Department of Veterans Affairs
Decentralized Hospital Computer Program

LABORATORY
BLOOD BANK USER MANUAL

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Preface

The Blood Bank Module and User Manual were developed and prepared by the Pathology Special Interest Users Group (SIUG), as part of the Laboratory System Package. The User Manual was designed as a training guide and reference manual for Veterans Affairs Medical Center (VAMC) Site Managers, Lab Applications Coordinators, and all users of the Blood Bank Module. It should be used in conjunction with other documentation of the Laboratory Package. Related Manuals include:

Users Guide to Computing
VA FileMan User Manual
Laboratory Release Notes
Laboratory Installation Guide
Laboratory Technical Manual
Laboratory Security Guide
Laboratory User Manual
Anatomic Pathology User Manual

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INTRODUCTION

Blood Bank Module Goals

Blood banking involves many sophisticated analyses that, without automation/ computerization, can only be performed by highly skilled persons. The human ability to "look for things" is more flexible than a computer's, but the ability to flexibly and intelligently search for and analyze information starts to break down as the quantity of information becomes larger. Computers, however, can handle vast amounts of information without suffering any deleterious effects.

Therefore, a sophisticated computer system allows the highly trained technical staff to devote more time and energy to those problems and sophisticated analyses not within the realm of a computer.

On the basis of these principles, the following goals were established for the Blood Bank Module:

1. Improve the safety of blood/blood component transfusion by decreasing the number and severity of human errors.

    - retrieval of previous records and verification of the present results
    - detection of inconsistencies and flagging of the results that require corrective action before release of the unit
    - bar code entry of donor unit information
    - computer-assisted labeling of donor units

2. Improve the quality of patient care by allowing an evaluation of the appropriateness of all transfusions and of specific blood components through integration with other portions of the system.

    - comparison of current lab values with established standards and screening criteria for each of various components to allow concurrent audits, etc.,
    - delta checks for pre and post transfusion values to determine whether the increments are within the established range

3. Decrease the clerical workload

    - bar code entry of donor unit information
    - printing of SF 518s only upon unit issue (reduce by 2-3 times)
    - transfer of information via pointers to reduce duplication
    - preparation of labels etc., following data entry

4. Improve donor recruitment management

   - retrieval of previous donation information, based on specific individual donors, donor groups, etc.,
   - increased capability to perform searches for generating call lists, etc.,
   - generation of workload statistics for a given collection site, etc., to be used for future planning

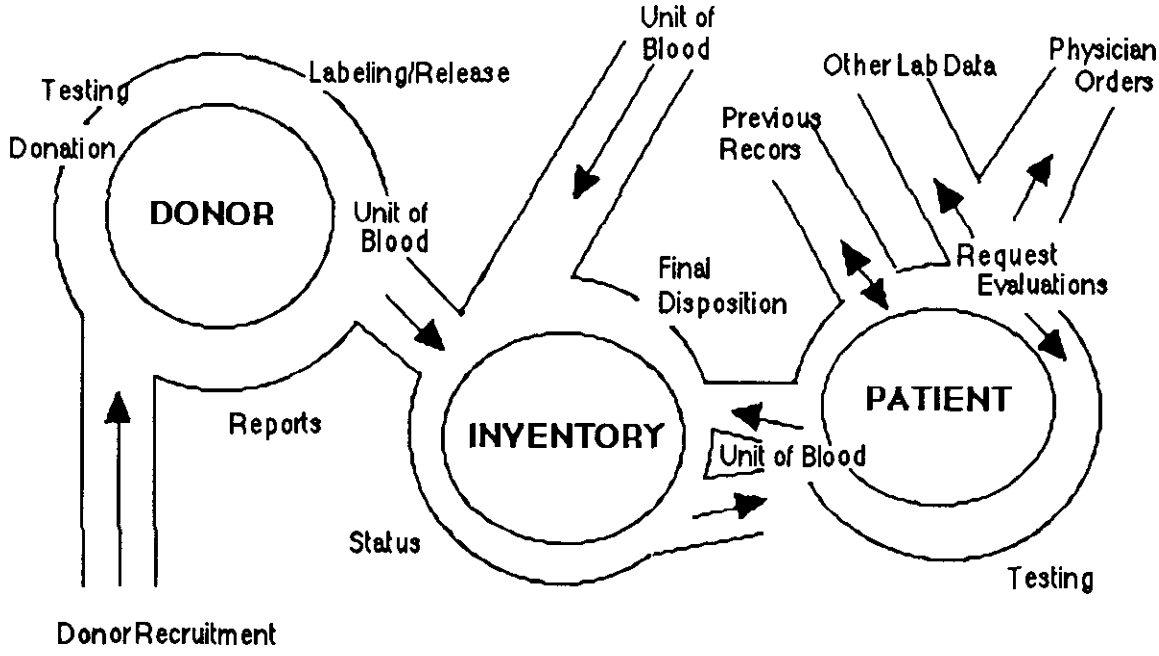
5. Improve resource management

   - cost accounting by ward, physician, etc.,
   - workload statistics, including variables by time of day, day of week, etc.,
   - access to information for medical and nursing staff

While the computerizing of any system can require changes in that system, this module has been designed to impose no substantive changes in the actual work flow. With the exception of the actual worksheets for recording testing results and interpretation, paper documents will be replaced by the computer. For the sake of accurate identification of patient specimens entered into the computer, it will be necessary to assign unique accession numbers, in addition to the current identification system, that is, patient's full name, SSN, etc., required by the accrediting agencies.

Functional Description

The Blood Bank Module uses data that can be tied primarily to a donor, a patient, or a unit of blood/blood component. Information about a blood donation or donation attempt revolves around the name of the blood donor. Similarly, information about a unit of blood/blood component, once it appears in inventory, revolves around the donor unit identification, and information involving transfusion and testing of patient samples revolves around the patient name/SSN.



Donor

Each time a donor visits a drawing site, the flow of data begins at the reception desk and continues with the donor to the screening and collection areas. From there, some data is sent with the unit, while other data is stored for documentation of the donor's visit. Sufficient data must be recorded during each visit to facilitate recruitment efforts and preparation of statistical reports.

Registration

Each donor arriving at a drawing site provides personal data such as name, date of birth, address, and telephone number. If the donor has donated at the donor center before, the information previously recorded can be verified and updated as necessary. The data is then stored so that it will be available for the next visit. The records from previous donations confirm donor identity as well as eligibility to donate on any given date. The total number of donations (useful when issuing donor recognition certificates) and special instructions about handling the donor in screening and collection processes may also be obtained from the computerized record. The blood type or special antigen typing done previously may identify donors whose blood should be drawn into a special bag or processed into a specific product such as frozen red cells. This data accumulates on every visit, making a comprehensive donor record.

Screening and Drawing

For each donor visit, data may flow from registration to screening and collection **or** data may flow from component preparation, with entry of the registration and collection data added later (usually in the case of units drawn on mobiles).

Once the donor is registered, forms containing the medical history questions and other information can be generated which contain a complete printout of the patient demographics, last donation date, etc.

The unit number and details of the drawing are appended to the record in the collection area. The occurrence of a donor reaction or an incomplete or prolonged collection is recorded for use in future visits.

Component Preparation

During component preparation, the computer ensures that the allowable preparation time was not exceeded, calculates the expiration dates of any component, and records the component weights. Bar code entry of unit number and product type ensures efficiency and accuracy of the data. For example, entry of the preparation (freeze) time of fresh frozen plasma would elicit a comparison to the collection time and ensure that less than six hours had elapsed. Also, the computer ensures that all the components prepared from one unit were logically allowable. For example, whole blood collected into a single bag could **not** be made into platelets, fresh frozen plasma, and red blood cells.

Recruitment

Donor recruitment can be aided by the data collected during donor visits. The computer can be used to select a list of donor's names, which is then used to produce customized letters, mailing labels or postcards. Lists of donors and their telephone numbers can be given to staff, home callers, or mobile hosts. Specific blood types can be recruited since the computer is able to provide information on available donors by blood type.

Many different criteria for donor selection can be used. The computer can, however, only select by using information that was captured during donor visits. Some possible criteria are:

- 100 A positive donors who are eligible to donate.
- All donors who have registered at a particular site.
- All donors who donated in a given month.
- Donors with a particular zip code or telephone exchange.
- Donors who are available during the holidays.
- Apheresis donors.
- Donors who are deferred for a particular reason.
- Donors who have donated x numbers of gallons.

The options are limited only by the data that were (or were not) recorded in the computer.

Statistics

Statistics, such as how many donors from a mobile unit have donated before, or how many donations a mobile unit has produced at each drawing over the last several years, can be reported by the computer.

There are two ways of gathering statistics with a computer: 1) to accumulate them as the original data is recorded, or 2) to sort through data that has been previously recorded and stored. The first method requires the computer to do more when the data is entered and thus slows down that process. The second will not slow down data entry, but may require much time to obtain the information when requested. The latter method is the one selected; thus, statistical reports requiring these searches must **never** be performed during hours of peak use.

Processing

At the present time, the system accepts only the interpretation of test results, rather than the actual test results. It does, however, compare these results with the previous record on that donor. In the case of nonroutine antigen tests (e.g., Duffy, Kidd, etc.,) it is beneficial to have a record of results of tests performed on previous units from the same donor. These results are then stored with the donor record and will be transferred into inventory, in total, with all future units donated.

Labeling

After all processing results are entered, the technologist can review the information and determine the acceptability of the unit. The computer provides two different mechanisms for labeling and releasing the units into inventory, one of which uses a bar code reader.

When a bar code reader is not used, the computer allows the first technologist to review the information and label the unit, following a check by the computer to ensure that the test results on the donor would not preclude its release to stock. A second technologist must then review the results and the labeled unit and verify that the information is correct before the unit is released to inventory.

By incorporating a bar code reader, the system eliminates the need for a second technologist to perform this process. Instead, the information obtained by scanning the labels that have been placed on the units are used to determine whether the label placed on the unit agrees with the previously entered test results.

Inventory

Units of blood/blood components, also known as blood products, may be placed into inventory through one of two routes. Units received from outside blood centers are logged in upon receipt (through bar code entry). Units drawn at the facility are automatically transferred into inventory once processing and labeling have been completed and verified.

Inventory Control

Upon request, the computer will generate a complete listing of all units available in stock including those crossmatched for patients for the desired product. After completion of appropriate testing, the unit may be signed out for the patient for transfusion. The record of the ultimate disposition is critical for required records and good inventory control. The system is also used to record the particulars of the transaction, including the time and date of pickup, the person to whom the unit is issued, and the inspection of the unit. It can also print labels for the Caution tag which must accompany the unit.

Modification of Units

When a unit is placed into inventory, the product information for that particular component, defined in the BLOOD PRODUCT file (#66), is automatically attached. If the unit is modified, i.e., pooled, frozen, washed, divided, irradiated, etc., before its final disposition, the computer records all such modifications and assigns new donor identification numbers when appropriate. Information can be generated on either the original unit, showing modifications, **or** on the new unit, showing the original information, as well as the current information.

Disposition

Once the unit has been assigned a final disposition, the data can then be entered for that unit, with automatic transfer to the patient's record. Information remains on the system until a hard copy is generated and a command is entered to delete the units, as determined by each institution's policies. Note: The patient's transfusion data remains.

Transaction Summary

Upon request, the computer will generate a summary of all transactions with outside blood centers for a specified period of time. Itemized listings by component are generated, based both on information entered when the units were logged in and data in the BLOOD PRODUCT file (#66) for each supplier regarding costs and other pertinent information.

Patient

As a transfusion service's central concern revolves around individual patients, a critical part of the system's design involves the management of data about the hospital's patients. With access to a complete patient transfusion and serological history, provision of appropriate blood products can be greatly simplified.

Previous Records

Upon receipt of a specimen and a request for testing on a patient, the computer checks the patient's previous test results for ABO/Rh, as well as for any entries under Special Instructions such as antibody problems, transfusion reactions, and then automatically displays this information. Additional information related to previous transfusions or other items is available upon request in the more extended version, through either of two options.

Requests for Blood Components

Requests for blood products for surgery/transfusion are entered in a manner similar to other test requests; however, the system automatically displays other information relevant to the request. Once the patient is selected, the computer displays any units already assigned to the patient, the most recent laboratory values for the patient for those tests designated by each institution (e.g., hemoglobin, hematocrit, platelet count, PT, and PTT), and the most recent request received for each component.

The user is then asked to enter the component request, with the option of reviewing any information in the BLOOD PRODUCT file related to ordering that specific component. If the request is **not** for surgery, the system compares the patient's laboratory values for specific tests appropriate to each component to preestablished criteria and then displays any inconsistencies before continuing to process the request. If the request is for surgery, the system will check the routine blood orders for that specific surgical procedure and display any inconsistencies before continuing to process the request. At the same time, the system checks to see that the Blood Bank has received a specimen within the established time frame, and for those requiring new specimens, displays an appropriate message.

Unit Selection

Selection of specific blood products can be done either by entering the unit numbers after they have been selected from the stock OR by allowing the computer to provide a listing of appropriate units, based on the ABO/Rh of the patient, with subsequent selection of the unit(s) by the technologist. Once units have been selected, they are held in reserve for that patient until subsequent action is taken, such as release to stock or issue for transfusion.

In those cases where the patient has an irregular antibody, the system can draw on information available on all units in inventory related to their phenotypes. Information is stored for both HLA and RBC antigens, as present or absent. In addition, the computer stores the same information on all blood donors and transfers this data into inventory with the unit each time the donor donates. Thus, the system can, upon request, generate a listing with appropriate phenotypes.

Test Result Entry

While the system does not, at present, record actual test results, testing interpretation and comments are entered once the testing has been completed. The system does provide a variety of validity checks based on these entries to ensure maximum protection against clerical errors. Entry of abnormal results for some tests triggers automatic access to information in another section, such as the display of the patient's medications upon entry of a positive direct antiglobulin test.

General Comments

1. The Blood Bank Module, unlike other areas of the laboratory package, does not require a separate action to enter the tech ID or to verify information. Whenever the tech enters his/her access code, the computer automatically assigns all subsequent actions to that individual. Thus, it is extremely important for each user to sign off.

2. In order to prevent "electronic white-out" all edits and changes are recorded, including the initial information, the new information, the date changed and the identity of the persons entering both pieces of information. Many edits are restricted to those with Blood Bank Supervisor's key privileges.

3. With the exception of the deletion options in the Donor and the Inventory menus, data is retained in the system in perpetuity. At the present time, since only interpretations and not actual serological test results are entered, information is not archived.

ORIENTATION

Manual Conventions

This Blood Bank User Manual is designed to provide a maximum amount of information about each option in the Blood Bank module as clearly as possible. In this light, the manual is set up as follows:

1. Each option has an introductory paragraph(s) in the font style of this sentence.

2. The example in `10 point Courier font` represent the option as it will be seen on the CRT screen or in a printed report.

3. The portions of the example typed in **bold** print represent the information to be entered in response to the prompt displayed. Bold print is also used in narrative to highlight a descriptive word(s).

4. Those portions of the examples shown on "label" stock represent information printed on the label printer based on information requested through the CRT.

> **NOTE:** The label stock to be used is the same as that for the remainder of the laboratory package. Lines between the labels can be adjusted using the Lines in a Label option in the Supervisor's Menu.

5. Since workload is a feature that can be turned on and off by the site, not all the examples show the changes that workload causes.

6. Note Box

> **NOTE:** The note box indicates that a special action may be recommended or required.

7. The italicized words contained in brackets: *[Enter Print Device Here]* , refer to editor's comments.

8. Pressing the return key at the "Select Print Device: *[Enter Print Device Here]*" prompt sends the output to your terminal. You can also send the output to a specified printer.

Computer Conventions

1. Unless otherwise noted, entry of a "?" as a response triggers a display of the description of the intended response. Entry of "??" triggers a display of the available choices. Entry of "???" call up brief descriptions of the options.

2. Entry of the first few letters or any abbreviated version for the answer to a prompt will be accepted by the computer; however, this can result in delays, in that the computer has to search further to find what you are requesting. In addition, if there is more than one choice which meets this criteria, all possibilities will be displayed for you to select from. This delay does not occur if the entry is an acceptable synonym or a product code, in the case of the blood components.

3. Responses may be followed by double slashes (//). These are known as "defaults" or "most probable answers." In some cases, they have been programmed in, and, in some cases, they are merely an echo of the previous entry. To accept the default answer, press the RETURN KEY (designated in this manual as <RET>. If you choose a different answer, enter it, then <RET>.

> **NOTE:** The default usually represents the safest answer . If the system receives no response after a specified time, it will sign off the terminal as a security precaution.

4. Entry of the "@" symbol after a "//" deletes the previous entry. However, you must have the appropriate level of security access to delete data entries.

5. Entering "^" tells the system that you have finished entering data in the field or option you are in and want to exit. Entering "^" followed by the name of a field is useful for skipping quickly from one field to another. This is only useful in certain VA FileMan options, as indicated in the documentation. You cannot use "^" to skip a mandatory response field. Repeated entry of "^" will exit you from the system.

6. *If you do not wish to answer a prompt, press the RETURN (<RET>) key and the* next prompt will appear unless that prompt has been designated as a mandatory entry, in which case it will reappear (often with instructions regarding the intended response).

7. Entry of a space bar and <RET> does **not** recall the previous selection in all of the options. In most options involving selection of a patient name, the space bar and <RET> will recall the last patient selected, regardless of the previous option used. This function is not usually permitted for entry of unit ID numbers or donor unit numbers; however, there may be some options in which it may be useful.

8. Date formats acceptable to the system include:

   AUGUST 18, 1987, 18 AUG 87, 8-18-87, and 081887

   T or **TODAY** (representing the current date)

   T + 1 (representing tomorrow)

   T - 1 (representing yesterday)

   T + 2W (representing two weeks in the future)

   T + 365 (representing one year in the future)

9. Time formats acceptable to the system include:

   N or **NOW** for the current date and time

   T @ 3 for today at 3:00 p.m.

   T @ 8:00 p.m. for today at 8:00 p.m.

   T @ 1500 for today at 3:00 p.m.

   You can omit the entry of a.m./p.m. for times after 6:00 a.m. and before 6:00 p.m.

10. To edit a "free text, word processing" field, choose the appropriate response to the prompt "EDIT Option:"

```
EDIT Option: ?          Choose, by first letter, one of the following:

                        Add lines to end of text
                        Break a line in two
                        Change every string to another in a range of lines
                        Delete line(s)
                        Edit a line (Replace - With - )
                        Insert line(s) after an existing line
                        Join line to the one following
                        List a range of lines
                        Move lines to new location within text
                        Print lines as formatted output
                        Repeat lines at a new location
                        Search for a string
                        Transfer lines from another document
```

Or type a line number to edit that line.

Each option then contains further prompts to aid the user in that particular editing process.

PACKAGE MANAGEMENT

PACKAGE MANAGEMENT

Package Management

In addition to the LRLAB and LRVERIFY security keys, the Blood Bank Module requires only the LRBLOODBANK key to access the majority of the options. The LRBLSUPER key is necessary to access all of the options in the Supervisor's Menu, as well as to release incompatible blood using the Disposition relocation (I-DN) option in the Inventory Menu.

The Laboratory software package makes use of Current Procedural Terminology (CPT) codes which are an American Medical Association (AMA) copyrighted product. Its use is governed by the terms of the agreement between the Department of Veterans Affairs and the American Medical Association.

The Workload (WKLD) codes are based on the College of American Pathologists (CAP) codes. The CAP codes are used with the permission of the College of American Pathologists. Specific instruments and products are referenced by the Workload codes. These references should not be perceived as endorsement or approvals by the Decentralized Hospital Computer Program (DHCP) system or the Laboratory software package.

PACKAGE OPERATIONS

NOTE: Please read the Blood Bank section of the Planning and Implementation Guide before attempting to use the Blood Bank module.

Workflow/Procedures

The Blood Bank User Manual presumes the use of the menu names and option names as they have been developed. In order for this documentation to be useful to the Blood Bank staff, changing the documentation must be done in conjunction with the changes in the system. Since options are cross referenced within the text of the documentation, the impact of any changes should be realistically evaluated before making the changes. For example, the Inventory Menu for the Evening/Night Shift Technologist (under "Setting Up Menus" in the Planning and Implementation Guide) is designated as "modified." Instead of this main menu option name being [LRBLI], the modified menu might be named [LRZZBLI]. However, the submenu options for the menu would retain their original identity and, therefore, should not confuse the user.

Because of the manner in which the Blood Bank options for data entry are set up, the same options are used regardless of the environment in which the data are being entered (i.e., urgency status). Since the module was designed to assume that all requests could be "emergencies" there is no option in the module that would equate with the Bypass Normal Data Entry [LRFAST] option in the general laboratory package. By looking at the suggested menu for the Evening/Night Shift Technologist, included under "Setting Up Menus" you can determine the basic set of options necessary to use this module.

Diagram Menu for Blood Bank Module [LRBL]

The Blood Bank Module has submenus for all of the main menu options. In addition, there are submenus for some of the submenu options. The diagram shown below includes **all** of the Blood Bank options; however, the order in which the options are displayed is not the same as that which will appear during normal use. During normal use, the menu options appear in alphabetical order based on the two-letter abbreviation, rather than the first letter of the long name of the option as shown below.

```
Diagram Of Main Menu Options:

Select Blood bank Option: ?

   D       Donor
   I       Inventory
   P       Blood bank patient
   Q       Inquiries
   R       Reports
   S       Supervisor
   W       Ward
```

Detailed Menu Including all Options

```
Blood bank (LRBL)
**LOCKED: LRBLOODBANK**

   D       Donor [LRBLD]
      CP      Collection disposition/component preparation [LRBLDCP]
      DC      Donor collection/processing [LRBLDC]
      DD      Donor demographics [LRBLDD]
      DH      Donor history, physical and consent form [LRBLDR]
      DO      Old blood donor records [LRBLDO]
      DP      Donor phenotyping [LRBLDPH]
      DR      Donor registration [LRBLDLG]
      DU      Donor blood testing/review/release [LRBLDU]
            CR      Component preparation report [LRBLDCR]
            DA      Abnormal donor tests [LRBLDTA]
            DC      Donor unit ABO/Rh recheck [LRBLDUC]
            DL      Donor unit testing worklist [LRBLDDAW]
            DR      Donor unit testing prooflist [LRBLDTR]
            DS      Donor unit supplemental testing prooflist [LRBLDTRS]
            DT      ABO/Rh testing of donor units [LRBLDDAT]
            LA      Lab tests(not ABO/Rh) on donor units [LRBLDT]
            LR      Test review/Component labeling/release [LRBLDRR]

   I       Inventory [LRBLI]
      DN      Disposition -not transfused [LRBLIDN]
      DR      Disposition -relocation [LRBLIDR]
      LR      Log-in regular (invoices) [LRBLILR]
      LT      Enter blood inventory typing charges [LRBLILS]
      PD      Pediatric unit preparation [LRBLPED]
      SH      Shipping invoices for blood components [LRBLISH]
      UC      Unit ABO/Rh confirmation [LRBLIUC]
      UP      Unit phenotyping [LRBLIUP]
      UR      Units release to stock (cancel) by patient [LRBLIUR]
      UW      Inventory ABO/Rh testing worksheet [LRBLIW]

   P       Blood bank patient [LRBLP]
      DA      Remove an accession [LRDELOG]
      DT      Blood transfusion results [LRBLPT]
      ET      Enter test data [LRBLPET]
      PR      Previous records [LRBLPER]
      RS      Request/select/xmatch blood components [LRBLPC]
            CR      Blood component requests [LRBLPCS]
            US      Select units for patients [LRBLPIC]
            XM      Enter crossmatch results [LRBLPX]
      SI      Special instructions [LRBLPSI]
      SL      Specimen log-in [LRBLPLOGIN]
      TA      Add tests to a given accession. [LRADD TO ACC]  Locked: LRLAB
      TD      Delete test from an accession [LRTSTOUT]
      TL      Test worklist [LRBLTTW]
      WL      Accession area worklist [LRUW]
```

```
Q       Inquiries [LRBLQ]
   DI      Single donor demographic information [LRBLQSDD]
   OR      Order/test status [LROS]
   PA      Show list of accessions for a patient [LRUPT]
   PH      Patient Medication List [LRBLPH]
   PR      Patient blood bank record [LRBLQDR]
   SD      Single donor information [LRBLQSD]
   ST      Single unit status [LRBLQST]
   SU      Single unit information- display [LRBLIPSD]
   UA      Units assigned/components requested [LRBLQPR]
   VD      Validation documentation [LRBLVALI]
   VT      Test description information [LREV]


R       Reports [LRBLR]
   AR      Patient antibody report (short list) [LRBLPR]
   BR      Blood bank tests report [LRBLPBR]
      1       Add BB patient(s) to report queue [LRBLP ADD]
      2       Delete BB report print queue [LRBLP DELETE]
      3       Print single BB patient report [LRBLP PRINT SINGLE]
      4       Print all BB patient reports on print queue [LRBLP PRINT ALL
               ON QUEUE]
      5       Blood bank consultation reports [LRUCN]  Locked: LRBLSUPER
   CT      Unit CAUTION tag labels [LRBLILA]
   CV      CMV Antibody Status Report [LRBLICV]
   DR      Donor summary reports [LRBLDSR]
         CD      Collection disposition report [LRBLDCD]
         DR      Blood donor recruitment reports [LRBLDRPTS]
               DA      Gallon donor report [LRBLDDA]
               DD      Donor deferral report [LRBLDDR]
               DL      List of donors by last attempt date [LRBLDPL]
               DS      Donor scheduling report [LRBLDSC]
               ED      Emergency donor report [LRBLDEDR]
               FD      First time blood donors [LRBLDFD]
               GA      Group affiliation report [LRBLDGA]
               GD      Group donation report [LRBLDGDR]
               MC      Mobile (Collection Site) report [LRBLDMC]
               ML      Donor month/holiday recall list [LRBLDMR]
               PC      Patient credits from blood donations [LRBLDPCR]
               PL      Apheresis donor list [LRBLDAP]
               SD      Donor short draw report [LRBLDSD]
               XD      Donor lists/labels/letters [LRBLDL]
         DS      Donor unit supplemental testing prooflist [LRBLDTRS]
         DT      Donor unit testing prooflist [LRBLDTR]
         PD      Permanent donor deferral report [LRBLDPD]
         PR      Blood product rejection report [LRBLDPRR]
   IS      Blood inventory status reports [LRBLIS]
         DU      Disposition-not transfused [LRBLIDU]
         SU      Single unit (display/print) information [LRBLQSU]
               SD      Single unit information- display [LRBLIPSD]
               SP      Single unit information- print [LRBLIPSP]
         UA      Units available (indate/no disposition) [LRBLRUA]
         UN      Units with no disposition [LRBLRUN]
         UX      Units on Xmatch by date/time Xmatched [LRBLIX]
   IT      Blood inventory transaction reports [LRBLITX]
         IN      Supplier invoices (inventory) [LRBLRIN]
         IS      Special typing charges (inventory) [LRBLRIS]
         IT      Supplier transactions (inventory) [LRBLRIT]
```

```
PL     Patient accession list [LRBLPAL]
TC     Transfusion reaction count [LRBLTA]
TR     Transfusion reaction report [LRBLIPTR]
UP     Phenotyped units available [LRBLIPH]
UR     Blood utilization & summary reports [LRBLIUS]
            AA     Crossmatch/Transfusions by Specialty/Physician [LRBLAA]
            AR     Autologous Disposition report [LRBLJD]
            CT     Crossmatch:Transfusion report [LRBLRCT]
            IS     Unit issue book entries [LRBLIRB]
            IT     Inappropriate transfusion requests report [LRBLPRIT]
            PT     Prolonged transfusion times [LRBLPIT]
            RS     Transfused RBC for treating specialty [LRBLJUT]
            TH     Patient transfusions & hematology results [LRBLPCH]
            TR     Transfusion data report [LRBLITR]
            TS     Transfusion by treating specialty/physician [LRBLITS]
            TX     Transfusion follow-up tests [LRBLTXA]
VD     Print blood bank validation [LRBLVALP]
WK     Blood bank workload reports [LRBLRWK]
       AD     Blood Bank Administrative Data [LRBLA]
       CR     Component preparation report [LRBLDCR]
       CT     Test counts by treating specialty [LRUPACT]
       IR     Inventory ABO/Rh re-check counts [LRBLC]
       TC     Test counts by location [LRBLRTC]

S      Supervisor [LRBLS]  Locked: LRBLSUPER
DO     Delete entire order or individual tests [LRCENDEL]
ED     Blood donor edit options ... [LRBLSD]
       DC     Donor collection/deferral edit [LRBLDA]
       DD     Permanent deferral/special comments [LRBLDEF] Locked with
                      LRBLSUPER
       DE     Blood donor group/type edit [LRBLDEDIT]  Locked with
                      LRBLSUPER
       DH     Edit donor history questions [LRBLSEH]
       DL     Enter/edit donor letters [LRBLDLT]
       DP     Edit donor consent [LRBLDCX]
EF     Edit blood bank files ... [LRBLEF]
       AA     Edit Corresponding Antigen/Antibody [LRBLSNO] Locked with
                      LRBLSUPER
       BD     Edit blood bank descriptions file [LRBLSEF]
       BP     Edit blood product file [LRBLSEB]
       BU     Edit blood bank utility file [LRBLSEU]
       CR     Blood component request edit [LRBLSRQ]
       LL     Edit lab letter file [LRBLSLL]
       MS     Maximum surgical blood order edit [LRBLSMS]
       SP     Edit blood bank site parameters [LRBLSSP]
       VD     Blood bank validation documentation [LRBLVAL]  Locked with
                      LRBLSUPER
EI     Blood bank inventory edit options ... [LRBLSI]
       DI     Edit unit disposition fields [LRBLSED]
       FR     Free autologous/directed donor units [LRBLSEE]
       LI     Edit unit log-in [LRBLSEL]
       PI     Edit unit - patient fields [LRBLSEC]
       PP     Edit pooled blood product [LRBLJM]
EP     Blood bank patient edit options ... [LRBLSP]
       LD     Tests for display on patient look-up [LRBLST]
       PE     Patient ABO/Rh edit [LRBLPEDIT]  Locked with LRBLSUPER
       PP     Edit previous transfusion record [LRBLSPP]  Locked with
                      LRBLSUPER
```

```
        TH      Tests for inclusion in transfusion report [LRBLSET]
        TR      Unknown unit transfusion reaction [LRBLPTXR]  Locked with
                        LRBLSUPER
        TX      Tests for transfusion follow-up [LRBLTX]
   FD    Outline for one or more files [LRUFILE]
   II    Blood bank inventory integrity report [LRBLII]
   LL    Edit number of lines in a label [LRBLSF]
   SR    Summary and deletion reports ... [LRBLSSR]
        AD      Print data change audits [LRBLAD]  Locked with LRBLSUPER
        AP      Antibodies by patient [LRBLPAB]  Locked with LRBLSUPER
        AR      Patient antibody report (long-list) [LRBLPRA]  Locked with
                        LRBLSUPER
        CD      Cumulative donations and awards [LRBLDCU]  Locked with
                        LRBLSUPER
        DA      Acknowledge donor award by deletion [LRBLDAWARD]  Locked
                        with LRSUPER
        PL      Delete a user's patient list [LRBLSDPL]  Locked with
                        LRBLSUPER
        PU      Print units with final disposition [LRBLRUF]  Locked with
                        LRBLSUPER
        PX      Print ex-donors [LRBLDEX]  Locked with LRBLSUPER
        RA      Remove data change audits [LRBLAR]  Locked with LRBLSUPER
        RI      Remove inappropriate transfusion requests [LRBLSRI]  Locked
                            with LRBLSUPER
        RU      Remove units with final disposition [LRBLSER]  Locked with
                        LRBLSUPER
        RX      Remove ex-donors [LRBLDK] Locked with LRBLSUPER
   SW    Blood bank workload ... [LRBLSW]
        DW      Display workload for an accession [LRUWL]

W      Ward [LRBLW]
   PO    Show list of accessions for a patient [LRUPT]
   PR    Patient blood bank record [LRBLQDR]
   TI    Test description information [LREV]
   UA    Units assigned/components requested [LRBLQPR]
```

Blood Bank File Relations

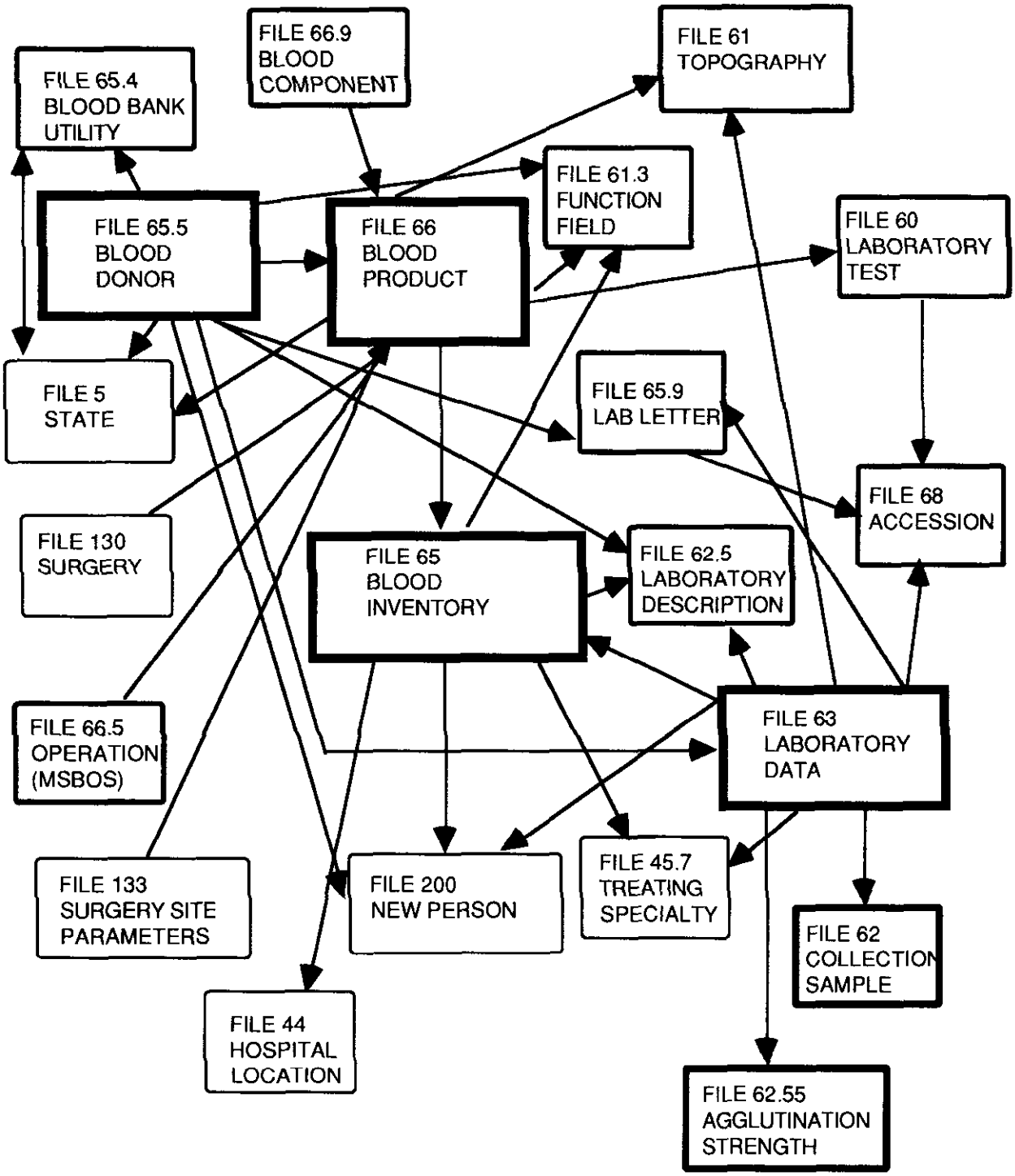
Since Blood Bank has multiple interacting files, a brief overview of the file relations may be of use to the LIM.

The following chart diagrams the relations of the various files to each other. The major controlling Laboratory files have the bold outline. The other laboratory files have a finer outline. The other files either point to Laboratory files or Laboratory files point to them.

Following the chart is a listing of all nonLaboratory files that the Blood Bank module interacts with. This indicates the increasing integration of the DHCP programs with each other.

Next are several Blood Bank files data dictionaries (DDs). These DDs have been edited to make the file relationships clearer. Of particular interest to the LIMs, are the explanations of where and how the cross references are set and cleared.

Chart of File Interaction



Non-Laboratory Files Used by the Blood Bank Module

Files Pointed to:	By:
File 2 (PATIENT)	
	VA PATIENT NUMBER (#65.03,.07)
File 200 (NEW PERSON)	
	LOG-IN PERSON (#.09)
	DISPOSITION ENTERING PERSON (#4.3)
	TECH ENTERING-ABO INTERPRETATION (#10.2)
	TECH ENTERING-RH INTERPRETATION (#11.2)
	BLOOD SAMPLE DATE/TIME:
	XMATCH TECH (#65.02,.05)
	DATE/TIME UNIT RELOCATION:
	TECH INSPECTING (#65.03,.03)
	DATE RE-ENTERED
	PREVIOUS DISP ENTERING PERSON (#65.15,.04)
	DATE RE-ENTERED
	PREVIOUS LOG-IN PERSON (#65.15,.07)
	DEMO ENT/EDIT BY (#65.5,.09)
	DEFERRAL ENTER/EDIT BY (#65.5,.12)
	DONATION OR DEFERRAL DATE:
	DONATION ENTERED/EDIT BY (#65.54,.011)
	PROCESSING TECH (#65.54,4.8)
	TECH ENTERING-ABO INTERP (#65.54,10.2)
	TECH ENTERING-ABO RECHECK (#65.54,10.5)
	TECH ENTERING-RH INTERP (#65.54,11.2)
	TECH ENTERING-RH RECHECK (#65.54,11.5)
	TECH -SYPHILIS SEROLOGY (#65.54,12.2)
	TECH -HBsAg (#65.54,13.2)
	TECH -HIV (#65.54,14.2)
	TECH -ANTIBODY SCREEN (#65.54,15.2)
	TECH -HBcAb (#65.54,16.2)
	TECH -ALT (#65.54,17.2)
	TECH -HTLV-I (#65.54,18.2)
	TECH -HCV ANTIBODY (#65.54,19.2)
	TECH LABELING (#65.66,.06)
	DISPOSITION TECH (#65.66,.07)
	BLOOD BANK:
	PHYSICIAN (#63.01,.07)
	PROVIDER NUMBER (#200.53,.03)
	BLOOD SAMPLE DATE/TIME:
	PROVIDER NUMBER (#65.02,.08)
File 5 (STATE)	
	STATE (#65.54,1.5)
	STATE (#65.5,1.5)
	SUPPLIER:
	STATE (#66.01,.07)
File 45.7 (FACILITY TREATING SPECIALTY)	
	BLOOD COMPONENT REQUEST:
	TREATING SPECIALTY (#63.084,2.3)
	TREATING SPECIALTY NUMBER field (#6.7)
	BLOOD SAMPLE DATE/TIME:
	TREATING SPECIALTY NUMBER (#65.02,.07)

```
File 50 (DRUG)              Routine LRBLPE1

File 52 (PRESCRIPTION)      Routine LRBLPE1

File 52.6 (IV ADDITIVES)    Routine LRBLPE1

File 55 (PHARMACY PATIENT)  Routine LRBLPE1

File 62 (UNIT DOSE)         Routine LRBLPE1
```

NOTE: In routine LRBLPE1, patient medications can be listed if the direct antiglobulin test is positive. In addition, they will be able to listed in a separate option in V 5.2.

- For OUTPATIENT PHARMACY ITEMS, field #52 PRESCRIPTION PROFILE of the PHARMACY PATIENT file #55 is a pointer to the PRESCRIPTION file (#52). In addition, field 6 DRUG of File #52 is a pointer to File #50.

- For INPATIENT PHARMACY ITEMS, field #52 UNIT DOSE of File #55 has a multiple field #55.06, #2 DRUG which is a pointer to File #50.

- For IV DRUGS, File #55 has a multiple field #100 IV which contains a multiple 55.01,1 called ADDITIVE and a multiple #55.02 which points to File #52.6 IV ADDITIVES.

[In addition to data being stored as pointers, data is pulled from other files and stored as free text as follows:]

Data Pulled From: *[stored as free text]*	**By:**
File 2 (PATIENT)	
	PATIENT XMATCHED/ASSIGNED (#65.01,.01)
	FOR PATIENT (#65.03,.06)
	PATIENT TRANSFUSED (#65,6.1)
PRIMARY PHYSICIAN (.104)	BLOOD SAMPLE DATE/TIME: PHYSICIAN (#65.02,.03)
PRIMARY PHYSICIAN (.104)	PHYSICIAN (#6.2)
TREATING SPECIALTY (.103)	TREATING SPECIALTY (#65,6.3)

NOTE: The .103 and .104 fields are updated based on changes made in File #405 (PATIENT MOVEMENT FILE).

```
File 44 (HOSPITAL LOCATION)
LOCATION (#??)              DATE/TIME UNIT RELOCATION:
                               LOCATION (#65.03,.04)

File 45.7 (FACILITY TREATING SPECIALTY)
TREATING SPECIALTY field (#??)   BLOOD SAMPLE DATE/TIME:
                               TREATING SPECIALTY (#65.02,.02)
```

Data Dictionaries for Certain Files

```
#61.3 -- FUNCTION FIELD FILE          06/12/94
STORED IN ^LAB(61.3,                 (VERSION 5.2)
-------------------------------------------------------------------------------
This is the FUNCTION field of SNOMED.  It is used by a variety of areas,
primarily Blood Bank and Anatomic Pathology .

              DD ACCESS: @
              WR ACCESS: 1
             DEL ACCESS: 1
           LAYGO ACCESS: 1

IDENTIFIED BY:

POINTED TO BY:
FUNCTION FIELD File (#61.3)
               CORRESPONDING ANTIGEN/ANTIBODY field (#.04)

LAB DATA File (#63)
              RBC ANTIGEN PRESENT field (#.01) of the RBC ANTIGEN PRESENT
                  sub-field (#63.011) of the BLOOD BANK sub-field (#63.01)
              RBC ANTIGEN ABSENT field (#.01) of the RBC ANTIGEN ABSENT
                  sub-field (#63.0112) of the BLOOD BANK sub-field (#63.01)
              HLA ANTIGEN ABSENT field (#.01) of the HLA ANTIGEN ABSENT
                  sub-field (#63.0114) of the BLOOD BANK sub-field (#63.01)
              ELUATE ANTIBODY field (#.01) of the ELUATE ANTIBODY sub-field
                  (#63.012) of the BLOOD BANK sub-field (#63.01)
              HLA ANTIGEN PRESENT field (#.01) of the HLA ANTIGEN PRESENT
                  sub-field (#63.013) of the BLOOD BANK sub-field (#63.01)
              RBC ANTIGENS ABSENT field (#.01) of the RBC ANTIGENS
                  ABSENT(other) sub-field (#63.016)
              ANTIBODIES IDENTIFIED field (#.01) of the ANTIBODIES IDENTIFIED
                  sub-field (#63.075)
              RBC ANTIGENS PRESENT field (#.01) of the RBC ANTIGENS
                  PRESENT(other) sub-field (#63.13)
              HLA ANTIGEN PRESENT field (#.01) of the HLA ANTIGENS PRESENT
                  sub-field (#63.14)
              HLA ANTIGENS ABSENT field (#.01) of the HLA ANTIGENS ABSENT
                  sub-field (#63.141)
              FUNCTION field (#.01) of the FUNCTION sub-field (#63.25) of the
                  AUTOPSY ORGAN/TISSUE sub-field (#63.2)
              FUNCTION field (#.01) of the FUNCTION sub-field (#63.285) of the
                  EM ORGAN/TISSUE sub-field (#63.212) of the EM sub-field
                  (#63.02)
              SERUM ANTIBODY field (#.01) of the SERUM ANTIBODY sub-field
                  (#63.46) of the BLOOD BANK sub-field (#63.01)
              FUNCTION field (#.01) of the FUNCTION sub-field (#63.85) of the
                  ORGAN/TISSUE sub-field (#63.12) of the SURGICAL PATHOLOGY
                  sub-field (#63.08)
              FUNCTION field (#.01) of the FUNCTION sub-field (#63.985) of the
                    CYTOPATH ORGAN/TISSUE sub-field (#63.912) of the
                    CYTOPATHOLOGY sub-field (#63.09)
```

```
BLOOD INVENTORY File (#65)
               RBC ANTIGEN PRESENT field (#.01) of the RBC ANTIGEN PRESENT
                   sub-field (#65.04)
               RBC ANTIGEN ABSENT field (#.01) of the RBC ANTIGEN ABSENT
                   sub-field (#65.05)
               HLA ANTIGEN PRESENT field (#.01) of the HLA ANTIGEN PRESENT
                   sub-field (#65.08)
               HLA ANTIGEN ABSENT field (#.01) of the HLA ANTIGEN ABSENT
                   sub-field (#65.09)

BLOOD DONOR File (#65.5)
               RBC ANTIGEN PRESENT field (#.01) of the RBC ANTIGEN PRESENT
                   sub-field (#65.56)
               RBC ANTIGEN ABSENT field (#.01) of the RBC ANTIGEN ABSENT
                   sub-field (#65.57)
               HLA ANTIGEN PRESENT field (#.01) of the HLA ANTIGEN PRESENT
                   sub-field (#65.58)
               HLA ANTIGEN ABSENT field (#.01) of the HLA ANTIGEN ABSENT
                   sub-field (#65.59)

CROSS REFERENCED BY:
NAME(B)
ABBREVIATION(B)
SNOMED CODE(C)
SYNONYM(D)
IDENTIFIER(E)

FILES POINTED TO                        FIELDS
FUNCTION FIELD (#61.3)             CORRESPONDING ANTIGEN/ANTIBODY (#.04)
LAB JOURNAL (#95)                  JOURNAL REFERENCE:MEDICAL JOURNAL (#2)
WKLD CODE (#64)                    WKLD CODE:WKLD CODE (#.01)

INPUT TEMPLATE(S):
LRAPFR                        JUL 09, 1986   USER #0
LRAPFUN                       JUL 09, 1986   USER #0

PRINT TEMPLATE(S):
CAPTIONED                                    USER #0
LR ANTIGEN/ANTIBODY LISTING   DEC 14, 1987   USER #0   SNOMED NOMENCLATURE FOR
                                                       BLOOD GROUP ANTIBODIES
LRBL ANTIBODIES               DEC 01, 1989   USER #0   ANTIBODIES
LRBLAG WKLD CODES             OCT 17, 1990   USER #0   WKLD CODES

SORT TEMPLATE(S):
LR ANTIBODY LISTING           MAR 03, 1987   USER #0   IDENTIFIER EQUALS "AB"
LR ANTIGEN LISTING            MAR 02, 1987   USER #0   IDENTIFIER EQUALS "AN"
LRBL ANTIBODY LISTING         DEC 01, 1989   USER #0
LRBLAG WKLD CODES             OCT 17, 1990   USER #0   IDENTIFIER EQUALS "AN"
                                        and FUNCTION FIELD WKLD CODE NOT NULL
```

```
#62.55 -- AGGLUTINATION STRENGTH FILE   06/12/94
STORED IN ^LAB(62.55,                   (VERSION 5.2)
--------------------------------------------------------------------------------
Listing of all the agglutination strengths, including a description of the
reaction as described in the Technical Manual of the American Association of
Blood Banks..

              DD ACCESS: @
              WR ACCESS: 1
             DEL ACCESS: 1
           LAYGO ACCESS: 1


IDENTIFIED BY:
   WILL STAND FOR (#1)

CROSS REFERENCED BY:
NAME(B)
WILL STAND FOR(C)

 INPUT TEMPLATE(S):

PRINT TEMPLATE(S):

SORT TEMPLATE(S):
```

```
#63 -- LAB DATA FILE                    06/13/94
STORED IN ^LR(                          (VERSION 5.2)
-------------------------------------------------------------------------------
Patient's laboratory data
```

[This is a partial DD limited to the portion that directly affects Blood Bank.]

```
IDENTIFIED BY:
PARENT FILE (#.02)
NAME (#.03)

POINTED TO BY:
BLOOD DONOR File (#65.5)
               LABORATORY REFERENCE field (#63)

CROSS REFERENCED BY:
               TRANSFUSION REACTION TYPE(AB),

FILES POINTED TO (By File 63 field):

File 65  (BLOOD INVENTORY)
                UNITS SELECTED FOR XMATCH:
                      UNITS SELECTED FOR XMATCH (#63.0841,.01)

File 66  (BLOOD PRODUCT)
                TRANSFUSION RECORD:
                      COMPONENT (#63.017,.02)
                BLOOD COMPONENT REQUEST:
                      BLOOD COMPONENT REQUEST (#63.084,.01)

File 62  (COLLECTION SAMPLE)
               BLOOD BANK:
                      COLLECTION SAMPLE (#63.01,.055)


File 45.7 (FACILITY TREATING SPECIALTY)
               BLOOD COMPONENT REQUEST:
                      TREATING SPECIALTY (#63.084,2.3)

File 61.3 (FUNCTION FIELD)
               ELUATE ANTIBODY:
                      ELUATE ANTIBODY (#63.012,.01)
               RBC ANTIGEN PRESENT (other):
                      RBC ANTIGEN PRESENT (#63.13,.01)
               ANTIBODIES IDENTIFIED:
                       ANTIBODIES IDENTIFIED (#63.075,.01)
               RBC ANTIGEN ABSENT (other):
                       RBC ANTIGEN ABSENT (#63.016,.01)
               HLA ANTIGEN PRESENT :
                       HLA ANTIGEN PRESENT (#63.14,.01)
               HLA ANTIGEN ABSENT:
                       HLA ANTIGEN ABSENT (#63.14,1.01)
               SERUM ANTIBODY:
                       SERUM ANTIBODY (#63.46,.01)
```

```
File 61 (TOPOGRAPHY FIELD)
               BLOOD BANK:
                       SPECIMEN (#63.01,.05)

File 200 (NEW PERSON)
               BLOOD BANK:
                       ENTERING PERSON (#63.01,.04)
                       PHLEBOTOMIST (#63.01,.09)
               BLOOD BANK:
                       PHYSICIAN  (#63.01,.07)
               ABO TYPING TECH (#10.2)
               RH TYPING TECH (#11.2)
               TRANSFUSION RECORD:
                       ENTERING PERSON (#63.017,.04)
               BLOOD COMPONENT REQUEST:
                       ENTERING PERSON(#63.084,.08)


DATA PULLED FROM:                          By File 63 field
[stored as free text]

File 62.55(AGGLUTINATION STRENGTH)
               DIRECT AHG (POLYSPECIFIC) (# 2.1)
               ANTI-IgG (# 2.4)
               ANTI-COMPLEMENT (# 2.6)


DATA CAN BE PULLED FROM:                   By File 63 field
[stored as free text]

File 62.5  (LABORATORY DESCRIPTIONS)
               COMPONENT REQUEST REASON (#2.1)
               TRANSFUSION COMMENT:
                       TRANSFUSION COMMENT (#63.186,.01)
               DIRECT AHG TEST COMMENT (#2.91)
               ANTIBODY SCREEN COMMENT (#63.48,.01)
               ABO TESTING COMMENT (# 10.3)
               RH TESTING COMMENT (# 11.3)


INPUT TEMPLATE(S):
LRBLPABRH                    APR 17, 1993@09:57  USER #0
LRBLPAG                      OCT 28, 1990@15:12  USER #0
LRBLPCMBS                    OCT 28, 1990@15:49  USER #0
LRBLPCMBSO                   JUN 17, 1993@08:49  USER #46
LRBLPCS                      AUG 30, 1988        USER #0
LRBLPEDIT                    MAY 26, 1986        USER #0
LRBLPOLD                     APR 27, 1988        USER #0
LRBLPT                       JUL 30, 1987        USER #0
LRBLPTXR                     JUN 28, 1993@07:19  USER #0
LRBLSCREEN                   JUN 24, 1993@11:16  USER #0
LRBLSPP                      AUG 03, 1988        USER #0

PRINT TEMPLATE(S):

SORT TEMPLATE(S):
```

```
#65 -- BLOOD INVENTORY FILE            06/12/94
STORED IN ^LRD(65,                     (VERSION 5.2)
-------------------------------------------------------------------------------
- Stores data associated with units of blood/blood components, also known as
blood products.  Units may be entered into this file via one of two routes.
Units received from outside blood centers are logged in upon receipt.  Units
drawn by the facility are automatically transferred from File 65.5 (Blood
Donor) once processing and labeling have been completed and the units
released.
```

*[This file should **NOT** be reindexed as this process may reset the cross references improperly.]*

```
              DD ACCESS: 1
              RD ACCESS: 1
              WR ACCESS: 1
             DEL ACCESS: L


IDENTIFIED BY:
   UNIT ID (#.01)
   COMPONENT (#.04)
   EXPIRATION DATE/TIME (#.06)
   DATE/TIME UNIT RELOCATION (#3)
   TRANSFUSION COMMENT (#7)

POINTED TO BY:
LAB DATA File (#63)
               UNIT SELECTED FOR XMATCH field (#.01) of the UNITS SELECTED FOR
                   XMATCH sub-field (#63.0841) of the BLOOD COMPONENT REQUEST
                   sub-field (#63.084)

WKLD DATA File (#64.1)
               PATIENT field (#9) of the ACCESSION WKLD CODE TIME sub-field
                   (#64.1111) of the WKLD CODE sub-field (#64.111) of the DATE
                   sub-field (#64.11)

CROSS REFERENCED BY:
               DATE/TIME RECEIVED(A)
               field .05     by date/time received, by IFN

               COMPLETE DATE/TIME(AA)

               DISPOSITION DATE(AB)
               field 4.2     by disposition date, by IFN

               DISPOSITION(AC)
               field 4.1     kills the AE and AI cross references if
                             disposition deleted

               ABO INTERPRETATION(AD)
               field 10     set at login by the AT cross reference;
                            killed upon entry of results

               EXPIRATION DATE/TIME(AE)
               field .06    list of units by component, by expiration date
                            set based on unit login
                            updated based on AH cross reference
```

```
DISPOSITION COMMENT(AE)

RH  INTERPRETATION(AF)
field 11     set at login by the AT cross reference;
             killed upon entry of results
             resets the AT cross reference if the results
             are deleted

DISPOSITION(AG)
field 4.1      if disposition is deleted, kills field 4.2 and
               4.3 if disposition is deleted, updates 63.017
               (patient transfusion record)

COMPONENT(AH)
field .04      by expiration date
               set at log-in once all data is entered
               resets AE cross reference if field is edited

EXPIRATION DATE/TIME(AI)
field .06      list of units by component, by unit ID, by
               expiration date
               set based on unit login
               updated based on AI cross reference

UNIT ID(AJ)
field .01      resets AI cross reference if field is edited

COMPONENT(AK)
field .04      by expiration date
               resets AI cross reference if field is edited

DATE/TIME UNIT RELOCATION(AL)
file 65.03,    by date/time relocation, by IFN
 field .01

PATIENT XMATCHED/ASSIGNED(AM)
file 65.01,    list of patients by LRDFN, by IFN
 field .01

DATE/TIME CROSSMATCHED(AN)
file 65.02,    by date/time crossmatched, by unit ID, by pt
 field .09     crossmatched (2), by blood sample date/time
               (65.02,.01)

SOURCE(AO)
field .02      calls LRBLU
               sets C cross reference (removes prefix)

DATE/TIME UNIT ASSIGNED(AP)
file 65.01,    by LRDFN, by IFN
 field .02     set when data entered by AT cross reference;
               killed when unit taken when date deleted, i.e.,
               unit released or  the final disposition entered

DISPOSITION(APS)
field 4.1      if disposition is deleted, kills the AP cross
               reference
```

```
COMPONENT(AQ)
field .04      calls LRBLU
               sets C cross reference (removes prefix)

PREVIOUS DATE LOGGED-IN(AR)
file 65.15,      sets the A cross reference
 field .08

UNIT ID(AT)
field .01      list of units which need confirmation testing
               set upon login; killed upon entry of test results
               or if unit is deleted
               sets the AD and AF cross references
               sets AP cross reference if there is no
               disposition & if the units are currently assigned

RESTRICTED FOR(AU)
field 8        by LRDFN, by unit IFN

UNIT ID(B)
field .01      set upon login, by IFN
               full entry (including prefix)

UNIT ID(C)
field .01      set upon login
               unit ID without the prefix -used by bar code
               reader set by the AQ cross reference
```

FILES POINTED TO	FIELDS
ACCESSION (#68)	COMPLETE DATE/TIME:MAJOR SECTION (#.04) SUBSECTION (#.05)
BLOOD BANK UTILITY (#65.4)	TRANSFUSION REACTION TYPE (#6.8)
BLOOD PRODUCT (#66)	COMPONENT (#.04) MODIFIED TO/FROM:MODIFIED TO/FROM (#.01)
FACILITY TREATING SPECIALTY (#45.7)	TREATING SPECIALTY NUMBER (#6.7) BLOOD SAMPLE DATE/TIME:TREATING SPECIALTY NUMBER (#.07)
FUNCTION FIELD (#61.3)	RBC ANTIGEN PRESENT:RBC ANTIGEN PRESENT (#.01) RBC ANTIGEN ABSENT:RBC ANTIGEN ABSENT (#.01) HLA ANTIGEN PRESENT:HLA ANTIGEN PRESENT (#.01) HLA ANTIGEN ABSENT:HLA ANTIGEN ABSENT (#.01)
INSTITUTION (#4)	COMPLETE DATE/TIME:INSTITUTION (#.03)
LABORATORY TEST (#60)	TEST/PROCEDURE:TEST/PROCEDURE (#.01)
NEW PERSON (#200)	LOG-IN PERSON (#.09) DISPOSITION ENTERING PERSON (#4.3) PROVIDER NUMBER (#6.6) TECH ENTERING-ABO INTERP (#10.2) TECH ENTERING-RH INTERP (#11.2)

```
                                BLOOD SAMPLE DATE/TIME:XMATCH TECH (#.05)
                                PROVIDER NUMBER (#.08)
                                DATE/TIME UNIT RELOCATION:TECH INSPECTING
                                (#.0 3)
                                DATE RE-ENTERED:PREVIOUS DISP ENTERING
                                PERSON (#.04)
                                PREVIOUS LOG-IN PERSON (#.07)
                                COMPLETE DATE/TIME:TECH (#.02)

PATIENT (#2)                    DATE/TIME UNIT RELOCATION:VA PATIENT NUMBER
                                (# .07)

WKLD CODE (#64)                 WKLD CODE:WKLD CODE (#.01)


DATA PULLED FROM:          By File 65 field
[stored as free text]

File 66  (BLOOD PRODUCT)
SUPPLIER (#66.01,.01)      SOURCE  (#.02)
COST (#66.01,.02)          COST (#.1)

File 2 (PATIENT)
                           PATIENT XMATCHED/ASSIGNED (#65.01,.01)
                           FOR PATIENT (#65.03,.06)
                           PATIENT TRANSFUSED (#6.1)

PRIMARY PHYSICIAN (.104)   BLOOD SAMPLE DATE/TIME:
                                 PHYSICIAN (#65.02,.03)
PRIMARY PHYSICIAN (.104)      PHYSICIAN (#6.2)
TREATING SPECIALTY (.103)  TREATING SPECIALTY (#6.3)
```

[The .103 and .104 fields are updated based on changes made in File #405 (PATIENT MOVEMENT file).]

```
File 44 (HOSPITAL LOCATION)
                           DATE/TIME UNIT RELOCATION:
                              LOCATION (#65.03,.04)

File 45.7 (FACILITY TREATING SPECIALTY)
                           BLOOD SAMPLE DATE/TIME:
                              TREATING SPECIALTY (#65.02,.02)

File 200 (NEW PERSON)
                           PERSON CHANGING DATA (#.65.099,.02)


DATA CAN BE PULLED FROM:   By File 65 field
[stored as free text]

File 62.5  (LABORATORY DESCRIPTIONS)
                           BLOOD SAMPLE DATE/TIME:
                                 RELEASE REASON (#65.02,.1)
                           BLOOD SAMPLE DATE/TIME:
                                 CROSSMATCH COMMENT (#65.0913,.01)
                              DISPOSITION COMMENT (#65.06,.01)
                              TRANSFUSION COMMENT (#65.07,.01)
```

```
INPUT TEMPLATE(S):
LRBLIABRH                    JAN 27, 1991@09:51  USER #0
LRBLIAG                      JAN 27, 1991@09:54  USER #0
LRBLID                       JAN 27, 1991@09:40  USER #0
LRBLIDTM                     APR 01, 1993@12:15  USER #0
LRBLILG                      APR 15, 1993@10:43  USER #0
LRBLIXR                      APR 01, 1993@12:12  USER #0

PRINT TEMPLATE(S):
CAPTIONED                                  USER #0
LR ARCHIVE EXTRACT 65        MAY 04, 1994  USER #0
LRBL DISCARDED UNITS DISP    DEC 09, 1985  USER #0  DISCARDED UNITS
                                                    DISPOSITION REPORT
LRBL DISPOSITION TOTALS      AUG 28, 1985  USER #0  DISPOSITION TOTALS
LRBL ISSUES TO SURGERY       AUG 28, 1985  USER #0  ISSUES TO SURGERY
LRBL TRANSFUSION REACTIONS   DEC 14, 1992  USER #0  TRANSFUSION REACTION
                                                    REPORT
LRBL WASTAGE REPORT          AUG 30, 1985  USER #0  BLOOD WASTAGE REPORT
LRBLDP                       NOV 06, 1985  USER #0  History of donor units
LRBLDSP                      JUN 16, 1988  USER #0  Inventory list
LRBLINV                      JUN 16, 1988  USER #0  Blood Inventory List
LRBLITR                      OCT 10, 1986  USER #0  PATIENTS TRANSFUSED
LRBLTX                       AUG 13, 1985  USER #0  TRANSFUSED UNITS

SORT TEMPLATE(S):
LRBL DISCARDED UNITS         DEC 09, 1985        USER #0
SORT BY: DISPOSITION// <RET>
From 'D'  To 'M'
 WITHIN DISPOSITION, SORT BY: DISPOSITION DATE// <RET>  [User is asked range]

LRBL DISPOSITION TOTALS      AUG 28, 1985        USER #0
SORT BY: DISPOSITION// <RET>
 WITHIN DISPOSITION, SORT BY: DISPOSITION DATE// <RET>  [User is asked range]
  WITHIN DISPOSITION DATE, SORT BY: COMPONENT// <RET>  [User is asked range]

LRBL ISSUES TO SURGERY       AUG 28, 1985        USER #0
SORT BY: !DATE/TIME UNIT RELOCATION// DATE/TIME UNIT RELOCATION SUB-FIELD:
DATE/TIME UNIT RELOCATION// <RET>  [User is asked range]
 WITHIN DATE/TIME UNIT RELOCATION, SORT BY: UNIT ID//<RET>
  WITHIN UNIT ID, SORT BY: 'DATE/TIME UNIT RELOCATION//<RET>
  DATE/TIME UNIT RELOCATION SUB-FIELD: LOCATION// <RET>
From 'SURGERY'  To 'SURGERY'

LRBL TRANSFUSION REACTIONS   JAN 14, 1986        USER #0
SORT BY: DISPOSITION DATE// <RET>  [User is asked range]
 WITHIN DISPOSITION DATE, SORT BY: TRANSFUSION REACTION// <RET>
From '1'  To '1'
LRBL WASTAGE                 AUG 30, 1985        USER #0     SORT BY:
DISPOSITION DATE// <RET>  [User is asked range]
 WITHIN DISPOSITION DATE, SORT BY: DISPOSITION COMMENT//  DISPOSITION COMMENT
SUB-FIELD: DISPOSITION COMMENT// <RET>
  WITHIN DISPOSITION COMMENT, SORT BY: COMPONENT// <RET>
   WITHIN COMPONENT, SORT BY: UNIT ID// <RET>
```

```
LRBL WASTAGE-2                    MAY 19, 1988        USER #0
SORT BY: DISPOSITION DATE//  <RET>
 WITHIN DISPOSITION DATE, SORT BY: COMPONENT// <RET>

LRBLINV                           DEC 13, 1989@08:53  USER #0
SORT BY: +SOURCE//  WITHIN SOURCE, SORT BY: +COMPONENT// <RET>
 WITHIN COMPONENT, SORT BY: DATE/TIME RECEIVED// <RET>  [User is asked range]
  WITHIN DATE/TIME RECEIVED, SORT BY: ABO GROUP//<RET>
   WITHIN ABO GROUP, SORT BY: RH TYPE// <RET>

LRBLITR                           OCT 10, 1986        USER #0
SORT BY: PATIENT TRANSFUSED// <RET>  [User is asked range]
 WITHIN PATIENT TRANSFUSED, SORT BY: DISPOSITION DATE// <RET>
                                                        [User is asked range]

LRBLTX                            OCT 12, 1987        USER #0
SORT BY: @DISPOSITION// <RET>
From 'T'  To 'TZ'
 WITHIN DISPOSITION, SORT BY: DISPOSITION DATE// <RET>  [User is asked range]
  WITHIN DISPOSITION DATE, SORT BY: PATIENT TRANSFUSED// <RET>
```

```
#65.4 -- BLOOD BANK UTILITY FILE      06/13/94
STORED IN ^LAB(65.4,                 (VERSION 5.2)
-------------------------------------------------------------------------------
This file contains donor affiliation groups, collection sites, items related
to donor history, and transfusion reaction types.

              DD ACCESS: @
              RD ACCESS: @
              WR ACCESS: @
             DEL ACCESS: @
           LAYGO ACCESS: @

IDENTIFIED BY:
   SCREEN (#.02)
   FULL NAME (#.03)

POINTED TO BY:

LAB DATA File (#63)
                TRANSFUSION REACTION TYPE field (#.11) of the TRANSFUSION
                    RECORD sub-field (#63.017)
                TRANSFUSION REACTION TYPE field (#.02) of the TRANSFUSION
                    REACTION DATE sub-field (#63.0171)

BLOOD INVENTORY File (#65)
                TRANSFUSION REACTION TYPE field (#6.8)
                GROUP AFFILIATION field (#.01) of the GROUP AFFILIATION
                    sub-field (#65.51) of the BLOOD DONOR File (#65.5)
                COLLECTION SITE field (#.02) of the DONATION OR DEFERRAL DATE
                    sub-field (#65.54) of the BLOOD DONOR File (#65.5)
                DONATION GROUP field (#.03) of the DONATION OR DEFERRAL DATE
                    sub-field (#65.54) of the BLOOD DONOR File (#65.5)
                DONOR REACTION CODE field (#3) of the DONATION OR DEFERRAL DATE
                    sub-field (#65.54) of the BLOOD DONOR File (#65.5)
                DEFERRAL REASON field (#.01) of the DEFERRAL REASON sub-field
                    (#65.55) of the DONATION OR DEFERRAL DATE sub-field
                    (#65.54)

CROSS REFERENCED BY:
NAME(B)
FULL NAME(C)

FILES POINTED TO                        FIELDS
STATE (#5)                          STATE (#1.5)


INPUT TEMPLATE(S):

PRINT TEMPLATE(S):
BLOOD BANK UTILITY FILE      MAR 03, 1986        USER #49
                                                 BLOOD BANK UTILITY -FILE 65.4

SORT TEMPLATE(S):
```

```
#65.5 -- BLOOD DONOR FILE                06/13/94
STORED IN ^LRE(                           (VERSION 5.2)
-------------------------------------------------------------------------------
List of blood donors with demographic, collection, and test data and
components prepared from each collection.  Each time a donor visits a drawing
site, the flow of data begins at the reception desk and continues with the
donor to the screening and collection areas.  From there, some data is sent
with the unit, while other data is stored for documentation of the donor's
visit.

              DD ACCESS: @
              RD ACCESS: @
              WR ACCESS: @
             DEL ACCESS: @
           LAYGO ACCESS: @

IDENTIFIED BY: SEX (#.02),DOB (#.03),CITY (#1.4)

POINTED TO BY:
WKLD DATA File (#64.1)
                   PATIENT field (#9) of the ACCESSION WKLD CODE TIME sub-
                   field (#64.1111) of the WKLD CODE sub-field (#64.111) of
                   the DATE sub-field (#64.11)

CROSS REFERENCED BY:
                COMPLETE DATE/TIME(AA)

                ABO INTERPRETATION(AC)
                   file 65.54,       set at login by the AT cross reference;
                    field 10         killed upon entry of results
                                     resets the AT cross reference if the
                                     results are deleted

                DONATION OR DEFERRAL DATE(AD)
                   field 5       set at login, by IFN for subfile 65.54

                RH INTERPRETATION(AE)
                   file 65.54,       set at login by the AT cross reference;
                    field 11         killed upon entry of results
                                     resets the AT cross reference if the
                                     results are deleted

               SYPHILIS SEROLOGY(AF)
                  file 65.54,        set at login by the AT cross reference;
                   field 12          killed upon entry of results
                                     resets the AT cross reference if the
                                     results are deleted

                HBsAg(AG)
                   file 65.54,       set at login by the AT cross reference;
                    field 13         killed upon entry of results
                                     resets the AT cross reference if the
                                     results are deleted
```

```
HIV ANTIBODY(AH)
   file 65.54,       set at login by the AT cross reference;
    field 14         killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

ANTIBODY SCREEN RESULT(AI)
   file 65.54,       set at login by the AT cross reference;
     field 15        killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

HBcAb(AJ)
   file 65.54,       set at login by the AT cross reference;
    field 16         killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

ALT(AK)
   file 65.54,       set at login by the AT cross reference;
    field 17         killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

HTLV-I ANTIBODY(AL)
   file 65.54,       set at login by the AT cross reference;
    field 18         killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

HCV ANTIBODY(AM)
   file 65.54,       set at login by the AT cross reference;
    field 19         killed upon entry of results
                     resets the AT cross reference if the
                     results are deleted

UNIT ID(AT)
   file 65.54,       list of units which need testing
    field 4          set upon login; killed upon entry of test
                     results or if unit is deleted
                     sets the AD and AF cross references

NAME(B)
   field .01         set at login
                     Full name of donor

UNIT ID(C)
   file 65.54,       unit ID by donor IFN, by donation date by
    field 4          IFN of Subfile 65.54

UNIT ID(D)
    file 65.54,      unit ID in format which accommodates
     field 4         prefixes as in File 65

DOB(E)
   field .03         set at login
                     1st letter of last name + 1st 4 characters
                     (month/day) of DOB
```

```
NAME(F)
   field .01      set at login
                  1st letter of last name + 1st 4 characters
                  (month/day) of DOB

SSN(G)
   field .13      entire SSN in numerical order

SSN(G4)
   field .13      set by  the G4 cross reference
                  1st letter of last name + last 4 digits of
                  the SSN

NAME(G40)
   field .01      look up by  SSN
                  sets the G4 cross reference
```

FILES POINTED TO	FIELDS
BLOOD BANK UTILITY (#65.4)	GROUP AFFILIATION:GROUP AFFILIATION (#.01) DONATION OR DEFERRAL DATE: COLLECTION SITE (#.0 2) DONATION GROUP (#.03) DONOR REACTION CODE (#3) DEFERRAL REASON:DEFERRAL REASON (#.01)
BLOOD PRODUCT (#66)	ANTISERUM:ANTISERUM (#.01) BLOOD COMPONENT REQUEST: BLOOD COMPONENT (#.01)
FUNCTION FIELD (#61.3)	RBC ANTIGEN PRESENT: RBC ANTIGEN PRESENT (#.01) RBC ANTIGEN ABSENT: RBC ANTIGEN ABSENT (#.01) HLA ANTIGEN PRESENT: HLA ANTIGEN PRESENT (#.01) HLA ANTIGEN ABSENT: HLA ANTIGEN ABSENT (#.01)
LAB DATA (#63)	LABORATORY REFERENCE (#63)
LABORATORY TEST (#60)	WORKLOAD TEST/PROCEDURE: WORKLOAD TEST/PROCEDURE (#.01)
NEW PERSON (#200)	DEMOG ENT/EDIT BY (#.09) DEFERRAL ENTER/EDIT BY (#.12) DONATION OR DEFERRAL DATE: DONATION ENTERED/EDIT BY (#.011) PROCESSING TECH (#4.8) TECH ENTERING-ABO INTERP (#10.2) TECH ENTERING-ABO RECHECK (#10.5) TECH ENTERING-RH INTERP (#11.2) TECH ENTERING-RH RECHECK (#11.5) TECH-SYPHILIS SEROLOGY (#12.2) TECH-HBsAg (#13.2) TECH-HIV (#14.2) TECH-ANTIBODY SCREEN (#15.2)

```
                                        TECH-HBcAb (#16.2)
                                        TECH-ALT (#17.2)
                                        TECH-HTLV-I (#18.2)
                                        TECH-HCV ANTIBODY (#19.2)
                                   COMPLETE DATE/TIME:
                                        TECH (#.02)
                                   RBC TYPING METHOD:
                                        TECHNOLOGIST (#.03)
                                   BLOOD COMPONENT:
                                        TECH LABELING (#.06)
                                        DISPOSITION TECH (#.07)

STATE (#5)                         STATE (#1.5)

WKLD CODE (#64)                    WKLD CODE:
                                        WKLD CODE (#.01)


INPUT TEMPLATE(S):
LRBLDABRH                     FEB 03, 1991@15:56  USER #0
LRBLDAG                       FEB 05, 1991@12:32  USER #0
LRBLDC                        AUG 28, 1988        USER #0
LRBLDCP                       JUN 16, 1989@09:10  USER #0
LRBLDCPN                      AUG 22, 1990@10:47  USER #0
LRBLDEDIT                     MAY 04, 1987        USER #0
LRBLDEF                       OCT 17, 1988        USER #0
LRBLDEMO                      APR 02, 1993@07:00  USER #0
LRBLDNEW                      APR 02, 1993@06:56  USER #0
LRBLDNEWM                     APR 02, 1993@06:57  USER #0
LRBLDON                       SEP 10, 1990@06:52  USER #0
LRBLDT                        FEB 03, 1991@17:23  USER #0
LRBLDUC                       FEB 28, 1991@14:30  USER #0

PRINT TEMPLATE(S):
CAPTIONED                                         USER #0
LRBL APHERESIS DONORS         JUL 15, 1985        USER #0  APHERESIS DONORS
LRBL COLLECTION DISP RPT      JAN 14, 1986        USER #0  COLLECTION DISPOSITION
                                                            REPORT
LRBL DEFERRAL REPORT          JAN 27, 1986        USER #0  DEFERRAL REPORT
LRBL DONOR TESTING REPORT     DEC 18, 1988        USER #0  ^LRBLDPT BLOOD DONOR
                                                            LIST
LRBL DONOR TESTING SUPPLEMENT MAR 12, 1990        USER #0  ^LRBLDPK BLOOD DONOR
                                                            SUPPLEMENT
LRBL EMERGENCY DONORS         JUL 12, 1985        USER #0  EMERGENCY DONOR LIST
LRBL EX-DONOR REPORT          JUL 16, 1985        USER #0  EX-DONOR REPORT
LRBL FIRST TIME DONORS        FEB 28, 1991        USER #0  FIRST TIME DONORS
LRBL GROUP AFFILIATION REPORT JAN 30, 1986        USER #0  GROUP AFFILIATION
                                                            REPORT
LRBL GROUP DONATION REPORT    JAN 30, 1986        USER #0  GROUP DONATION REPORT
LRBL MOBILE REPORT            AUG 01, 1987        USER #0  MOBILE REPORT
LRBL MONTHLY RECALL LIST      MAY 06, 1986        USER #0  MONTHLY RECALL LIST
LRBL PATIENT CREDIT           AUG 25, 1985        USER #0  PATIENT CREDIT LIST
LRBL PRODUCT REJECTION REPORT JAN 14, 1986        USER #0  PRODUCT REJECTION
                                                            REPORT
LRBL SHORT DRAW REPORT        JUL 17, 1985        USER #0  SHORT DRAW REPORT
LRBLD GALLON                  JAN 22, 1987        USER #0  GALLON DONORS
LRBLD SCHEDULING              JAN 17, 1987        USER #0  DONOR SCHEDULING
                                                            REPORT
```

```
LRBLDPD                          NOV 20, 1986     USER #0  PERMANENT DONOR
                                                           DEFERRAL LIST


SORT TEMPLATE(S):
LRBL APHERESIS DONORS            DEC 13, 1989@10:04  USER #0
SORT BY: APHERESIS CODE// <RET>
From '@'  To '1'
 WITHIN APHERESIS CODE, SORT BY: ABO GROUP// <RET> [User is asked range]
  WITHIN ABO GROUP, SORT BY: RH TYPE;S2// <RET>   [User is asked range]
   WITHIN RH TYPE, SORT BY: 'DONATION OR DEFERRAL DATE// <RET>
   DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                   [User is asked range]
    WITHIN DONATION OR DEFERRAL DATE, SORT BY: NAME// <RET>

LRBL COLLECTION DISP RPT         JAN 14, 1986        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION OR DEFERRAL DATE// <RET>   [User is asked range]
 WITHIN DONATION OR DEFERRAL DATE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: COLLECTION DISPOSITION// <RET>
From '1' To '2'

LRBL DEFERRAL REPORT             JUL 15, 1985        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION/DEFERRAL CODE// <RET>
From 'N'  To ' N'
 WITHIN DONATION/DEFERRAL CODE, SORT BY: DONATION OR DEFERRAL DATE;S2// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: COLLECTION SITE// <RET>
                                                   [User is asked range]
  WITHIN COLLECTION SITE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
  DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                   [User is asked range]
   WITHIN DONATION OR DEFERRAL DATE, SORT BY: NAME// <RET>

LRBL DONOR TESTING REPORT        MAR 12, 1990@07:19  USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION OR DEFERRAL DATE// <RET>   [User is asked range]
 WITHIN DONATION OR DEFERRAL DATE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: UNIT ID// <RET>

LRBL EMERGENCY DONORS            JUL 12, 1985        USER #0
SORT BY: DONOR SCHEDULING/RECALL// DONOR SCHEDULING/RECALL SUB-FIELD: DONOR
SCHEDULING/RECALL// <RET>
From '16'  To ' 16'
 WITHIN DONOR SCHEDULING/RECALL, SORT BY: 'DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                   [User is asked range]
  WITHIN DONATION OR DEFERRAL DATE, SORT BY: ABO GROUP// <RET>
                                                   [User is asked range]
   WITHIN ABO GROUP, SORT BY: RH TYPE// <RET>  [User is asked range]
    WITHIN RH TYPE, SORT BY: NAME// <RET>

LRBL FIRST TIME DONORS           JAN 17, 1986        USER #0
SORT BY: DATE REGISTERED/EDITED// <RET>        [User is asked range]
 WITHIN DATE REGISTERED/EDITED, SORT BY: NAME// <RET>
From 'A'  To 'a'
```

```
LRBL GROUP AFFILIATION REPORT JAN 30, 1986        USER #0
SORT BY: GROUP AFFILIATION// GROUP AFFILIATION SUB-FIELD: GROUP AFFILIATION//
<RET>    [User is asked range]
 WITHIN GROUP AFFILIATION, SORT BY: NAME// <RET>
  WITHIN NAME, SORT BY: DONATION OR DEFERRAL DATE// <RET>
  DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBL GROUP DONATION REPORT    JAN 30, 1986        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION GROUP// <RET>    [User is asked range]
 WITHIN DONATION GROUP, SORT BY: NAME// <RET>
  WITHIN NAME, SORT BY: DONATION OR DEFERRAL DATE// <RET>
  DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBL MOBILE REPORT            AUG 01, 1987        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
COLLECTION SITE// <RET>    [User is asked range]
WITHIN COLLECTION SITE, SORT BY: DONATION OR DEFERRAL DATE//  DONATION OR
DEFERRAL DATE SUB-FIELD: DONATION GROUP// <RET>
    WITHIN DONATION GROUP, SORT BY: DONATION OR DEFERRAL DATE// <RET>
    DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBL MONTHLY RECALL LIST      MAY 07, 1986        USER #0
SORT BY: DONOR SCHEDULING/RECALL// DONOR SCHEDULING/RECALL SUB-FIELD: DONOR
SCHEDULING/RECALL// <RET>    [User is asked range]
 WITHIN DONOR SCHEDULING/RECALL, SORT BY: NAME// <RET>    [User is asked range]
  WITHIN NAME, SORT BY: @@DONATION OR DEFERRAL DATE// <RET>
  DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBL PATIENT CREDIT           AUG 25, 1985        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
PATIENT CREDIT// <RET>    [User is asked range]
 WITHIN DONATION OR DEFERRAL DATE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBL PRODUCT REJECTION REPORT JAN 14, 1986        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION OR DEFERRAL DATE// <RET>    [User is asked range]
 WITHIN DONATION OR DEFERRAL DATE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: BLOOD COMPONENT//  BLOOD COMPONENT SUB-
 FIELD: COMPONENT DISPOSITION// <RET>
From '1'  To '2'
  WITHIN COMPONENT DISPOSITION, SORT BY: DONATION OR DEFERRAL DATE// <RET>
  DONATION OR DEFERRAL DATE SUB-FIELD: BLOOD COMPONENT// <RET>
  BLOOD COMPONENT SUB-FIELD: BLOOD COMPONENT// <RET>

LRBL SHORT DRAW REPORT        MAR 19, 1989        USER #0
SORT BY: DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
COLLECTION VOL (ml)// <RET>
From '1'  To '410 '
```

```
 WITHIN COLLECTION VOL (ml), SORT BY: DONATION OR DEFERRAL DATE//  DONATION OR
 DEFERRAL DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>
                                                    [User is asked range]

LRBLD GALLON                    JAN 21, 1987        USER #0
SORT BY: ]TOTAL AWARDS// <RET>
 WITHIN TOTAL AWARDS, SORT BY: NAME// <RET>

LRBLD SCHEDULING                JAN 14, 1987        USER #0
SORT BY: ]DONATION OR DEFERRAL DATE// DONATION OR DEFERRAL DATE SUB-FIELD:
DONATION OR DEFERRAL DATE// <RET>    [User is asked range]
 WITHIN DONATION OR DEFERRAL DATE, SORT BY: DONATION OR DEFERRAL DATE// <RET>
 DONATION OR DEFERRAL DATE SUB-FIELD: ARRIVAL/APPT TIME// <RET>

LRBLDPA                         JUN 19, 1992@16:33  USER #0
SORT BY: @NUMBER// <RET>    [User is asked range]
 WITHIN NUMBER, SORT BY: @DONATION OR DEFERRAL DATE//  DONATION OR DEFERRAL
 DATE SUB-FIELD: DONATION OR DEFERRAL DATE// <RET>    [User is asked range]

LRBLDPD                         NOV 20, 1986        USER #0
SORT BY: PERMANENT DEFERRAL// <RET>
From '1'  To '1'
 WITHIN PERMANENT DEFERRAL, SORT BY: NAME// <RET>    [User is asked range]
```

```
#65.9  LAB LETTER FILE                06/13/94
STORED IN ^LAB(65.9,                  (VERSION 5.2)
-------------------------------------------------------------------------------
This file is used to store lab consultations and blood donor letters.
At the present time, the only software which utilizes the lab consultations is
Blood Bank.  These are generated using an option in the Blood Bank Reports
menu.
Upon registration, blood donors are automatically placed in a print queue to
receive an appropriate donor letter which is generated by an option in the
Blood Donor Recruitment Reports menu, i.e., Donor lists/labels/letters.  In
addition, specific donor recruitment letters can also be generated through
this option.

CROSS REFERENCED BY:
NAME(B)

FILES POINTED TO                        FIELDS

ACCESSION (#68)                     ACCESSION AREA (#.09)


INPUT TEMPLATE(S):

PRINT TEMPLATE(S):

SORT TEMPLATE(S):
```

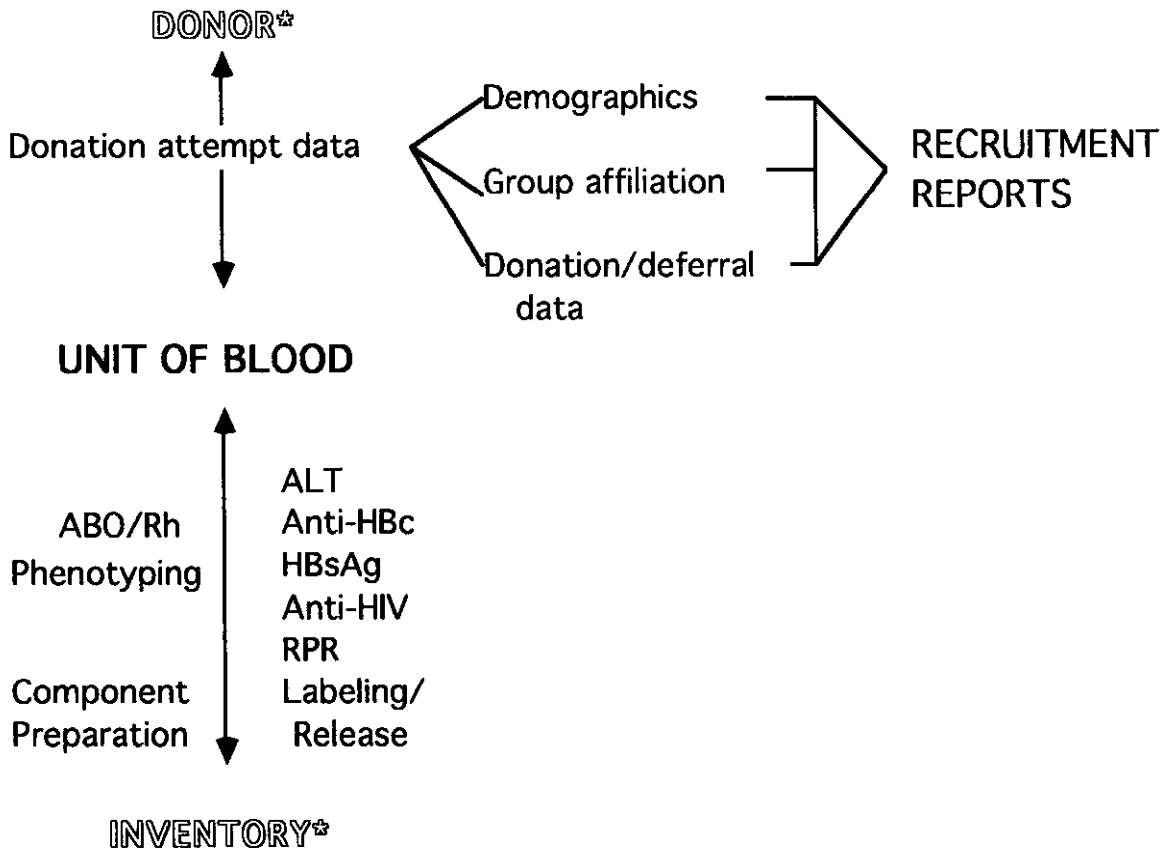
```
#66 -- BLOOD PRODUCT FILE                06/13/94
STORED IN                                (VERSION 5.2)
-------------------------------------------------------------------------------
This file is critical to the function of the Blood Bank module as it contains
"everything you ever wanted to know" about the different types of blood
products.  It is very site-specific and may be edited extensively to reflect
the actual workflow and procedures of the facility.

              DD ACCESS: @
              WR ACCESS: 1
             DEL ACCESS: 1

IDENTIFIED BY:
   PRODUCT CODE (#.05)
   VOLUME (ml) (#.1)
   DESCRIPTION (#1)
   SYNONYM (#2)

POINTED TO BY:

LAB DATA File (#63)
                SOURCE field (#.02) of the SCREEN CELL sub-field (#63.015) of
                    the SCREEN CELL METHOD sub-field (#63.014) of the BLOOD
                    BANK sub-field (#63.01)
                COMPONENT field (#.02) of the TRANSFUSION RECORD sub-field
                    (#63.017)
                ANTISERUM field (#.01) of the ANTISERUM sub-field (#63.019) of
                    the RBC TYPING METHOD sub-field (#63.018) of the BLOOD BANK
                    sub-field (#63.01)
                BLOOD COMPONENT REQUEST field (#.01) of the BLOOD COMPONENT
                    REQUEST sub-field (#63.084)

BLOOD INVENTORY File (#65)
                COMPONENT field (#.04)
                MODIFIED TO/FROM field (#.01) of the MODIFIED TO/FROM sub-field
                    (#65.091)

BLOOD DONOR File (#65.5)
                ANTISERUM field (#.01) of the ANTISERUM sub-field (#65.62) of
                    the RBC TYPING METHOD sub-field (#65.61) of the DONATION OR
                    DEFERRAL DATE sub-field (#65.54)
                BLOOD COMPONENT field (#.01) of the BLOOD COMPONENT sub-field
                    (#65.66) of the DONATION OR DEFERRAL DATE sub-field
                    (#65.54)

BLOOD PRODUCT File (#66)
                PEDIATRIC PRODUCT field (#.22)
                MODIFY TO field (#.01) of the MODIFY TO sub-field (#66.03)

OPERATION (MSBOS) File (#66.5)
                BLOOD COMPONENT REQUEST field (#.01) of the BLOOD COMPONENT
                    REQUEST sub-field (#66.51)

BLOOD COMPONENT REQUEST File (#66.9)
                PRODUCTS field (#.01) of the PRODUCTS sub-field (#66.91)
```

```
CROSS REFERENCED BY:
   NAME(B)
   ABBREVIATION(B)
   DESCRIPTION(B)
   SYNONYM(C)
   PRODUCT CODE(D)

FILES POINTED TO                    FIELDS

BLOOD PRODUCT (#66)                 PEDIATRIC PRODUCT (#.22)
                                    MODIFY TO:MODIFY TO (#.01)

LABORATORY TEST (#60)               TESTS TO CHECK:
                                        TESTS TO CHECK (#.01)
                                    PREOP TESTS TO CHECK:
                                        PREOP TESTS TO CHECK (# .01)

STATE (#5)                          SUPPLIER:STATE (#.07)

TOPOGRAPHY FIELD (#61)              TESTS TO CHECK:SPECIMEN (#.02)
                                    PREOP TESTS TO CHECK:
                                        SPECIMEN (#.02)

WKLD CODE (#64)                     WKLD CODE:WKLD CODE (#.01)

INPUT TEMPLATE(S):
LRBLBP                  FEB 24, 1992@10:33  USER #0

PRINT TEMPLATE(S):
BLOOD PRODUCT INFO. (P-DEC)   AUG 12, 1985        USER #49
                                            BLOOD PRODUCT INFORMATION LIST
BLOOD PRODUCT INFORMATION     JUL 31, 1985        USER #49
                                                  BLOOD PRODUCT LIST
BLOOD PRODUCT LIST            JUL 31, 1985        USER #49
                                                  BLOOD PRODUCT LIST
BLOOD PRODUCT LIST (P-DEC)    AUG 12, 1985        USER #49
                                                  BLOOD PRODUCT LIST
BLOOD PRODUCT MODIF. (P-DEC)  AUG 12, 1985        USER #49
                                                  BLOOD PRODUCT MODIFICATION
BLOOD PRODUCT REQ. (P-DEC)    AUG 12, 1985        USER #49
                                                  BLOOD PRODUCT REQUIREMENTS
BLOOD PRODUCT REQUIREMENTS    JUL 31, 1985        USER #49
                                                  BLOOD PRODUCT REQUIREMENTS
BLOOD PRODUCT SYNONYMS        JUL 31, 1985        USER #49
                                                  BLOOD PRODUCT LIST
BLOOD PRODUCT SYNONYMS (P-DEC) AUG 12, 1985       USER #49
                                                  BLOOD PRODUCT LIST
BLOOD PRODUCT TESTS            JUL 31, 1985       USER #49
                                      BLOOD PRODUCT TESTS TO CHECK/INSTRUCTIONS
BLOOD PRODUCT TESTS (P-DEC)    AUG 12, 1985       USER #49
                                      BLOOD PRODUCT TESTS TO CHECK/INSTRUCTIONS
LRBL CAP CODES                 OCT 22, 1990@07:56 USER #0
                                                  BLOOD PRODUCT CAP CODES
LRBL WKLD CODES                OCT 22, 1990@07:56 USER #0
                                                  BLOOD PRODUCT WKLD CODES

SORT TEMPLATE(S):
BP FILE 66                    JUL 18, 1985        USER #49
```

BLOOD BANK OPTIONS

Donor Menu (D)

```
D       Donor [LRBLD]
      CP      Collection disposition/component preparation [LRBLDCP]
      DC      Donor collection/processing [LRBLDC]
      DD      Donor demographics [LRBLDD]
      DH      Donor history, physical and consent form [LRBLDR]
      DO      Old blood donor records [LRBLDO]
      DP      Donor phenotyping [LRBLDPH]
      DR      Donor registration [LRBLDLG]
      DU      Donor blood testing/review/release [LRBLDU]
            CR      Component preparation report [LRBLDCR]
            DA      Abnormal donor tests [LRBLDTA]
            DC      Donor unit ABO/Rh recheck [LRBLDUC]
            DL      Donor unit testing worklist [LRBLDDAW]
            DR      Donor unit testing prooflist [LRBLDTR]
            DS      Donor unit supplemental testing prooflist [LRBLDTRS]
            DT      ABO/Rh testing of donor units [LRBLDDAT]
            LA      Lab tests(not ABO/Rh) on donor units [LRBLDT]
            LR      Test review/Component labeling/release [LRBLDRR]
```



Donor Menu Data Flow Chart

Action	Option
1. Register donors	Donor Registration (DR)
2. Enter previous donor data	Old Donor Records (DO)
3. Enter changes in donor	Donor Demographics (DD)
4. Enter donor collection/deferral data	Donor Collection/Processing (DC)
5. Enter component preparation data	Collection Disposition/Component Preparation(CP)
6. Enter collection disposition data	Collection Disposition/ Component Preparation (CP)
7. Enter ABO/Rh testing interpretations	ABO/Rh Testing of Donor Units (DU-DT)
8. Enter ABO/Rh recheck interpretations	Donor Unit ABO/Rh Recheck (DU-DC)
9. Enter donor phenotyping interpretations	Donor Phenotyping (DP)
10. Enter HBsAg, RPR, anti-HIV testing results	Lab Tests (not ABO/Rh) Donor Units (DU-LA)
11. Request an incomplete test worklist	Donor Unit Testing Worklist (DU-DL)
12. Request a list of abnormal test results	Abnormal Donor Tests (DU-DA)
13. Label units of blood	Test Review/Component Labeling/Release (DU-LR)
14. Request a prooflist to review units labeled, etc.	Donor Unit Testing Prooflist (DU-DR) Donor Unit Supplemental Testing Prooflist (DU-DS)
15. Request a component preparation report for supervisory review of collection and component preparation times and other data.	Component preparation report (DU-CR)

Collection Disposition/Component Preparation (CP)

Before entering data related to component preparation or collection disposition for a given donor unit, the data for the collection must be entered through the Donor Collection/Processing (DC) option.

Several checks have been incorporated, including:

1) a comparison of the primary bag (i.e., single, double) against the number of components being prepared (see Example 2),

2) a comparison of the components being prepared to ensure that no more than one component for which the Contains Red Blood Cells field in File #66 is "YES" can be selected,

3) a comparison of the entry in the Date/Time Stored field with the previous entry in the Collection Time Started field to check the difference between the two against the entry in the Collection/Prep Hours field in the BLOOD PRODUCT file (#66) for that component to determine whether the component is being prepared/stored within an acceptable time frame,

4) a comparison of the anticoagulant entered for this collection to the entry for anticoagulant in the BLOOD PRODUCT file (#66) for the component selected.

HINTS:

1. Components must be prepared from all donor units collected that are not discarded, even if the unit is left as Whole Blood. If the component is not entered, there is no mechanism for the system to know that it exists.

2. The system will calculate the expiration date for each component prepared, based on the data in the Maximum Storage Time field of the BLOOD PRODUCT file (#66). This will be displayed as the default.

Example 1: Preparation of Red Blood Cells and Fresh Frozen Plasma from Donor Unit #V11111 Using the Bar Code Reader

```
Select Donor Option: CP  Collection disposition/component preparation

             Collection disposition/component preparation


                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        => 510      (Bar code)  O POS

Select BLOOD DONOR: 1511111          (Bar code) UNIT ID: V11111

HEMBRY,SHARON        F       12-24-59      DALLAS

Donor: HEMBRY,SHARON  ABO: B Rh: POS
Donation date/time: JAN 21, 1993  10:30           Unit ID: V11111

  COLLECTION DISPOSITION: PREPARE COMPONENT(S)// ?
     CHOOSE FROM:
       0        PREPARE COMPONENT(S)
       1        QUARANTINE
       2        DISCARD COLLECTION
  COLLECTION DISPOSITION: PREPARE COMPONENT(S)// <RET>
  DATE/TIME PROCESSED: NOW// <RET>  (JAN 21, 1993@11:34)

Select BLOOD COMPONENT: ?

 ANSWER WITH BLOOD COMPONENT
     YOU MAY ENTER A NEW BLOOD COMPONENT, IF YOU WISH
     The selection must be a blood component.

      The anticoagulant in the collection bag
      must be appropriate to the component selected.
      Number of components selected cannot exceed number
      allowed for the primary collection bag.
 ANSWER WITH BLOOD PRODUCT NAME
 DO YOU WANT THE ENTIRE BLOOD PRODUCT LIST? N  (NO)

Select BLOOD COMPONENT: 04060
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
DATE/TIME STORED: 01/21/93@11:34// <RET>  (JAN 21, 1993@11:34)
EXPIRATION DATE: FEB 25, 1993// <RET>  (FEB 25, 1993)
COMPONENT VOL (ml): 250// <RET>

Select BLOOD COMPONENT: 18201
  FRESH FROZEN PLASMA, CPDA-1      18201      FA1      1      18201
BLOOD COMPONENT: FRESH FROZEN PLASMA, CPDA-1// <RET>
DATE/TIME STORED: 01/21/93@11:34// <RET>  (JAN 21, 1993@11:34)
EXPIRATION DATE: JAN 21, 1994@16:30// <RET>  (JAN 21, 1994@16:30)
COMPONENT VOL (ml): 225// <RET>
```

Example 2: Attempt to Make Red Blood Cells, Fresh Frozen Plasma, and Platelets from a Unit of Blood Drawn in a Double Bag

```
Select Donor Option: CP  Collection disposition/component preparation

            Collection disposition/component preparation

                        To use BAR CODE READER
              Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                       => <RET>

Select BLOOD DONOR: A55555  SMITH,SAM        M      04-30-26      OURTOWN

Donor: SMITH,SAM  ABO: A Rh: POS
Donation date/time: JAN 25, 1993  13:40           Unit ID: A55555

  COLLECTION DISPOSITION: PREPARE COMPONENT(S)// <RET>
  DATE/TIME PROCESSED: NOW// <RET>  (JAN 25, 1993@13:51)

Select BLOOD COMPONENT: 04060
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
DATE/TIME STORED: 01/25/93@13:51// <RET>  (JAN 25, 1993@13:51)
EXPIRATION DATE: MAR  1, 1993// <RET>  (MAR 01, 1993)
COMPONENT VOL (ml): 250// <RET>

Select BLOOD COMPONENT: 18201
  FRESH FROZEN PLASMA, CPDA-1      18201      FA1      1      18201
BLOOD COMPONENT: FRESH FROZEN PLASMA, CPDA-1// <RET>
DATE/TIME STORED: 01/25/93@13:51// <RET>  (JAN 25, 1993@13:51)
EXPIRATION DATE: JAN 25, 1994@19:40// <RET>  (JAN 25, 1994@19:40)
COMPONENT VOL (ml): 225// <RET>

Select BLOOD COMPONENT: P1/5   ??
```

[The system gives a beep and "??" when the attempt is made to enter a third component.]

Example 3: Attempted preparation of components seven hours after the collection was started using manual entry. (Please notice that the previous entry in the Donor Collection/Processing (DC) option for the COLLECTION TIME STARTED was 5:00 A.M.).

```
Select Donor Option: CP  Collection disposition/component preparation

              Collection disposition/component preparation


                          To use BAR CODE READER
                Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                          => <RET>

Select BLOOD DONOR: A33333  JONES,SUSAN        F      01-25-60      DALLAS

Donor: JONES,SUSAN  ABO:  Rh:
Donation date/time: JAN 21, 1993  15:59           Unit ID: A33333

  COLLECTION DISPOSITION: PREPARE COMPONENT(S)// <RET>
  DATE/TIME PROCESSED: NOW// <RET>  (JAN 21, 1993@13:41)

Select BLOOD COMPONENT: 04060
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
DATE/TIME STORED: 01/25/93@13:41// <RET>  (JAN 25, 1993@22:59)

Time between collection and storage too long !!


Must enter DATE and TIME
Time stored must not be earlier than time processed
Future date/time not allowed.
DATE/TIME STORED: 01/21/93@22:59// ^

Select BLOOD COMPONENT: <RET>
```

Example 4: Collection discarded for a therapeutic phlebotomy

HINT: The selections available at the "Select COLLECTION DISPOSITION COMMENT" prompt are based on entries in the BLOOD DESCRIPTION file. Additional entries may be made by using the EDIT BLOOD BANK DESCRIPTIONS file option in the Supervisor's Menu, by specifying BB COLLECT as the screen.

```
Select Donor Option: CP  Collection disposition/component preparation

                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        =>

Select BLOOD DONOR: DUSTY,RUSTY          M      04-27-25      SALT LAKE CITY

Donor: DUSTY,RUSTY  ABO: A Rh: POS
Donation date/time: JAN 21, 1993  10:36           Unit ID: R99999

  COLLECTION DISPOSITION: PREPARE COMPONENT(S)// DISCARD COLLECTION
  Select COLLECTION DISPOSITION COMMENT: ?
 ANSWER WITH COLLECTION DISPOSITION COMMENT
     YOU MAY ENTER A NEW COLLECTION DISPOSITION COMMENT, IF YOU WISH
     ANSWER MUST BE 2-80 CHARACTERS IN LENGTH

CHOOSE FROM:
CON   CONTAMINATED
OD   OVERDRAWN (>495 ML)
SD   SHORTDRAW (<405 ML)
THER   THERAPEUTIC PHLEBOTOMY

  Select COLLECTION DISPOSITION COMMENT: THER  (THERAPEUTIC PHLEBOTOMY)
  Select COLLECTION DISPOSITION COMMENT: <RET>
```

Once components are prepared, the individual components must have a disposition entered through the Donor Blood Testing/Review/Release (LR) option rather than entering a disposition for the entire collection as shown above.

Donor Collection/Processing (DC)

In order to best reflect the actual operations of a blood donor center, data on the collection may be entered prior to the entry of the registration data.

All donors should be entered, including those for whom the unit obtained is not usable (shortdraws, therapeutic phlebotomies, etc.,). These units can then be discarded through the Collection Disposition/Component Preparation (CP) option. In this way, the "Collection Disposition Report" will include the data on these units.

Components must be prepared on all units which are not discarded, **even if the unit is left as whole blood.** If a component is not entered using the Component Preparation (CP) option, the system has no mechanism for knowing that any components exist.

HINTS:

1. If there is a "YES" in the Permanent Deferral field for that donor, the donor's name will be displayed again, followed by Permanent Deferral.

2. The Collection site, Donation group and deferral reasons are pulled from the LAB DESCRIPTION file (#62.5). Additional entries for collection sites and donation groups may be made using the Edit Blood Bank Description file option in the Supervisor's Menu, by specifying either COLLECTION SITE or GROUP AFFILIATION AND COLLECTION SITE. The same option is used to enter new deferral reasons.

3. The program will not allow you to use a donor unit ID number that has been assigned to another donation within a five year time period.

4. The "Bag Lot #:" prompt is controlled by the third default for DONOR in the SITE PARAMETER file. If this default is set to "NO," the "Bag Lot #:" prompt will **not** appear. You can use the Edit Blood Bank Site Parameters option to edit this parameter.

Example 1: Entry of collection data for a new donor who donates successfully on this attempt

```
Select Donor Option: DC  Donor collection/processing

Select BLOOD DONOR NAME: HEMBRY,SHARON
  ARE YOU ADDING 'HEMBRY,SHARON' AS A NEW BLOOD DONOR (THE 14TH)? Y  (YES)
   BLOOD DONOR SEX: F  FEMALE
   BLOOD DONOR DOB: 12/24/59  (DEC 24, 1959)
   BLOOD DONOR CITY: ?
     ANSWER MUST BE 1-30 CHARACTERS IN LENGTH
   BLOOD DONOR CITY: DALLAS
NAME: HEMBRY,SHARON// <RET>
Select DONATION OR DEFERRAL DATE: T   JAN 21, 1993
  DONATION OR DEFERRAL DATE: JAN 21,1993// <RET>
  COLLECTION SITE: ?
     SELECTS ONLY COLLECTION SITES FROM DESCRIPTION LIST
 ANSWER WITH BLOOD BANK UTILITY NAME, OR FULL NAME
 DO YOU WANT THE ENTIRE BLOOD BANK UTILITY LIST? Y  (YES)
CHOOSE FROM:
   PK-V      PARK RIDGE VFW POST #345
   VAH      VA HOSPITAL BLOOD CENTER
   VFW      VFW

  COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
  DONATION GROUP: ??
     Group affiliation for which a donation attempt is made

CHOOSE FROM:
   PK-V      PARK RIDGE VFW POST #345
   VAH      VA HOSPITAL BLOOD CENTER
   VFW      VFW

  DONATION GROUP: VAH          VA HOSPITAL BLOOD CENTER
  DONATION/DEFERRAL CODE: WHOLE BLOOD// ?
     CHOOSE FROM:
       W        WHOLE BLOOD
       P        PLASMAPHERESIS
       C        CYTAPHERESIS
       N        NO DONATION
  DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
  DONATION TYPE: HOMOLOGOUS// ?
     CHOOSE FROM:
       H        HOMOLOGOUS
       A        AUTOLOGOUS
       T        THERAPEUTIC
       D        DIRECTED
  DONATION TYPE: HOMOLOGOUS// <RET>
PATIENT CREDIT: ?
     Enter patient for donation credit
  PATIENT CREDIT: <RET>
  PHLEBOTOMIST: ?
     ANSWER MUST BE 2-30 CHARACTERS IN LENGTH
PHLEBOTOMIST: SH
```

```
  DONOR REACTION CODE: NONE// ?
     SELECTS ONLY DONOR REACTIONS TO BLOOD COLLECTION"
 ANSWER WITH BLOOD BANK UTILITY NAME, OR FULL NAME
 DO YOU WANT THE ENTIRE BLOOD BANK UTILITY LIST? Y  (YES)
CHOOSE FROM:
   MILD       MILD REACTION
   NONE       NO REACTION
   SEVERE       SEVERE REACTION

  DONOR REACTION CODE: NONE// <RET>          NO REACTION
  UNIT ID: R99998
  PRIMARY BAG: ?
     CHOOSE FROM:
       1         SINGLE
       2         DOUBLE
       3         TRIPLE
       4         QUADRUPLE
       5         QUINTUPLE
  PRIMARY BAG: 2  DOUBLE
  ANTICOAGULANT: ?
     CHOOSE FROM:
       1         CPD
       2         ACD
       3         CPDA-1
       4         ADSOL
  ANTICOAGULANT: 3  CPDA-1
  BAG LOT #: 12F12345
  DATE/TIME COLLECTION STARTED: T@10:30  (JAN 21, 1993@10:30)
  DATE/TIME COLLECTION COMPLETED: N  (JAN 21, 1993@11:15)
  COLLECTED PRIMARY UNIT WT (gm): 575
  EMPTY PRIMARY UNIT WT (gm): 98
  COLLECTION VOL (ml): 450// <RET>
```

Example 2: Entry of collection data for a new donor (autologous) who donates successfully on this attempt

HINTS:

1. Previous entries for the Collection site and/or Donation group can be used as defaults with the use of the <SPACE> <RET> convention. Other prompts follow the standard default (//) convention.

2. Please notice how the program checks the unit number in the next example.

```
Select BLOOD DONOR NAME: SNERD,SALLY
  ARE YOU ADDING 'SNERD,SALLY' AS A NEW BLOOD DONOR (THE 23RD)? Y  (YES)
   BLOOD DONOR SEX: F  FEMALE
   BLOOD DONOR DOB: 1/12/56  (JAN 12, 1956)
   BLOOD DONOR CITY: DETROIT
NAME: SNERD,SALLY// <RET>
Select DONATION OR DEFERRAL DATE: T   JAN 25, 1993
  DONATION OR DEFERRAL DATE: JAN 25,1993//<RET>
  COLLECTION SITE: <SPACE> <RET> VAH          VA HOSPITAL BLOOD CENTER
  DONATION GROUP: <SPACE> <RET> VAH        VA HOSPITAL BLOOD CENTER
  DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
  DONATION TYPE: HOMOLOGOUS// A  AUTOLOGOUS
  RESTRICTED FOR: SNERD,SALLY// <RET>

Donor:SNERD,SALLY DOB: 01-12-56

PATIENT:          01-12-56     707000000P     NSC VETERAN  SNERD,SALLY

Is this the patient ? NO// Y  (YES)
  PHLEBOTOMIST: SH
  DONOR REACTION CODE: NONE// <RET>          NO REACTION
  UNIT ID: A33333
A33333 assigned to JONES,SUSAN??
     Enter ID that component(s) prepared from donation will be labeled.

                    Not less than 6 or more than 11 characters
  UNIT ID: A33333
  PRIMARY BAG: DOUBLE
  ANTICOAGULANT: CPDA-1
  BAG LOT #: 12F2345
  DATE/TIME COLLECTION STARTED: T@1400  (JAN 25, 1993@14:00)
  DATE/TIME COLLECTION COMPLETED: N  (JAN 25, 1993@14:34)
  COLLECTED PRIMARY UNIT WT (gm):  ??
     TYPE A NUMBER BETWEEN 1 AND 2999
  COLLECTED PRIMARY UNIT WT (gm): 575
  EMPTY PRIMARY UNIT WT (gm): 98
  COLLECTION VOL (ml): 450// <RET>
```

Example 3: Entry of current information on a donor already in the system who is deferred on this donation attempt. Notice that the questions related to demographics are not asked, since the donor is known. The questions relating to the actual collection are not asked, since the donor was deferred.

```
Select Donor Option: DC  Donor collection/processing

Select BLOOD DONOR NAME: JONES,SUSAN          F      01-25-60      DALLAS
NAME: JONES,SUSAN// <RET>
Select DONATION OR DEFERRAL DATE: JAN 21,1993// T   JAN 25, 1993
  DONATION OR DEFERRAL DATE: JAN 25,1993// <RET>
  COLLECTION SITE: <SPACE> <RET>   VAH        VA HOSPITAL BLOOD CENTER
  DONATION GROUP: <SPACE> <RET>   VAH        VA HOSPITAL BLOOD CENTER
  DONATION/DEFERRAL CODE: WHOLE BLOOD// NO DONATION
  Select DEFERRAL REASON: ??
     Reason(s) for which the donor is (are) deferred.

CHOOSE FROM:
   AGE       AGE<17, MINOR & NO CONSENT, OR AGE>65 & UNACCEPTABLE FOR DONATION
   AIDS       AIDS-POSITIVE QUEST. RESPONSE
   ALCOHOL       ALCOHOL HABITUATION OR INTOXICATION
   BLOOD       ABNORMAL BLEEDING TENDENCY
   BP       SYSTOLIC BP<90 or >180 or DIASTOLIC BP <50 or >100 mm Hg
   CANCER       HISTORY OF CANCER
   CNS       CONVULSIONS AFTER INFANCY
   DONATION       DONATION INTERVAL <8 WK FOR WHOLE BLOOD
   DRUG       DRUG THERAPY
   GENERAL APPEARANCE       UNACCEPTABLE GENERAL APPEARANCE
   HCT       HCT < 38% female, <41% male
   HEART       ACTIVE HEART DISEASE
   HEPATITIS       VIRAL HEPATITIS, SINGLE DONOR TO PT WHO DEVELOPED HEPATITIS
   HGB       HGB <12.5 g/dl female,<13.5 g/dl male
   IMMUNIZ       IMMUNIZATIONS OR VACCINATIONS VARIES WITH SPECIFIC TYPE
   INFECTIOUS       NOT FREE OF INFECTIOUS DISEASE
   KIDNEY       ACTIVE KIDNEY DISEASE
   LIVER       ACTIVE LIVER DISEASE
   LUNG       ACTIVE LUNG DISEASE
   MALARIA       DEFERRED 6 mo- 3 yr DEPENDING ON CIRCUMSTANCES
   MHX       MEDICAL HISTORY DEFERRAL
   NARCOTIC       NARCOTIC HABITUATION OR INTOXICATION
   NS       NEEDLE SCARS
   OP       OTHER PERMANENT DEFERRAL
   OT       OTHER TEMPORARY DEFERRAL
```

```
  PHERESIS      WB DONATION <48 HR AFTER PHERESIS
  PREG      PREGNANCY TO 6 WEEKS POSTPARTUM
  PULSE      PULSE <50 or>100 /min, or pathological irregularity
  RECEIPT      RECEIVED BLOOD PRODUCT PAST 6 MO
  SKIN      DONOR SKIN NOT FREE OF LESIONS
  SURG      SURGERY WITHIN 6 WEEKS - 6 MONTHS
  TB      CLINICALLY ACTIVE TUBERCULOSIS
  TEMP      ORAL TEMP >37.5 degrees C
  WEIGHT      >109 lbs can donate 450+/- 45 ml <109 lb bleed proportionately

 Select DEFERRAL REASON: BP      SYSTOLIC BP<90 or >180 or DIASTOLIC BP <50
or >100 mm Hg
 Select DEFERRAL REASON: <RET>

 Select BLOOD DONOR NAME: <RET>
```

Example 4: Known donor, accidentally using the wrong unit number

```
Select Donor Option: DC  Donor collection/processing

Select BLOOD DONOR NAME: DUSTY,RUSTY       M      04-27-25      SALT LAKE CITY
NAME: DUSTY,RUSTY// <RET>
Select DONATION OR DEFERRAL DATE: DEC 6,1992// T   JAN 21, 1993
  DONATION OR DEFERRAL DATE: JAN 21,1993// <RET>
  COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
  DONATION GROUP: <RET>
  DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
  DONATION TYPE: HOMOLOGOUS// <RET>
  PATIENT CREDIT: <RET>
  PHLEBOTOMIST: SH
  DONOR REACTION CODE: NONE// <RET>          NO REACTION
  UNIT ID: A99999
              INVENTORY FILE HAS AN ENTRY WITH SAME ID ! ??
     Enter ID that component(s) prepared from donation will be labeled.

                    Not less than 6 or more than 11 characters
  UNIT ID: R99999
  PRIMARY BAG: 1  SINGLE
  ANTICOAGULANT: ?
     CHOOSE FROM:
       1        CPD
       2        ACD
       3        CPDA-1
       4        ADSOL
  ANTICOAGULANT: 3  CPDA-1
  DATE/TIME COLLECTION STARTED: N  (JAN 21, 1993@10:36)
  DATE/TIME COLLECTION COMPLETED: T@10:50  (JAN 21, 1993@10:50)
  COLLECTED PRIMARY UNIT WT (gm): 570
  EMPTY PRIMARY UNIT WT (gm): 90
  COLLECTION VOL (ml): 452//450
```

Donor Demographics (DD)

For donors already in this system, changes in any of the demographic data are entered using this option. This includes changes for any of the following fields:

```
NAME
SEX
DOB
ADDRESS LINE 1
ADDRESS LINE 2
ADDRESS LINE 3
CITY
STATE
ZIP CODE
HOME PHONE
WORK PHONE
APHERESIS CODE
GROUP AFFILIATION
DONOR SCHEDULING/RECALL
```

Enter the new (correct) information after the defaults, which reflect the previously entered data. The system will then redisplay the information on the donor, including any changes entered.

Example: Change in the home phone number and the apheresis code

```
Select Donor Option: DD  Donor demographics

Select BLOOD DONOR NAME: HOFFMAN,L
     1   HOFFMAN,LARK          F      05-17-51      OAK PARK
     2   HOFFMAN,LYNEETY          F      01-23-67      DETROIT
CHOOSE 1-2: 1
NAME: HOFFMAN,LARK// <RET>
SEX: FEMALE// <RET>
DOB: MAY 17,1951// <RET>
ADDRESS LINE 1: 301 S HEMPHILL// <RET>
ADDRESS LINE 2: <RET>
ADDRESS LINE 3: <RET>
CITY: OAK PARK// <RET>
STATE: ILLINOIS// <RET>
ZIP CODE: 60301// <RET>
HOME PHONE: 484-4943// 388-4240
WORK PHONE: X1585 LAB// <RET>
APHERESIS CODE: YES
Select GROUP AFFILIATION: VAH// <RET>
  GROUP AFFILIATION: VAH// <RET>
Select GROUP AFFILIATION: <RET>
Select DONOR SCHEDULING/RECALL: EMERGENCY// <RET>


NAME: HOFFMAN,LARK                        SEX: FEMALE
  DOB: MAY 17, 1951                       APHERESIS CODE: YES
  DEMOG ENT/EDIT BY: HEMBRY,SHARON        DATE REGISTERED/EDITED: JAN 25, 1993


  ADDRESS LINE 1: 301 S HEMPHILL          CITY: OAK PARK
  STATE: ILLINOIS                         ZIP CODE: 60301
  HOME PHONE: 388-4240                    WORK PHONE: X1585 LAB


GROUP AFFILIATION: VAH


DONOR SCHEDULING/RECALL: MAR
DONOR SCHEDULING/RECALL: JUN
DONOR SCHEDULING/RECALL: SEP
DONOR SCHEDULING/RECALL: XMAS
DONOR SCHEDULING/RECALL: EMERGENCY


Select BLOOD DONOR NAME: <RET>
```

NOTE: Only those fields with data are included in a redisplay of information.

Donor History, Physical and Consent Form (DH)

The advantages of using computer generated forms to record the data on each blood donation include,

- donor demographic information incorporated onto the form,
- the ability to edit donor medical history questions,
- the ability to edit the informed consent,
- provision of a place to mark the responses to items which will later be entered into the system through other options.

Donors can get into the print queue in two ways. When donors are entered using the Donor Registration option, the user is asked whether the form should be printed and if the response is positive, the donor's name is added to the list. Alternatively, for walk ins who have not yet been registered or to preprint forms for scheduled donors, the donors may be specifically added to the queue without entering actual donation data.

It is also possible to preprint forms for an entire group for prospective mobile or donor drive by specifying a group affiliation.

Example:

```
Select Donor Option: DH  Donor history, physical and consent form

                    Donor registration forms

Display list of donors for printing registration forms ? NO//  <RET>  (NO)

Add all donors from a GROUP AFFILIATION: ? NO//  <RET>  (NO)
Add Donor Name to list: <RET>

Print donor registration forms ? NO// Y  (YES)
Select COLLECTION SITE to appear on form: VAH          VA HOSPITAL BLOOD CENTER
Date to appear on form: APR 07, 1994// <RET> (APR 07, 1994)
Select Print Device:  [Enter Print Device Here]
```

NOTES:

- If the donor had an entry in the Donor Comments field (entered through the S-ED-PD option in the Supervisor's Menu), it would appear above "EXAM:" so that the interviewer would see the relevant information.

- The question "Been pregnant within past six weeks?" does not appear on male donors.

```
JUN 29, 1994  14:47   VAMC                                          Pg: 1
DONOR REGISTRATION                                     Date: APR  7, 1994
Collection site: VA HOSPITAL BLOOD CENTER
-------------------------------------------------------------------------
HOFFMAN,LARK                  Sex: F DOB: MAY 17, 1951     ABO:  Rh:
SSN: 143-67-8900
301 S HEMPHILL
OAK PARK, ILLINOIS 60301
Home phone: 388-4240  Business phone: X1585 LAB
Employer/Donor Group(s):            Current donation type:
    VA HOSPITAL BLOOD CENTER
Cum donations: 2    Previous visit: APR 19, 1994 (WHOLE BLOOD DONATION)

DONOR HISTORY
                                        Circle Y for yes or N for no

    1.  Have you ever given blood under a different name?          Y   N
    2.  In the past 8 weeks, have you given blood, plasma or      Y   N
        platelets?
    3.  Have you ever been refused as blood donor or told not     Y   N
        to donate blood?
    4.  Have you ever had chest pain, heart disease or lung       Y   N
        disease?
    5.  Have you ever had cancer, a blood disease or a bleeding   Y   N
        problem?
    6.  Have you ever had yellow jaundice, liver disease,         Y   N
        hepatis, or a positive test for hepatitis?
    7.  Have you ever had Chaga's disease or babesiosis?          Y   N
    8.  Have you ever been given growth hormone?                  Y   N
    9.  Have you ever taken Tegison for psoriasis?                Y   N
    10. Are you feeling well today?                               Y   N
    11. In the past 3 years, have you been outside the U.S.       Y   N
        or Canada?
    12. In the past 3 years, have you had malaria or taken        Y   N
        anti-malarial drugs?
    13. In the past 12 months, have you been under a doctor's     Y   N
        care or had a major illness or surgery?
    14. In the past 12 months, have you received blood or had     Y   N
        an organ or tissue transplant?
    15. In the past 12 months, have you had a tattoo, ear or      Y   N
        skin piercing, acupuncture or an accidental needle
        stick?
    16. In the past 12 months, have you had close contact with    Y   N
        a person with yellow jaundice or hepatitis, or have you
        been given Hepatitis B Immune Globulin (HBIG)?
    17. In the past 12 months, have you been given rabies shots?  Y   N
    18. A. In the past 12 months, have you had a positive test    Y   N
            for syphilis?
    18. B. In the past 12 months, have you had or been treated    Y   N
            for syphilis or gonorrhea?
    19. In the past 12 months, have you given money or drugs to   Y   N
       anyone to have sex with you?
    20. Female Donors:  In the past 6 weeks, have you been        Y   N
        pregnant or are you pregnant now?
    21. In the past 4 weeks, have you had any shots or            Y   N
        vaccinations?
    22. In the past 4 weeks, have you taken any pills,            Y   N
        medications, or Accutane?
```

23. In the past 3 days, have you taken aspirin or anything that has aspiring in it?	Y	N
24. A. Have you ever used a needle, even one, to take any drug (including steroids)?	Y	N
24. B. In the past 12 months, have you had sex, even once with someone who has used a needle to take drugs?	Y	N
25. A. At any time since 1977, have you taken money or drugs for sex?	Y	N
25. B. In the past 12 months, have you had sex, even once, with anyone who has taken money for drugs or sex?	Y	N
26. Male Donors: Have you had sex with another male since 1977?	Y	N
27. Female Donors: In the past 12 months, have you had sex with a male who has had sex, even once since 1977, with with another male?	Y	N
28. A. Have you ever taken clotting factor concentrates for for a bleeding problem such as hemophilia?	Y	N
28. B. In the past 12 months, have you had sex, even once, with anyone who has taken clotting factors to control bleeding?	Y	N
29. A. Do you have AIDS or have you had a positive test for the AIDS virus?	Y	N
29. B. In the past 12 months, have you had sex, even once with someone who has tested positive for the AIDS virus?	Y	N
30. Are you donating blood today for the purpose of being tested for AIDS?	Y	N
31. Do you understand that if you have the AIDS virus, you can give it to someone else even though you may feel well and have a negative AIDS test?	Y	N
32. Have you read and understood all the donor information presented to you and have all your questions been answered?	Y	N
33. Have you eaten in the last four hours?	Y	N

The medical history which I have furnished is true and accurate, to the best of my knowledge. I consent to having the HIV-1 antibody testing performed and understand that I will be informed of the test results, should the test be positive, no sooner than 55 days from today. I hereby grant permission to the Veterans Administration Blood Bank to draw approximately 450 ml. of blood from me, to be used in such a manner as the Blood Bank may deem desirable.

Date .....at .....(time) .....
(Donor)

.....
(Witness)

```
JUN 29, 1994  14:47   VAMC                                          Pg: 2
DONOR REGISTRATION                                        Date: APR  7, 1994
Collection site: VA HOSPITAL BLOOD CENTER
-------------------------------------------------------------------------------
HOFFMAN,LARK                    Sex: F DOB: MAY 17, 1951     ABO:  Rh:
SSN: 143-67-8900
301 S HEMPHILL
OAK PARK, ILLINOIS 60301
Home phone: 388-4240  Business phone: X1585 LAB
Employer/Donor Group(s):            Current donation type:
    VA HOSPITAL BLOOD CENTER
Cum donations: 2    Previous visit: APR 19, 1994 (WHOLE BLOOD DONATION)
-------------------------------------------------------------------------------
EXAM:


General appearance:

Venipuncture site:

Weight (lb):                    Temp:          Pulse:          BP:

Hb:                 Hct:

OK to collect unit (Yes or No):

If not OK to collect reason(s):

Patient credit:

Examiner:                                  Phlebotomist:

UNIT NUMBER:                               Bag lot #:

Time collection started:                   Time completed:

Donor reaction(s) ? :

Date/time processed:

Collected primary unit (gm):               Empty primary unit container (gm):

Vol collected (ml):
```

Old Donor Records (DO)

In order to use the various donor recruitment aspects of the system, it will be necessary to enter the data for those donors who had donated before the implementation of the donor module. This option is to be used **only** for recording historical data, not for entering current donation information. Therefore, once the donor is in the system, this option will not accept the input of that donor's name as an acceptable response.

Example: Entry of data for a donor who had previously donated two units of whole blood and had one previous deferral

NOTES:

- If the entry of information is interrupted for any reason, the donor name will need to be deleted and the data entry restarted, because it will not be possible to get back into the option once the system recognizes that donor as already entered. If this occurs, the donor can be deleted if you have the appropriate security access. Use the Donor Registration option in the Donor Menu to, a) indicate that you wish to edit the donor demographic information, then, b) enter "@" when the donor's name is displayed, to delete the donor.

- The option used to enter the donor unit ID number is automatically stored at the time of entry. If the unit ID is being entered using this option, the system will permit entry of a unit ID which is identical to a unit ID in the INVENTORY file, IF the response to the prompt "INVENTORY FILE has an entry with the same ID! Do you still want to enter the unit in the donor file? NO//" is "YES."

- Donor unit numbers entered via this option are not accessible using other donor options (those used to enter component preparation information).

```
Select Donor Option: DO  Old blood donor records

Select BLOOD DONOR NAME: HOFFMAN,LAURA
  ARE YOU ADDING 'HOFFMAN,LAURA' AS A NEW BLOOD DONOR (THE 25TH)? Y  (YES)
   BLOOD DONOR SEX: F  FEMALE
   BLOOD DONOR DOB: 7-17-51  (JUL 17, 1951)
   BLOOD DONOR CITY: OAK PARK

Donors with same last name, first name initial and sex as your entry:
            HOFFMAN,LARK                  DOB: 05/17/51
            HOFFMAN,LYNEETY               DOB: 01/23/67

Your entry: HOFFMAN,LAURA                 DOB: 07/17/51

Want to delete your entry ? NO// <RET>  (NO)
NAME: HOFFMAN,LAURA// <RET>
SEX: FEMALE// <RET>
DOB: JUL 17,1951// <RET>
```

```
APHERESIS CODE: ?
     CHOOSE FROM:
       1        YES
       2        NO
       1        yes
       2        no
APHERESIS CODE: Y YES
ABO GROUP: A  A
RH TYPE: POS  POSITIVE
CUMULATIVE DONATIONS: <RET>
ADDRESS LINE 1: 301 S HEMPHILL
ADDRESS LINE 2: <RET>
ADDRESS LINE 3: <RET>
CITY: OAK PARK// <RET>
STATE: ILLINOIS
ZIP CODE: 60301
HOME PHONE: 488-4943
WORK PHONE: X3333 LAB
Select GROUP AFFILIATION: VAH          VA HOSPITAL BLOOD CENTER
Select GROUP AFFILIATION: <RET>



DONOR SCHEDULING:
  1>?
Specialized instructions/information for the donor which
 need to be brought to the attention of the person
 performing the donor's medical history interview.

You are ready to enter a line of text.
If you have no text to enter, just press the return key.
Type "CONTROL-I" (or TAB key) to insert tabs.
When text is output, these formatting rules will apply:
 A)  Lines containing only punctuation characters, or lines containing tabs
     will stand by themselves, i.e., no wrap-around.
 B)  Lines beginning with spaces will start on a new line.
 C)  Expressions between "|" characters will be evaluated as
     "computed-field expressions and then be printed as evaluated
     thus "|NAME|" would cause the current name to be inserted in the text.
```

```
Want to see a list of allowable formatting "WINDOWS"? NO// <RET>  (NO)
  1> <RET>
Select DONOR SCHEDULING/RECALL: ?
 ANSWER WITH DONOR SCHEDULING/RECALL
     YOU MAY ENTER A NEW DONOR SCHEDULING/RECALL, IF YOU WISH
CHOOSE FROM:
       1           JAN
       2           FEB
       3           MAR
       4           APR
       5           MAY
       6           JUN
       7           JUL
       8           AUG
       9           SEP
       10          OCT
       11          NOV
       12          DEC
       13          7/4
       14    LABOR DAY
       15         XMAS
       16    EMERGENCY
Select DONOR SCHEDULING/RECALL: 1  (JAN)
Select DONOR SCHEDULING/RECALL: 6  (JUN)
Select DONOR SCHEDULING/RECALL: 15  (XMAS)
Select DONOR SCHEDULING/RECALL: 16  (EMERGENCY)
Select DONOR SCHEDULING/RECALL: <RET>

NAME: HOFFMAN,LAURA                    SEX: FEMALE
  DOB: JUL 17, 1951                    APHERESIS CODE: YES
  ABO GROUP: A                         RH TYPE: POSITIVE
  DEMOG ENT/EDIT BY: HEMBRY,SHARON     DATE REGISTERED/EDITED: JAN 26, 1993

  ADDRESS LINE 1: 301 S HEMPHILL       CITY: OAK PARK
  STATE: ILLINOIS                      ZIP CODE: 60301
  HOME PHONE: 488-4943                 WORK PHONE: X3333 LAB

GROUP AFFILIATION: VAH


DONOR SCHEDULING/RECALL: JAN
DONOR SCHEDULING/RECALL: JUN
DONOR SCHEDULING/RECALL: XMAS
DONOR SCHEDULING/RECALL: EMERGENCY

EDIT above information: ? NO// <RET>  (NO)

Select DONATION ATTEMPT DATE/TIME DONATION OR DEFERRAL DATE: 2-4-90 FEB 4,
1990
DONATION OR DEFERRAL DATE: FEB 4,1990// <RET>
COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
DONATION GROUP: VAH          VA HOSPITAL BLOOD CENTER
DONATION/DEFERRAL CODE: WHOLE BLOOD// W  WHOLE BLOOD
DONATION TYPE: HOMOLOGOUS// H  HOMOLOGOUS
DONOR REACTION CODE: NONE// <RET>          NO REACTION
DONOR UNIT ID: N11112
```

```
Select DONATION ATTEMPT DATE/TIME DONATION OR DEFERRAL DATE: 5-2-90  MAY 2,
1990
DONATION OR DEFERRAL DATE: MAY 2,1990// <RET>
COLLECTION SITE: VAH// <RET>          VA HOSPITAL BLOOD CENTER
DONATION GROUP: <SPACE> <RET>   VAH        VA HOSPITAL BLOOD CENTER
DONATION/DEFERRAL CODE: WHOLE BLOOD// D??
     CHOOSE FROM:
       W        WHOLE BLOOD
       P        PLASMAPHERESIS
       C        CYTAPHERESIS
       N        NO DONATION
DONATION/DEFERRAL CODE: WHOLE BLOOD// N  NO DONATION
Select DEFERRAL REASON: HCT          HCT < 38% female, <41% male
Select DEFERRAL REASON: <RET>

Select DONATION ATTEMPT DATE/TIME DONATION OR DEFERRAL DATE: 5-12-90 MAY 12,
1990
DONATION OR DEFERRAL DATE: MAY 12,1990// <RET>
COLLECTION SITE: VAH// <RET>          VA HOSPITAL BLOOD CENTER
DONATION GROUP: <SPACE> <RET>   VAH        VA HOSPITAL BLOOD CENTER
DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
DONATION TYPE: HOMOLOGOUS// <RET>
DONOR REACTION CODE: NONE// <RET>          NO REACTION
DONOR UNIT ID: N11158

Select DONATION ATTEMPT DATE/TIME DONATION OR DEFERRAL DATE: <RET>

Select BLOOD DONOR NAME: <RET>
```

Donor Phenotyping (DP)

RBC and HLA phenotyping results and the CMV antibody status of donors/ donor units should be entered as part of the donor's record. In this way, they will become part of the permanent record and will be transferred with any units of blood which the donor may subsequently donate.

The system incorporates validity checks which compare the entry in the RBC Antigen Present field with those in RBC Antigen Absent field, and vice versa, to ensure that the same antigen cannot be entered in both.

If the phenotyping or CMV antibody testing is performed on the donor unit **after** it has been released to inventory, results are entered through the Unit Phenotyping (UP) option in the Inventory Menu so that they are associated with the unit ID number. Data entered through I-UP will be transferred to File #65.5 and the donor's record will be updated.

Any data changes made in the phenotyping or CMV antibody status will be included in the audit trail.

Example 1: Entry of Test Results

```
Select Donor Option:  DONOR PHEnotyping

Select BLOOD DONOR NAME: A22223  SNERD,SALLY        F      01-12-56    DETROIT

Select donation date phenotyping specimen taken: 1-25-1993// <RET> JAN 25, 1993
Select RBC ANTIGEN PRESENT: ?
 ANSWER WITH RBC ANTIGEN PRESENT
     YOU MAY ENTER A NEW RBC ANTIGEN PRESENT, IF YOU WISH
 ANSWER WITH FUNCTION FIELD IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N  (NO)
Select RBC ANTIGEN PRESENT: 50140  A-1    50140  A-1
Select RBC ANTIGEN PRESENT: 50750  c    50750  c
Select RBC ANTIGEN PRESENT: 50740  E    50740  E
Select RBC ANTIGEN PRESENT: <RET>

Select RBC ANTIGEN ABSENT: C
     1   C      50730  C
     2   Ce      50780  Ce
     3   Cw      50790  Cw
     4   Cx      50810  Cx
CHOOSE 1-4: 1
Select RBC ANTIGEN ABSENT: e      50760  e
Select RBC ANTIGEN ABSENT: Fy(a)      51200  Fy(a)
Select RBC ANTIGEN ABSENT: <RET>

CMV ANTIBODY: ?
     CHOOSE FROM:
       0        NEG
       1        POS
CMV ANTIBODY: <RET>

Select HLA ANTIGEN PRESENT: <RET>

Select HLA ANTIGEN ABSENT: <RET>

Date/time work completed: NOW// <RET>  (JAN 26, 1993@11:01)


Select BLOOD DONOR NAME: <RET>
```

NOTE: The name of the antigen or the SNOMED code for the antigen can be used as the answer to the "Select RBC ANTIGEN PRESENT:" or the "Select RBC ANTIGEN ABSENT:" prompts.

Example 2: Correction of a previously entered result (c negative typing) which proved to be erroneous

```
Select Donor Option: DP Donor phenotyping

Select BLOOD DONOR NAME: A22223  SNERD,SALLY        F      01-12-56     DETROIT

Select donation date phenotyping specimen taken: 1-25-1993// <RET> JAN 25, 1993

                                        Antigen(s) present  | Antigen(s) absent
-------------------------------------------------------------------------------
Donor Phenotype Record:                              A-1 E c  |        C Fy(a) e

Select RBC ANTIGEN PRESENT: E// ?
 ANSWER WITH RBC ANTIGEN PRESENT
CHOOSE FROM:
   30              A-1
   93              E
   132             c

     YOU MAY ENTER A NEW RBC ANTIGEN PRESENT, IF YOU WISH
 ANSWER WITH FUNCTION FIELD IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N  (NO)
Select RBC ANTIGEN PRESENT: E// 132  c
  RBC ANTIGEN PRESENT: c// @
   SURE YOU WANT TO DELETE THE ENTIRE RBC ANTIGEN PRESENT? Y  (YES)
Select RBC ANTIGEN PRESENT: ?
 ANSWER WITH RBC ANTIGEN PRESENT
CHOOSE FROM:
   30              A-1
   93              E

     YOU MAY ENTER A NEW RBC ANTIGEN PRESENT, IF YQU WISH
 ANSWER WITH FUNCTION FIELD IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N  (NO)
Select RBC ANTIGEN PRESENT: <RET>

Select RBC ANTIGEN ABSENT: Fy(a)// <RET>
  RBC ANTIGEN ABSENT: Fy(a)// <RET>
Select RBC ANTIGEN ABSENT: ^

Date/time work completed: NOW// <RET>  (JAN 26, 1993@11:04)


Select BLOOD DONOR NAME: <RET>
```

Donor Registration (DR)

Blood donors may be registered at either of two times:

1. At the actual time of donation, in order to take advantage of the automatic printing of the forms which can be used to record the donor's medical history, physical and consent, or

2. After the actual donation for those donors drawn at mobile sites.

If the donor's date of birth is such that the donor would not be between 18 and 65 years of age, the appropriate message will be displayed. In addition, the system checks the previous donation date to determine if the prospective donor has donated whole blood within the last eight weeks.

In order to minimize the possibility of duplicate donors, the system performs a variety of searches of the existing entries in the BLOOD DONOR file #65.5. This includes a comparison by last name and first letter of first name, social security number and last name, and birth date (day and month).

If the donor is **not** a new donor, the date for the last donor visit will be displayed following a negative response to the prompt "Edit above information?"

If the donation is Autologous, Directed or Therapeutic, the prompts will indicate the need for additional information.

If the donation is Homologous, the donor will be placed in the print queue for the post-visit donor thank you letters generated by the Donor Lists/Labels/Letters (R-DR-DR-XD) option, regardless of the DONATION/DEFERRAL CODE.

See Example 3, for a donor who has a "YES" entry in the Permanent Deferral field.

HINTS:

1. Collection site & Donation group names are based on entries in the BLOOD BANK UTILITY file (#65.4). Additional entries may be made using the Edit Donor Utility file option in the Supervisor's Menu.

2. Blood Donor Name will cross reference the BLOOD DONOR file (#65.5) if you enter the first letter of the last name and the month and day of birth or the SSN.

3. If the donor has an entry in the Donor Comments field, the information will be displayed before the prompt "Is this the donor?"

4. Phone numbers are free text fields that will accept 3-15 characters.

5. Group affiliation will accept the "space bar and return" convention to accept the previous entry to this field.

6. Apheresis code will accept a <RET> for "unknown".

7. Defaults during editing are the entries made at the beginning of the option.

8. If you enter "YES" at the "Enter donor in list for printing registration form ? NO//" prompt, you will exit the option at this point. You answer "YES," for those donors on whom the computer-generated form will be used.

9. If you accept the default at the "Continue to enter collection information ? YES//" prompt, you continue entering collection information as otherwise entered using the Donor Collection/Processing option.

Example 1: Entry of information for a homologous donor who has just arrived in the donor center

```
Select Donor Option: DR  Donor registration

                         Log-in donor visits

Enter DONATION DATE: TODAY// <RET> JAN 25, 1993 MONDAY

For a group of donors COLLECTION SITE & DONATION GROUP need be entered once.
If not desired just press "RETURN" key after the following two prompts.


Enter COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
Enter DONATION GROUP: VAH          VA HOSPITAL BLOOD CENTER
```

```
Select BLOOD DONOR NAME: HOFFMAN,LARK
  ARE YOU ADDING "HOFFMAN,LARK" AS A NEW BLOOD DONOR (THE 20TH)? Y  (YES)
   BLOOD DONOR SEX: F  FEMALE
   BLOOD DONOR DOB: 5/17/51  (MAY 17, 1951)
   BLOOD DONOR CITY: OAK PARK

Donors with same last name, first name initial and sex as your entry:
            HOFFMAN,LYNEETY                DOB: 01/23/67

Your entry: HOFFMAN,LARK                   DOB: 05/17/51

Want to delete your entry ? NO// <RET>  (NO)
ADDRESS LINE 1: 301 S HEMPHILL
ADDRESS LINE 2: <RET>
ADDRESS LINE 3: <RET>
STATE: ILLINOIS
ZIP CODE: 60301
HOME PHONE: 484-4943
WORK PHONE: X1585 LAB
Select GROUP AFFILIATION:  <SPACE> <RET>  VAH        VA HOSPITAL BLOOD CENTER
Select GROUP AFFILIATION: <RET>
Select DONOR SCHEDULING/RECALL: ?
 ANSWER WITH DONOR SCHEDULING/RECALL
     YOU MAY ENTER A NEW DONOR SCHEDULING/RECALL, IF YOU WISH
CHOOSE FROM:
       1           JAN
       2           FEB
       3           MAR
       4           APR
       5           MAY
       6           JUN
       7           JUL
       8           AUG
       9           SEP
       10          OCT
       11          NOV
       12          DEC
       13          7/4
       14    LABOR DAY
       15         XMAS
       16    EMERGENCY
Select DONOR SCHEDULING/RECALL: 3  (MAR)
Select DONOR SCHEDULING/RECALL: 6  (JUN)
Select DONOR SCHEDULING/RECALL: 9  (SEP)
Select DONOR SCHEDULING/RECALL: 15  (XMAS)
Select DONOR SCHEDULING/RECALL: 16  (EMERGENCY)
Select DONOR SCHEDULING/RECALL: <RET>
APHERESIS CODE: ?
                              CHOOSE FROM:
                                 1        YES
                                 2        NO
                                 1        yes
                                 2        no
APHERESIS CODE: <RET>
```

```
NAME: HOFFMAN,LARK                          SEX: FEMALE
  DOB: MAY 17, 1951                         DEMOG ENT/EDIT BY: HEMBRY,SHARON
  DATE REGISTERED/EDITED: JAN 25, 1993

  ADDRESS LINE 1: 301 S HEMPHILL            CITY: OAK PARK
  STATE: ILLINOIS                           ZIP CODE: 60301
  HOME PHONE: 484-4943                      WORK PHONE: X1585 LAB

GROUP AFFILIATION: VAH

DONOR SCHEDULING/RECALL: MAR
DONOR SCHEDULING/RECALL: JUN
DONOR SCHEDULING/RECALL: SEP
DONOR SCHEDULING/RECALL: XMAS
DONOR SCHEDULING/RECALL: EMERGENCY

EDIT above information: ? NO// <RET>

COLLECTION SITE: VAH// <RET>
DONATION GROUP: VAH// <RET>
ARRIVAL/APPT TIME: NOW// <RET>  (JAN 25, 1993@12:40)
DONATION/DEFERRAL CODE: WHOLE BLOOD// ?
     CHOOSE FROM:
       W        WHOLE BLOOD
       P        PLASMAPHERESIS
       C        CYTAPHERESIS
       N        NO DONATION
DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
DONATION TYPE: HOMOLOGOUS// ?
     CHOOSE FROM:
       H        HOMOLOGOUS
       A        AUTOLOGOUS
       T        THERAPEUTIC
       D        DIRECTED
DONATION TYPE: HOMOLOGOUS// <RET>
Enter donor in list for printing registration form ? NO// <RET>  (NO)

Continue to enter collection information ? YES// N  (NO)
```

Example 2: Entry of information for a homologous donor who donated at a mobile collection site the previous evening

HINT: Only the fields for which information was previously entered through the Donor Collection/Processing (DC) option are displayed. Thus, it is necessary to edit the demographic information in order to complete the remainder of the entries.

```
Select Donor Option: DR Donor registration


                    Log-in donor visits

Enter DONATION DATE: TODAY// T-1  (JAN 25, 1993) MONDAY

For a group of donors COLLECTION SITE & DONATION GROUP need be entered once.
If not desired just press "RETURN" key after the following two prompts.


Enter COLLECTION SITE: PK-V          PARK RIDGE VFW POST #345
Enter DONATION GROUP: PK-V          PARK RIDGE VFW POST #345


Select BLOOD DONOR NAME: S0108  SMITH,RANDY      M      01-08-45      PARK RIDGE
Is this the Donor ? YES// <RET>  (YES)


NAME: SMITH,RANDY                        SEX: MALE
  DOB: JAN  8, 1945                      DATE REGISTERED/EDITED: JAN 26, 1993

  CITY: PARK RIDGE


EDIT above information: ? NO// Y  (YES)
NAME: SMITH,RANDY// <RET>
SEX: MALE// <RET>
DOB: JAN 8,1945// <RET>
ADDRESS LINE 1: 345 N PONTIAC
ADDRESS LINE 2: <RET>
ADDRESS LINE 3: <RET>
CITY: PARK RIDGE// <RET>
STATE: ILLINOIS
ZIP CODE: 60222
HOME PHONE: 345-9086
WORK PHONE: 544-6789
APHERESIS CODE: <RET>
Select GROUP AFFILIATION: PK-V          PARK RIDGE VFW POST #345
Select GROUP AFFILIATION: <RET>
Select DONOR SCHEDULING/RECALL: 16  (EMERGENCY)
Select DONOR SCHEDULING/RECALL: <RET>
```

```
NAME: SMITH,RANDY                          SEX: MALE
  DOB: JAN  8, 1945                        DEMOG ENT/EDIT BY: HEMBRY,SHARON
  DATE REGISTERED/EDITED: JAN 26, 1993


  ADDRESS LINE 1: 345 N PONTIAC            CITY: PARK RIDGE
  STATE: ILLINOIS                          ZIP CODE: 60222
  HOME PHONE: 345-9086                     WORK PHONE: 544-6789


GROUP AFFILIATION: PK-V


DONOR SCHEDULING/RECALL: EMERGENCY


EDIT above information: ? NO// <RET>  (NO)  Last visit: JAN 26, 1993
COLLECTION SITE: PK-V// <RET>
DONATION GROUP: PK-V// <RET>
ARRIVAL/APPT TIME: NOW// T-1@8PM  (JAN 25, 1993@20:00)
DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
DONATION TYPE: HOMOLOGOUS// <RET>
Enter donor in list for printing registration form ? NO// <RET>  (NO)

Continue to enter collection information ? YES// <RET>  (YES)
  DONATION OR DEFERRAL DATE: JAN 25,1993// <RET>
  PATIENT CREDIT: <RET>
  PHLEBOTOMIST: MEL
  DONOR REACTION CODE: NONE// <RET>          NO REACTION
  UNIT ID: V11234
  PRIMARY BAG: 2  DOUBLE
  ANTICOAGULANT: 3  CPDA-1
  BAG LOT #: 12345F
  DATE/TIME COLLECTION STARTED: T-1@22:30  (JAN 25, 1993@22:30)
  DATE/TIME COLLECTION COMPLETED: T-1@22:40  (JAN 25, 1993@22:40)
  COLLECTED PRIMARY UNIT WT (gm): 610
  EMPTY PRIMARY UNIT WT (gm): 98
  COLLECTION VOL (ml): 483// <RET>


Select BLOOD DONOR NAME: <RET>
```

NOTE: This procedure may also be performed more rapidly using the Donor Demographics (DD) option, providing the entries for COLLECTION SITE, DONATION GROUP, DONATION/DEFERRAL CODE, and DONATION TYPE were made through the Donor Collection/Processing (DC) option. If they were not, the collection data will not be recorded for that donor.

Example 3: Attempt to register a donor who has a previous entry in the Permanent Deferral field

HINTS:

1. The Permanent Deferral Reason field is not displayed, in order to maintain the confidentiality of test results, etc.

2. If the donor has already donated, e.g., at a mobile collection site, and the information is being entered retrospectively, it must be entered using the Donor Collection/Deferral Edit (ED-DC) option in the Supervisor's Menu, in order to avoid the system's rejecting the data.

```
Select Donor Option: DR  Donor registration

                         Log-in donor visits

Enter DONATION DATE: TODAY// <RET> FEB 23, 1993 TUESDAY

For a group of donors COLLECTION SITE & DONATION GROUP need be entered once.
If not desired just press "RETURN" key after the following two prompts.


Enter COLLECTION SITE: <RET>
Enter DONATION GROUP: <RET>


Select BLOOD DONOR NAME: JONES,SUSAN          F      01-25-60      DALLAS
Is this the Donor ? YES// <RET>  (YES)


NAME: JONES,SUSAN                          SEX: FEMALE
  DOB: JAN 25, 1960                        PERMANENT DEFERRAL: YES
  DATE REGISTERED/EDITED: JAN 21, 1993  DEFERRAL ENTER/EDIT BY: HEMBRY,SHARON
  PERMANENT DEFERRAL DATE CHANGE: JAN 26, 1993@13:27


  CITY: DALLAS


JONES,SUSAN permanently deferred except for autologous
or therapeutic donation.  If any questions see physician in charge.

Do you want autologous/therapeutic donation ? NO// <RET>  (NO)


Select BLOOD DONOR NAME: <RET>
```

Example 4: Entry of information for an Autologous donor (already in the donor file) who has just arrived in the donor center

HINT: In order to be entered as an Autologous donor, the patient **must** already be entered in the patient file. By entering the patient/donor's name in the Restricted For field, the system will not allow that unit to be selected for another patient.

```
Select Donor Option: DR  Donor registration

                        Log-in donor visits

Enter DONATION DATE: TODAY// <RET> JAN 26, 1993 TUESDAY

For a group of donors COLLECTION SITE & DONATION GROUP need be entered once.
If not desired just press "RETURN" key after the following two prompts.


Enter COLLECTION SITE: <RET>
Enter DONATION GROUP: <RET>


Select BLOOD DONOR NAME: SN
     1   SNERD,MORIMER          M      01-24-56
     2   SNERD,SALLY          F      01-12-00      DETROIT
CHOOSE 1-2: 2

Is this the Donor ? YES// <RET>  (YES)  Age: 93
       Does donor have physician permission to donate ? YES// <RET>  (YES)

NAME: SNERD,SALLY                          SEX: FEMALE
  DOB: JAN 12, 1900                        DEMOG ENT/EDIT BY: HEMBRY,SHARON
  DATE REGISTERED/EDITED: JAN 25, 1993


  ADDRESS LINE 1: 301 S. HEMPHILL          CITY: DETROIT
  STATE: ILLINOIS                          ZIP CODE: 60301
  HOME PHONE: 484-4943                     WORK PHONE: 544-2888


EDIT above information: ? NO// <RET>  (NO)  Last visit: JAN 25, 1990
COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
DONATION GROUP: <RET>
ARRIVAL/APPT TIME: NOW// <RET>  (JAN 26, 1993@13:44)
DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
DONATION TYPE: HOMOLOGOUS// A  AUTOLOGOUS


RESTRICTED FOR: SNERD,SALLY// <RET>
```

```
PATIENT:          01-12-00     707000000P     NSC VETERAN
SNERD,SALLY ID: 707-00-0000P
ABO group:   Rh type:
AGE: 93  DATE OF BIRTH:  1900
Ward on Adm: 1B  Service: OPHTHALMOLOGY
Adm Date: JUL 21, 1992  Adm DX: SICK
Present Ward: 1D                        MD:


SNERD,SALLY
Is this the patient ? NO// Y  (YES)
Enter donor in list for printing registration form ? NO// <RET>  (NO)

Continue to enter collection information ? YES// NO  (NO)


Select BLOOD DONOR NAME: <RET>
```

NOTES:

- If the patient is not entered in the patient file, the system would have beeped and the prompts would have been as shown above instead of as previously shown. Since the entry was not accepted, the prompt is repeated, including the explanation for what type of data is to be entered.

```
RESTRICTED FOR: HOFFMAN,LARK// <RET>

PATIENT: <RET>
Select PATIENT NAME: HOFFMAN,LARK
Select PATIENT NAME: ??
     If autologous donation donor must be the same as the patient


PATIENT: <RET>
 ANSWER WITH PATIENT NAME, OR SOCIAL SECURITY NUMBER, OR WARD LOCATION, OR
     ROOM-BED
 DO YOU WANT THE ENTIRE 415-ENTRY PATIENT LIST? N  (NO)
Select PATIENT NAME: <RET>
```

- If the unit can later be released for general use, it may be "unrestricted" using the Free Unit from Autologous Donor (EI-FR) option in the Supervisor's Menu.

Example 5: Entry of information for a DIRECTED donor (already in the donor file) who has just arrived in the donor center. In order for the Directed Donor information to be entered, the patient must already be entered in the patient file.

```
Select Donor Option: DR Donor registration

                       Log-in donor visits

Enter DONATION DATE: TODAY// <RET> JAN 26, 1993 TUESDAY

For a group of donors COLLECTION SITE & DONATION GROUP need be entered once.
If not desired just press "RETURN" key after the following two prompts.


Enter COLLECTION SITE: <RET>
Enter DONATION GROUP: <RET>


Select BLOOD DONOR NAME: HOFFMAN,L
     1   HOFFMAN,LARK          F      05-17-51      OAK PARK
     2   HOFFMAN,LAURA          F      07-17-51      OAK PARK
     3   HOFFMAN,LYNEETY          F      01-23-67      DETROIT
CHOOSE 1-3: 1
Is this the Donor ? YES// <RET>  (YES)



NAME: HOFFMAN,LARK                        SEX: FEMALE
  DOB: MAY 17, 1951                       APHERESIS CODE: YES
  DEMOG ENT/EDIT BY: HEMBRY,SHARON        DATE REGISTERED/EDITED: JAN 25, 1993


  ADDRESS LINE 1: 301 S HEMPHILL          CITY: OAK PARK
  STATE: ILLINOIS                         ZIP CODE: 60301
  HOME PHONE: 388-4240                    WORK PHONE: X1585 LAB


GROUP AFFILIATION: VAH


DONOR SCHEDULING/RECALL: MAR
DONOR SCHEDULING/RECALL: JUN
DONOR SCHEDULING/RECALL: SEP
DONOR SCHEDULING/RECALL: XMAS
DONOR SCHEDULING/RECALL: EMERGENCY


EDIT above information: ? NO// <RET>  (NO)  Last visit: JAN 25, 1993
COLLECTION SITE: VAH          VA HOSPITAL BLOOD CENTER
DONATION GROUP: <RET>
ARRIVAL/APPT TIME: NOW// <RET>  (JAN 26, 1993@13:57)
DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
DONATION TYPE: HOMOLOGOUS// D  DIRECTED
```

```
RESTRICTED FOR: SNERD,SALLY          00-00-00     707000000P     NSC VETERAN

SNERD,SALLY ID: 707-00-0000P
ABO group:   Rh type:
AGE: 93  DATE OF BIRTH:  1900
Ward on Adm: 1B  Service: OPHTHALMOLOGY
Adm Date: JUL 21, 1992  Adm DX: SICK
Present Ward: 1D                        MD:


SNERD,SALLY
Is this the patient ? NO// Y  (YES)
Enter donor in list for printing registration form ? NO// <RET>  (NO)

Continue to enter collection information ? YES// N  (NO)


Select BLOOD DONOR NAME: <RET>
```

NOTES:

- If the unit can later be released for general use, it may be "unrestricted" using the Free Unit from Autologous/Directed Donor (EI-FR) option in the Supervisor's Menu .

- In order for the tech receiving requests for the intended recipient to be aware of the unit, all units which are entered in the BLOOD INVENTORY file (#65) as restricted for a specific patient will be displayed in the patient menu options. Unfortunately, the patient options do not address the problem of units which have not yet been labeled/released to Inventory.

Donor Blood Testing/Review/Release (DU)

```
Select Donor Option: DU  Donor blood testing/review/release

Select Donor blood testing/review/release Option: ?

   CR     Component preparation report
   DA     Abnormal donor tests
   DC     Donor unit ABO/Rh recheck
   DL     Donor unit testing worklist
   DR     Donor unit testing prooflist
   DS     Donor unit supplemental testing prooflist
   DT     ABO/Rh testing of donor units
   LA     Lab tests(not ABO/Rh) on donor units
   LR     Test review/Component labeling/release

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Donor blood testing/review/release Option: <RET>
```

Component Preparation Report (DU-CR)

As part of routine supervisory review, it is necessary to look at the collection and component preparation information. This report allows a quick review of data entered using the D-DC and the D-CP options.

Example:

```
Select Donor blood testing/review/release Option: CR  Component preparation
report
                    Blood donor component preparation report
Start with Date TODAY// <RET> JAN 21, 1993
Go    to   Date TODAY// <RET> JAN 21, 1993
Select Print Device:   [Enter Print Device Here]


JAN 21, 1993  10:54   DALLAS ISC-DEVELOPMENT ACCOUNT                  Pg: 1
LABORATORY SERVICE
         BLOOD COMPONENT PREPARATION FROM JAN 21, 1993 TO JAN 21, 1993
                      Anti   Coll Proc Coll                        Vol  Storage
Unit ID      Type Bag Coag    Min  Min Disp Tech Blood component  (ml) Minutes
-------------------------------------------------------------------------------

DONATION DATE: JAN 21, 1993
R99999         H   1  CPDA-1   14      PREP SH
-------------------------------------------------------------------------------
HOMOLOGOUS DONATION TYPE                 COUNT:    1
-------------------------------------------------------------------------------
```

Abnormal Donor Tests (DU-DA)

As part of the routine supervisory review of abnormal test results, the system will generate, on command, a list of all abnormal donor testing results for a specified range of donor unit ID numbers. In order to maintain the privacy of the donors involved, only the unit ID and the donor's internal file number are included on the hard copy.

If only the totals are needed for the number of abnormal results, use the report generated through the R-WK-AD Blood Bank Administrative Data option in the Report Menu.

Example:

```
Select Donor blood testing/review/release Option: DA  Abnormal donor tests

                    Blood donor- Abnormal Test List

Start with DONOR UNIT ID: A22222
Go    to   DONOR UNIT ID: B33333
Select Print Device:  [Enter Print Device Here]
Date/Time to print: N
REQUEST QUEUED!
```

```
JAN 27, 1993  09:14   DALLAS ISC-DEVELOPMENT ACCOUNT                Pg: 1
LABORATORY SERVICE     ABNORMAL TEST RESULTS FOR DONORS
Donation Date Unit ID     DONOR     TEST
-----------------------------------------------------------------------------
JAN 25, 1993  A22222      23        ANTIBODY SCREEN RESULT
                                    ALT
-----------------------------------------------------------------------------
JAN 25, 1993  A22223      24        HBsAg
-----------------------------------------------------------------------------
APR 22, 1991  AGS94124    6         SYPHILIS SEROLOGY
                                    HBsAg
                                    HIV ANTIBODY
                                    ANTIBODY SCREEN RESULT
                                    HBcAb
-----------------------------------------------------------------------------
```

```
Select Donor blood testing/review/release Option: <RET>

Select Print Device:   [Enter Print Device Here]
```

Donor Unit ABO/RH Recheck (DU-DC)

Various requirements exist to ensure that donor units are properly tested and labeled prior to making them available for transfusion. ABO/Rh typing must be rechecked by a second technologist at some point in time, with at least one set of results coming from an integral segment attached to the donor unit.

If this testing is performed prior to labeling/release of the unit to inventory, the recheck interpretations are entered using this option. Since various checks have been included to evaluate the data entered, it is necessary to have the original testing entered using the ABO/Rh Testing of Donor Units (D-DU-DT) option in the Donor Menu before entering the rechecks. These checks include: 1) verification that the tech is not the same as the one entering the original testing, and 2) comparison of the original ABO/Rh interpretations with those being entered through this option.

The first default for the Donor Option in the LABORATORY SITE file (69.9) allows the site to indicate that the ABO/Rh interpretations for donor units should be transferred with the unit when it is released to inventory. If this default is set to "YES" **and** the rechecks have been entered, the ABO/Rh interpretations will be transferred to inventory and the units will **not** be placed on the worksheet generated using the I-UW option in the Inventory Menu. If, however, the rechecks have not been entered, the data will not be transferred to inventory and the units will be placed on the worksheet.

If the units are rechecked **after** being placed into inventory, the recheck information should be entered using the Unit ABO/Rh Confirmation (I-UC) option in the Inventory Menu.

In order to expedite the process of entering test results, the system will automatically add an increment of one to the donor number for which data has just been entered and make this new donor number the default for the next data entry, providing the next logical number actually exists in the system. If not, it will not display any default.

NOTES:

- In order to ensure the entry of actual interpretations, the donor's ABO/Rh are not displayed.

- If the interpretations entered do not match those entered through the ABO/Rh Testing of Donor Units (D-DU-DT) option in the Donor Menu, the system will beep and the following message will be displayed: "Recheck interpretation not equal to original interpretation." Although the system will accept the entry despite the warning message, the system will not allow the unit to be released until the discrepancy is resolved.

Example 1: Tech who entered original results tries to enter recheck

```
Select Donor blood testing/review/release Option: DC  Donor unit ABO/Rh recheck

                              Donor ABO/Rh Recheck


Enter TEST COMMENT(s) ? NO// <RET>  (NO)

Select DONOR ID: A22222

UNIT#:A22222  Donation date:JAN 25, 1993


Tech entering recheck results cannot be the same tech entering the
original interpretation.

Date/time work completed: NOW// <RET>  (JAN 27, 1993@09:06)

Select DONOR ID: A22223// <RET>

Select DONOR ID: <RET>
```

Example 2: Entering rechecks, one is correct and the other is not

```
Select Donor blood testing/review/release Option: DC Donor unit ABO/Rh recheck

                              Donor ABO/Rh Recheck


Enter TEST COMMENT(s) ? NO// <RET>  (NO)
Select DONOR ID: DAL00001

UNIT#:DAL00001  Donation date:DEC 10, 1992

  ABO INTERPRETATION RECHECK: A  A
  RH  INTERPRETATION RECHECK: POS  POSITIVE

Date/time work completed: NOW// <RET>  (JAN 27, 1993@09:20)


Select DONOR ID: DAL00002// <RET>

UNIT#:DAL00002  Donation date:DEC 10, 1992

  ABO INTERPRETATION RECHECK: B  B
Recheck not equal to original interpretation
  RH  INTERPRETATION RECHECK: NEG  NEGATIVE

Date/time work completed: NOW// <RET>  (JAN 27, 1993@09:20)


Select DONOR ID: <RET>
```

Donor Unit Testing Worklist (DU-DL)

Once blood collection data for a given blood donation is entered, including the donor unit number, the donor is automatically entered into the list for having processing performed. The worklist will then subsequently contain all tests requested for which the test results are incomplete. While it may be used to record results, it does not include designated areas for recording the actual test results of the immunohematology testing as it is being performed.

Example:

```
Select Donor Option: DU  Donor blood testing/review/release

Select Donor blood testing/review/release Option: DL  Donor unit testing
worklist

                    BLOOD DONOR WORKLIST
 10) ABO INTERPRETATION
 11) RH INTERPRETATION
 12) SYPHILIS SEROLOGY
 13) HBsAg
 14) HIV ANTIBODY
 15) ANTIBODY SCREEN RESULT
 16) HBcAb
 17) ALT
 18) HTLV-I ANTIBODY
 19) HCV ANTIBODY

Select test(s) by number: ??
Enter one or more of the above numbers
For 2 or more selections separate each with a ',' (ex. 12,13,15)
Enter 'ALL' for all tests.

Select test(s) by number: ALL

You have selected the following tests:
 10) ABO INTERPRETATION
 11) RH INTERPRETATION
 12) SYPHILIS SEROLOGY
 13) HBsAg
 14) HIV ANTIBODY
 15) ANTIBODY SCREEN RESULT
 16) HBcAb
 17) ALT
 18) HTLV-I ANTIBODY
 19) HCV ANTIBODY
OK ? YES// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)? YES// <RET>
(YES)
Select Print Device:  [Enter Print Device Here]
```

```
JAN 26, 1993  14:06   DALLAS ISC-DEVELOPMENT ACCOUNT                    Pg: 1
LABORATORY SERVICE     BLOOD DONOR WORKLIST
DONOR ID                                    ABO RH       Collection date
-----------------------------------------------------------------------------
A12345                                      A   POS      APR 17, 1991

SYPHILIS SEROLOGY
HBsAg
HIV ANTIBODY
ANTIBODY SCREEN RESULT
HBcAb
ALT
HTLV-I ANTIBODY
HCV ANTIBODY
-----------------------------------------------------------------------------
A22222                                                   JAN 25, 1993

ABO INTERPRETATION
RH INTERPRETATION
SYPHILIS SEROLOGY
HBsAg
HIV ANTIBODY
ANTIBODY SCREEN RESULT
HBcAb
ALT
HTLV-I ANTIBODY
HCV ANTIBODY
-----------------------------------------------------------------------------
A22223                                                   JAN 25, 1993

ABO INTERPRETATION
RH INTERPRETATION
SYPHILIS SEROLOGY
HBsAg
HIV ANTIBODY
ANTIBODY SCREEN RESULT
HBcAb
```

NOTES:

- Donor units which are discarded and for which testing is not done will continue to be included in the listing until ND is entered as the test result, making the test "completed."

- For those tests which a positive result was entered for and the unit was added back to the worklist, the unit can be removed from the worklist by simply indicating "NO" at the prompt. The result need not be changed. Entering the comment is sufficient to bring up the worklist prompt.

Donor Unit Testing Prooflist (DU-DR)

Review of the donor unit testing prooflist prior to the actual labeling of the donor units will allow the technologist to review the test results for the current donation as well as the previous ABO/Rh for the donor, if any, and to see if the donor is listed as a "permanent deferral." If the unit has already been labeled, the labeling information (labeling tech and verification tech) will be included.

Units for which the COLLECTION DISPOSITION is **other than** "Prepare components," must be reviewed and edited by the supervisor before they can be released for labeling.

NOTES:

- The print template for the next report is based on spacing of 132 across, rather than the usual 80 for an 8 1/2 by 11 inch page. Therefore, the content has been abbreviated in the example. The fields included on the actual report are:

  Donation or deferral date
  Donor unit number
  Donor record number
  Permanent deferral
  ABO (from donor record)
  Rh (from donor record)
  ABO (from current testing)
  Rh (from current testing)
  Antibody screen (AbS)
  Syphilis serology (RPR)
  HBsAG (Hep)
  HIV Antibody (HIV)
  HTLV-I Antibody (HT1)
  Collection disposition (COLL. DISP) - {This is as far as the example goes}
  Component
  Component disposition
  Expiration date
  Labeling tech (LTc)
  Verifying tech (VTc)

- For unit A33333, the donor's current test results indicate a positive HBsAg, and therefore, the supervisor entered the permanent deferral information into the system. However, the collection disposition (PREPARE COMPONENTS) had not yet been changed to DISCARD.

Example:

```
Select Donor blood testing/review/release Option: DR  Donor unit testing
prooflist
START WITH DONATION OR DEFERRAL DATE: FIRST// 12/9/92
GO TO DONATION OR DEFERRAL DATE: LAST// <RET>
Select Print Device:  [Enter Print Device Here]


BLOOD DONOR LIST                              JAN 27,1993  09:38        PAGE 1
DONATION DATE UNIT #  DONOR  PDef PR REC ABO Rh  AbS RPR Hep HIV HT1 COLL.DISP
-------------------------------------------------------------------------------

DEC 10,1992   DAL00001   13       A POS    A POS NEG NEG NEG NEG

DEC 10,1992   DAL00002   14       O NEG    O NEG                     PREPARE C

JAN 21,1993   A33333     16  YES                                     PREPARE C

JAN 21,1993   R99998     15       B POS    B POS     NEG REA         PREPARE C

JAN 21,1993   R99999     12       A POS    A POS     NEG NEG         DISCARD C

JAN 25,1993   A22222     23       A NEG    A NEG POS NEG NEG NEG NEG PREPARE C

JAN 25,1993   A22223     24       B POS    B POS NEG NEG REA NEG NEG PREPARE C

JAN 25,1993   A55555      9       A POS                              PREPARE C

Select Donor blood testing/review/release Option: <RET>
```

Donor Unit Supplemental Testing Prooflist (DU-DS)

Review of the donor unit testing prooflist prior to the actual labeling of the donor units will allow the technologist to review the test results for the current donation as well as the previous ABO/Rh for the donor, if any, and to see if the donor is listed as a "permanent deferral." If the unit has already been labeled, the labeling information (labeling tech and verification tech) will be included.

Units for which the COLLECTION DISPOSITION is **other than** "Prepare components," must be reviewed and edited by the supervisor before they can be released for labeling.

NOTES:

- The print template for the next report is based on spacing of 132 across, rather than the usual 80 for an 8 1/2 by 11 inch page. Therefore, the content has been abbreviated in the example. The fields included on the actual report are:

  Donation or deferral date
  Donor unit number
  Donor record number
  Permanent deferral
  ABO (from donor record)
  Rh (from donor record)
  Hepatitis B core antigen (HBcAg)
  ALT
  Collection disposition (COLL.DISP)
  Component
  Component disposition
  Expiration date
  Labeling tech (LTc)
  Verifying tech (VTc)

- For unit A88888, the donor's current test results indicate an elevated ALT and that unit is in quarantine. In addition, the donor for A33333 has a positive HBsAg and therefore the supervisor entered the permanent deferral information into the system. The collection disposition (i.e., PREPARE COMPONENTS) has not yet been changed to DISCARD.

Example:

```
Select Donor blood testing/review/release Option: DS  Donor unit supplemental
testing prooflist
START WITH DONATION OR DEFERRAL DATE: FIRST// 12/1/93
GO TO DONATION OR DEFERRAL DATE: LAST// <RET>
Select Print Device:  [Enter Print Device Here]

BLOOD DONOR SUPPLEMENT                          JAN 27,1993  10:04    PAGE 1
DONATION DATE UNIT #  DONOR PDef PR REC  HBcAb    ALT      HCV Ab   COLL.DISP
-----------------------------------------------------------------------------

DEC  6,1992   A88888    12       A POS  NEGATIVE RPT PENDING       QUARANTINE

DEC 10,1992   DAL00001  13       A POS  NEGATIVE NOT ELEV NEGATIVE PREPARE C

DEC 10,1992   DAL00002  14       O NEG  NEGATIVE NOT ELEV NEGATIVE PREPARE C

JAN 21,1993   A33333    16 YES   B POS  NEGATIVE NOT ELEV NEGATIVE PREPARE C

JAN 21,1993   R99998    15       B POS  NEGATIVE NOT ELEV NEGATIVE PREPARE C

JAN 21,1993   R99999    12       A POS  NEGATIVE NOT ELEV NEGATIVE DISCARD C

JAN 25,1993   A22222    23       A NEG  NEGATIVE ELEVATED NEGATIVE

JAN 25,1993   A22223    24       B POS  NEGATIVE NOT ELEV NEGATIVE

JAN 25,1993   A55555     9       A POS  NEGATIVE NOT ELEV NEGATIVE PREPARE C
```

ABO/Rh Testing of Donor Units (DU-DT)

When results of the present testing for ABO and Rh are entered for each donor unit, the system checks against the historical record for that donor to make sure there is no discrepancy. In the event that there is no previous record for the donor, the message "**CAUTION!!!** No checking can be done" is displayed.

In order to expedite the process of entering test results, the system will automatically add an increment of one to the donor number for which data has just been entered and make this new donor number the default for the next data entry, **providing** the next logical number actually exists in the system. If not, it will not display any default.

Only interpretations of test results are entered. Therefore, the actual test results must be retained to comply with the regulations of the various accrediting agencies.

NOTE: If the ABO INTERPRETATION or RH INTERPRETATION entered is not in agreement with the historical record, a message to that effect will be displayed, followed by the prompt "Is present testing OK? YES//." If "NO" is selected, the prompt "ABO INTERPRETATION" will be redisplayed to allow correction of the result entry. Accepting the results of the present testing does not automatically change the donor's historical record.

Example:

```
Select Donor Option: DU  Donor blood testing/review/release

Select Donor blood testing/review/release Option: DT ABO/Rh testing of donor
units
Same date/time work completed for all entries ? NO// Y  (YES)

Date/time work completed: NOW// <RET>  (JAN 21, 1993@11:00)

Enter TEST COMMENT(s) ? NO// <RET>  (NO)

Select DONOR ID: R99998

UNIT#:R99998  Donation date: JAN 21, 1993

ABO:   Rh:
ABO &/or Rh not on file.
CAUTION !! No checking can be done.

  ABO INTERPRETATION: B  B
  RH INTERPRETATION: POS  POSITIVE

Select DONOR ID: R99999 // <RET>

UNIT#:R99999  Donation date: JAN 21, 1993

ABO: A  Rh: POS
  ABO INTERPRETATION: A  A
  RH INTERPRETATION: POS  POSITIVE
```

Lab Tests (not ABO/Rh) on Donor Units (DU-LA)

When results of the testing for the lab tests other than ABO/Rh are entered, only the interpretations are entered. Therefore, the actual records of the testing must be retained, to comply with the regulations of the various accrediting agencies. No checking is done against historical results at this point.

In order to expedite the process of entering test results, the system will automatically add an increment of 1 to the donor number for which data has just been entered and make this new donor number the default for the next data entry, **providing** the next logical number actually exists in the system. If not, it will not display any default.

In order to minimize the potential for transcription errors, test results should be entered for only one test at a time; however, if this is not practical (based on time and volume restraints), the following steps will minimize the potential for accidentally entering negative results when transcribing results,

1. Enter positives, repeats pending, etc., first,

2. Select only one test at a time and enter "YES" in response to the prompt "Do you want to be asked test comments?"

3. Use the Test Review/Component Labeling/Release (DU-LR) option to place units with positive test results into quarantine until the testing is repeated, in order to prevent confusion and erroneous labeling/release of the unit,

4. Return to the beginning of the option and re-enter the tests for which you wish to enter the remainder of the "negative" results. You can then accept the No default in response to the prompt "Do you want to be asked test comments?"

HINTS:

1. If any comment is entered for any test, a prompt will be displayed as to whether that test should be added back to the incomplete worklist. See Example 2.

2. Currently, it is necessary to re-enter these donors into the other section of the laboratory where the HBsAg, HIV antibody, etc., testing is being performed, in order for those areas to get appropriate workload credit.

3. If results are entered as anything other than "negative" for units already released on an emergency basis, the message "Component(s) released with one or more positive/incomplete test results!" is displayed and a bulletin is sent to all holders of the LRBLSUPER key.

4. Once any components on a donor have been released, any attempt to modify the test results initiates a check to see if the user holds the LRBLSUPER key. If not, the system beeps and displays the message "One or more components were released. You may not edit existing test results." If the user holds the key, the system will allow the results to be edited, but will initiate a bulletin which is sent to all holders of the LRBLSUPER key. In addition, all changes will be included on the audit report.

Example 1: Entry of negative RPR results

```
Select Donor Option: DU  Donor blood testing/review/release

Select Donor blood testing/review/release Option: LA  Lab tests(not ABO/Rh) on
donor units
Same date/time work completed for all entries ? NO// Y  (YES)

Date/time work completed: NOW// <RET>  (JAN 27, 1993@08:55)

 12) SYPHILIS SEROLOGY
 13) HBsAg
 14) HIV ANTIBODY
 15) ANTIBODY SCREEN RESULT
 16) HBcAb
 17) ALT
 18) HTLV-I ANTIBODY
 19) HCV ANTIBODY

Select test(s) by number: 12

You have selected the following tests:
 12) SYPHILIS SEROLOGY
OK ? YES// <RET>  (YES)

Enter TEST COMMENT(s) ? NO// <RET>  (NO)

Select DONOR ID: A22222

UNIT#:A22222  ABO:A Rh:NEG  Donation date: JAN 25, 1993

  SYPHILIS SEROLOGY: ?
     CHOOSE FROM:
       1        REACTIVE
       0        NEGATIVE
       ND       NOT DONE

  SYPHILIS SEROLOGY: NEGATIVE

Select DONOR ID: A22223// <RET>

UNIT#:A22223  ABO:B Rh:POS  Donation date: JAN 25, 1993

  SYPHILIS SEROLOGY: NEGATIVE

Select DONOR ID: <RET>
```

Example 2: Entry of a positive HBsAg result, repeat pending

```
Select Donor blood testing/review/release Option: LA  Lab tests(not ABO/Rh) on
donor units
Same date/time work completed for all entries ? NO// <RET>  (NO)

 12) SYPHILIS SEROLOGY
 13) HBsAg
 14) HIV ANTIBODY
 15) ANTIBODY SCREEN RESULT
 16) HBcAb
 17) ALT
 18) HTLV-I ANTIBODY
 19) HCV ANTIBODY

Select test(s) by number: 13

You have selected the following tests:
 13) HBsAg
OK ? YES// <RET>  (YES)

Enter TEST COMMENT(s) ? NO// Y  (YES)

Select DONOR ID: R99998

UNIT#:R99998  ABO:B Rh:POS  Donation date: JAN 21, 1993

  HBsAg: ?
     CHOOSE FROM:
       1        REACTIVE
       0        NEGATIVE
       ND       NOT DONE
  HBsAg: 1  REACTIVE

  HBsAg COMMENT: ?
     ANSWER MUST BE 1-80 CHARACTERS IN LENGTH


CHOOSE FROM:
BADLABEL   Unit label incorrect. Return to supplier.
COLD   STRONG COLD AGGLUTININ PRESENT
ERRORCK   Error was made in the recheck.
OKLABEL   Error made in the invoice entry. Unit label is correct.
RPT   REPEAT PENDING
XMC   XMATCH COMMENT

  HBsAg COMMENT: RPT  (REPEAT PENDING)
Add HBsAg to donor testing worklist ? NO// Y  (YES)

Select DONOR ID: R99999// ^
```

Test Review/Component Labeling/Release (DU-LR)

Review of processing test results and labeling/release of the donor units can be done by either two different technologists or one technologist using a bar code reader.

In order to eliminate labeling errors, the system checks the current ABO/Rh against the previous record for the donor, and also verifies that the test results for the HBsAg, the HBcAb, the ALT, the SYPHILIS SEROLOGY, and the HIV ANTIBODY have been entered and are negative. If a bar code reader is **not** used, these checks do not occur until the unit is reviewed for "release" by the second technologist.

Once the units are released, they are automatically transferred into inventory.

HINTS:

1. For those units where one or more components should not be released to stock, the component disposition is entered, as shown by Example 4.

2. If the unit is an Autologous unit, it can be released even if there is a positive test result, providing there is an entry in the Restricted For field. However, a flag will be carried over to the inventory file to indicate positive screening test results.

3. In the event that a unit needs to be released prior to the completion of the processing, the system will permit a unit's release. However, additional checks are then done when the results are entered. In addition, a flag is carried over into the BLOOD INVENTORY file (#65) to indicate that the testing was incomplete should further modification or shipping be attempted. See Example 3.

4. If the current ABO/Rh testing does **not** agree with the historical record, the system will check to see if the user holds the LRBLSUPER key. If not, the system will beep and display the prompt Donor ABO(A) is different from unit ABO(B) Resolve discrepancy and will not continue. If the user holds the key, the system displays the same prompt **plus** an additional message asking if you want to continue. If the user continues, a bulletin is sent to all holders of the LRBLSUPER key to document that the action took place.

5. For greater confidentiality, the donor's name is not included with the display of processing results. However, if the donation type is either "Directed" or "Autologous," this is displayed with the patient name entered in the Restricted For field.

Example 1: Labeling/release by two technologists:
Unit X11111 had not been labeled
Unit X11112 FFP had been labeled by one tech and is being reviewed/verified by a second tech

```
Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => <RET>

Select UNIT ID FOR DISPOSITION: X11111

                                          Unit: X11111
Unit testing:                                                          Tech
     ABO INTERPRETATION              : A                               TB
     RH INTERPRETATION               : POSITIVE                        TB
     SYPHILIS SEROLOGY               : NEGATIVE                        TB
     HBsAg                           : NEGATIVE                        TB
     HIV ANTIBODY                    : NEGATIVE                        TB
     ANTIBODY SCREEN RESULT          : NEGATIVE                        TB
     HBcAb                           : NEGATIVE                        TB
     ALT                             : NOT ELEVATED                    TB
     HTLV-I ANTIBODY                 : NEGATIVE                        TB

Donation: WHOLE BLOOD              Collection completed: JAN 27, 1993  13:07
    Component                      Date/time stored      Expiration date
 1. CPDA-1 RED BLOOD CELL          JAN 27, 1993  13:15   MAR  3, 1993
 2. FRESH FROZEN PLASMA,  labeled  JAN 27, 1993  13:16   JAN 27, 1994  18:55

Select COMPONENT by number (2 choice): 1 CPDA-1 RED BLOOD CELL
OK to label component ? YES// <RET>  (YES)

Date/time work completed: NOW// <RET>  (JAN 27, 1993@13:20)


Select UNIT ID FOR DISPOSITION: X11112

DIRECTED For: SMITH,JEREMY,L. 580-82-0234

                                          Unit: X11112
Unit testing:                                                          Tech
     ABO INTERPRETATION              : B                               TB
     RH INTERPRETATION               : POSITIVE                        TB
     SYPHILIS SEROLOGY               : NEGATIVE                        TB
     HBsAg                           : NEGATIVE                        TB
     HIV ANTIBODY                    : NEGATIVE                        TB
     ANTIBODY SCREEN RESULT          : NEGATIVE                        TB
     HBcAb                           : NEGATIVE                        TB
     ALT                             : NOT ELEVATED                    TB
     HTLV-I ANTIBODY                 : NEGATIVE                        TB
```

```
Donation: WHOLE BLOOD                Collection completed: JAN 27, 1993  13:09
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL           JAN 27, 1993  13:15   MAR  3, 1993
 2.  FRESH FROZEN PLASMA,  labeled   JAN 27, 1993  13:16   JAN 27, 1994  18:55

Select COMPONENT by number (2 choice): 2 FRESH FROZEN PLASMA,
OK to release component ? YES// <RET>  (YES)
```

NOTES:

- If the same technologist attempts to label and release the units, the system will not allow the units to be released. The message "Since you labeled component someone else must release to inventory" will be displayed.

- For unit X11112, the donor has been entered as a directed donor. Therefore, the patient's name is displayed at the top of the screen with the unit ID.

Example 2: Labeling/release by one technologist using a bar code reader

HINT: Standard blood labels are alphanumeric. Labels that are all numeric are non-standard labels.

```
Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        => 950 (bar code) O NEG

               STANDARD UNIT ID LABELING ? YES// <RET>  (YES)

Select UNIT ID FOR DISPOSITION: 1511114 (Bar code)UNIT ID: V11114

                                          Unit: V11114
Unit testing:                                                        Tech
     ABO INTERPRETATION              : A                             TB
     RH INTERPRETATION               : POSITIVE                      TB
     SYPHILIS SEROLOGY               : NEGATIVE                      TB
     HBsAg                           : NEGATIVE                      TB
     HIV ANTIBODY                    : NEGATIVE                      TB
     ANTIBODY SCREEN RESULT          : NEGATIVE                      TB
     HBcAb                           : NEGATIVE                      TB
     ALT                             : NOT ELEVATED                  TB
     HTLV-I ANTIBODY                 : NEGATIVE                      TB

Donation: WHOLE BLOOD                Collection completed: JAN 27, 1993  13:11
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL           JAN 27, 1993  13:17   MAR  3, 1993
 2.  FRESH FROZEN PLASMA,  labeled   JAN 27, 1993  13:16   JAN 27, 1994  18:55

Select COMPONENT by number (2 choice): 1 CPDA-1 RED BLOOD CELL
OK to label component ? YES// <RET>  (YES)

Date/time work completed: NOW// <RET>  (JAN 27, 1993@13:26)

              ABO/Rh LABEL: 620 (Bar code)    ABO/Rh: A POS
OK to release component ? YES// <RET>  (YES)

Select UNIT FOR LABEL/RELEASE: <RET>
```

Example 3: Attempted labeling/release of unit for which the processing has not been completed (using the bar code reader)

```
Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => 950 (bar code) O NEG

               STANDARD UNIT ID LABELING ? YES// <RET>  (YES)

Select UNIT ID FOR DISPOSITION: 1516243 (Bar code)UNIT ID: V16243


                                                Unit: V16243
Unit testing:                                                          Tech
     ABO INTERPRETATION              : B                               SH
     RH INTERPRETATION               : POSITIVE                        SH
     SYPHILIS SEROLOGY               : NEGATIVE                        SH
     HBsAg                           : NEGATIVE                        SH
REPEAT PENDING
     HIV ANTIBODY                    :
     ANTIBODY SCREEN RESULT          :
     HBcAb                           :
     ALT                             :
     HTLV-I ANTIBODY                 :

Donation: WHOLE BLOOD                Collection completed: JAN 21, 1993  11:15
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL labeled   JAN 21, 1993  11:34   FEB 25, 1993
 2.  FRESH FROZEN PLASMA,            JAN 21, 1993  11:34   JAN 21, 1994  16:30

Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL

Testing not completed.  OK to continue ? NO// Y  (YES)
              ABO/Rh LABEL: 730 (Bar code)    ABO/Rh: B POS
OK to release component ? YES// <RET>  (YES)

Select UNIT FOR LABEL/RELEASE: <RET>
```

NOTE: The system allows components for which the processing is not completed to be labeled and released as shown. The system also sets the flag POSITIVE/INCOMPLETE SCREENING TESTS TO "YES." If results are subsequently entered as anything other than negative, the message "Component(s) released with one or more positive test results!" is displayed and a bulletin is sent to the holders of the LRBLSUPER key.

Example 4: Discarding the FFP for donor A22222 which has a positive antibody screening (manual entry)

```
Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => <RET>

Select UNIT FOR LABEL/RELEASE: A22222


Unit testing:                                                          Tech
     ABO INTERPRETATION              : A                               SH
     RH INTERPRETATION               : NEGATIVE                        SH
     SYPHILIS SEROLOGY               : NEGATIVE                        TB
     HBsAg                           : NEGATIVE                        TB
     HIV ANTIBODY                    : NEGATIVE                        TB
     ANTIBODY SCREEN RESULT          : POSITIVE                        TB
     HBcAb                           : NEGATIVE                        TB
     ALT                             : ELEVATED                        TB
     HTLV-I ANTIBODY                 : NEGATIVE                        TB

Donation: WHOLE BLOOD                Collection completed: JAN 25, 1993  15:20
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL           JAN 25, 1993  17:00   MAR  1, 1993
 2.  FRESH FROZEN PLASMA,            JAN 25, 1993  17:00   JAN 25, 1994  21:00

Select COMPONENT by number (2 choices): 2 FRESH FROZEN PLASMA,
OK to label component ? YES// N  (NO)
QUARANTINE or DISCARD component ? NO// Y  (YES)
     COMPONENT DISPOSITION: ?
CHOOSE FROM:
       1        QUARANTINE
       2        DISCARD
     COMPONENT DISPOSITION: 2 DISCARD

COMPONENT DISP DATE/TIME: NOW// <RET>  (FEB 02, 1993@14:37)
Select COMPONENT DISPOSITION COMMENT: ?
 ANSWER WITH COMPONENT DISPOSITION COMMENT
     YOU MAY ENTER A NEW COMPONENT DISPOSITION COMMENT, IF YOU WISH
     ANSWER MUST BE 2-80 CHARACTERS IN LENGTH


CHOOSE FROM:
+AB   +Antibody screen
+HBcAb   +HBcAb, confirmed
+HBsAg   + HBsAg confirmed
+HTLV-III   +HTLV-III Antibody, confirmed
+RPR   +RPR, +FTA, confirmed
ALT-1.5   ALT >1.5 NORMAL
ALT-3   ALT >3 NORMAL
BAG   DISCARD REASON: BAG BROKE
IV   IV INFILTRATED (ENTER AMOUNT GIVEN)
```

```
OUTDATED   OUTDATED
WASTE   WASTED (ISSUED/NOT USED)

Select COMPONENT DISPOSITION COMMENT: +AB  (+Antibody screen)
Select COMPONENT DISPOSITION COMMENT: <RET>

Select UNIT FOR LABEL/RELEASE: <RET>
```

Example 5: Placing the components for donor R99998 into quarantine since the initial HBsAg testing result was positive (repeat pending)

```
Select Donor Option: DU  Donor blood testing/review/release

Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => <RET>

Select UNIT FOR LABEL/RELEASE: R99998


                                          Unit: R99998
Unit testing:                                                        Tech
     ABO INTERPRETATION              : B                             SH
     RH INTERPRETATION               : POSITIVE                      SH
     SYPHILIS SEROLOGY               : NEGATIVE                      SH
     HBsAg                           : REACTIVE                      SH
REPEAT PENDING
     HIV ANTIBODY                    : NEGATIVE                      SH
     ANTIBODY SCREEN RESULT          : NEGATIVE                      SH
     HBcAb                           : NEGATIVE                      SH
     ALT                             : NOT ELEVATED                  SH
     HTLV-I ANTIBODY                 : NEGATIVE                      SH

Donation: WHOLE BLOOD                Collection completed: JAN 21, 1993  11:15
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL           JAN 21, 1993  11:34   FEB 25, 1993
 2.  FRESH FROZEN PLASMA,            JAN 21, 1993  11:34   JAN 21, 1994  16:30

Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL
OK to label component ? YES// N  (NO)
QUARANTINE or DISCARD component ? NO//  Y  (YES)
COMPONENT DISPOSITION: ?
CHOOSE FROM:
       1        QUARANTINE
       2        DISCARD
     COMPONENT DISPOSITION: QUARANTINE
COMPONENT DISP DATE/TIME: NOW// <RET> JAN 21,1993  12:45
Select COMPONENT DISPOSITION COMMENT: <RET>
```

NOTE: It is necessary to repeat the process for each component to be quarantined.

Example 6: Removing the components for donor R99998 from quarantine since the repeat testing for the HBsAg was negative

```
Select Donor blood testing/review/release Option: LR  Test review/Component
labeling/release

                    Review-label-release components


                         To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => <RET>

Select UNIT FOR LABEL/RELEASE: R99998


                                                Unit: R99998
Unit testing:                                                          Tech
     ABO INTERPRETATION              : B                               SH
     RH INTERPRETATION               : POSITIVE                        SH
     SYPHILIS SEROLOGY               : NEGATIVE                        SH
     HBsAg                           : NEGATIVE                        SH
     HIV ANTIBODY                    : NEGATIVE                        SH
     ANTIBODY SCREEN RESULT          : NEGATIVE                        SH
     HBcAb                           : NEGATIVE                        SH
     ALT                             : NOT ELEVATED                    SH
     HTLV-I ANTIBODY                 : NEGATIVE                        SH

Donation: WHOLE BLOOD                Collection completed: JAN 21, 1993  11:15
     Component                       Date/time stored      Expiration date
 1.  CPDA-1 RED BLOOD CELL           JAN 21, 1993  11:34   FEB 25, 1993
 2.  FRESH FROZEN PLASMA,            JAN 21, 1993  11:34   JAN 21, 1994  16:30

Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL
QUARANTINE
Do you want to delete DISPOSITION ? NO/ Y (YES)
COMPONENT DISPOSITION & COMPONENT DISPOSITION COMMENT DELETED
```

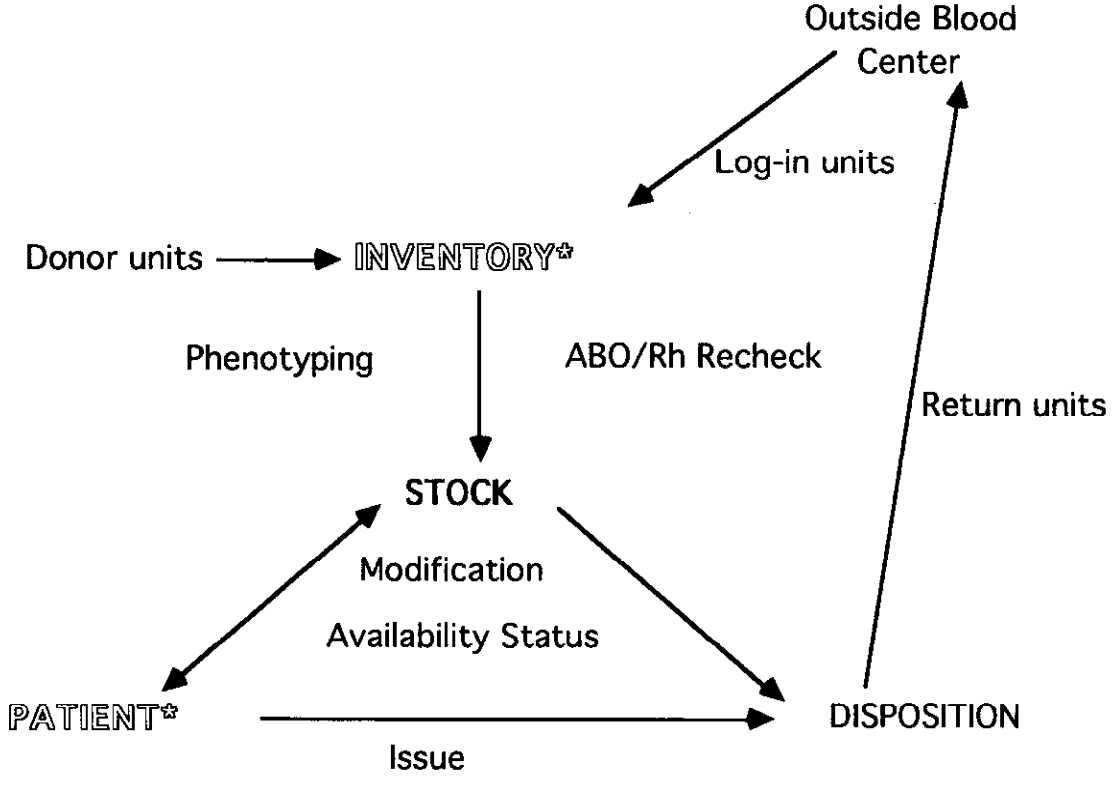
NOTES:

- Release of the units from quarantine requires the Blood Bank Supervisor's key (LRBLSUPER). If the technologist attempting to edit the previous entry for COMPONENT DISPOSITION does not have this key, the prompt "Do you want to delete DISPOSITION" will not be displayed.

- Once a unit has been labeled (pending release), it cannot have a COMPONENT DISPOSITION entered through any of the options in the Blood Bank module. The process of labeling a unit places the unit in a sort of "limbo" and any attempts to discard the unit will result in the display of the prompt "Select COLLECTION DISPOSITION" rather than "Select COMPONENT DISPOSITION." The only way that a component disposition can be entered is through the File Manager option to edit file entries.

Inventory Menu (I)

```
I       Inventory [LRBLI]
      DN      Disposition -not transfused [LRBLIDN]
      DR      Disposition -relocation [LRBLIDR]
      LR      Log in regular (invoices) [LRBLILR]
      LT      Enter blood inventory typing charges [LRBLILS]
      PD      Pediatric unit preparation [LRBLPED]
      SH      Shipping invoices for blood components [LRBLISH]
      UC      Unit ABO/Rh confirmation [LRBLIUC]
      UP      Unit phenotyping [LRBLIUP]
      UR      Units release to stock (cancel) by patient [LRBLIUR]
      UW      Inventory ABO/Rh testing worksheet [LRBLIW]
```



Inventory Menu Data Flow Chart

Action	Option
1. Log in units of blood/blood components	Log in Regular (Invoices) (LR)
2. Enter special typing charges	Enter Blood Inventory Typing Charges (LT)
3. Print worksheet for ABO/Rh rechecks	Inventory ABO/Rh Testing Worksheet (UW)
4. Enter ABO/Rh recheck results	Unit ABO/Rh Confirmation (UC)
5. Enter unit phenotyping results (non ABO/Rh)	Unit Phenotyping (UP)
6. Enter unit disposition of other than transfused	Disposition-not Transfused (DN)
7. Enter modification data on unit in inventory	Disposition-not Transfused (DN, then MO)
8. Enter data for pediatric unit preparation	Pediatric Unit Preparation (PD)
9. Issue/relocate units within the hospital	Disposition-Relocation (DR)
10. Release/cancel units previously assigned to a patient	Units Release to Stock (Cancel) by Patient (UR)
11. Generate a shipping invoice for for units being transferred	Shipping invoice (SH)

NOTE: Entry of the disposition of units which are transfused is done using the Blood Transfusion Results (DT) option in the Patient Menu.

Disposition-not Transfused (DN)

Units of blood products entered in inventory may be disposed of in a variety of ways. Only those units which are undergoing final disposition, other than transfusion, are processed through this option. However, this does include units which are modified, since the final disposition of the original unit is recorded as "Modified" and a new entry is created for the modified unit.

For those units which are in inventory and are modified (i.e., divided, washed, pooled, frozen, etc.,) into other blood products, supplemental questions are asked, depending on the type of modification selected.

1. Some information relating to patient assignments (if any), special phenotypings, CMV antibody status, etc., are carried through with the new unit.

2. Whether the ABO/Rh recheck information on red blood cell components is carried through with the new unit is determined by the entry in the Retype Required After Preparation field in the BLOOD PRODUCT file (#66) for the new component. If the entry is "YES," when the unit is modified, such as a unit of Frozen Red Blood Cells into a unit of Deglycerolized Red Blood Cells, the unit is added to the ABO/Rh recheck worklist generated through option I-UW. If the entry is "NO," the information previously entered for the ABO/Rh recheck will be carried through.

3. If the unit is being split into other components, the software checks the volumes of the new components to make sure the total volume does not exceed the original. However, if pooled components are being made, the new volume is merely calculated and carried through.

4. If the calculation of the new expiration date, based on the entry in the DAYS LEFT field in the BLOOD PRODUCT file for the new component, exceeds the expiration date of the original unit, a warning message "Expiration date exceeds original unit expiration date xxx OK ? NO//" is displayed. Since there are some circumstances, such as rejuvenated red cells or frozen red blood cells, in which this would be appropriate, it is possible to indicate such and proceed. If the new date is not appropriate, the field and default are redisplayed for editing. See Example 6.

HINTS:

1. Unit information may be entered manually or by using a bar code reader, as shown in the examples. The unit ID number is a unique code of 2 to 11 characters.

2. Disposition comments are contained in the LABORATORY DESCRIPTION file and new ones can be added using the Edit Blood Bank Description file (EF-BD) option in the Supervisor's Menu. You must specify BB DISP as the screen.

3. If a pool ID is not entered, **all** dispositions are automatically deleted. You do not have to delete with the supervisor option.

4. Additional specific notes included for the various types of disposition shown in the examples.

Example 1: Outdated unit sent to Microbiology (manual entry)

```
Select Inventory Option: DN  Disposition -not transfused

                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        => <RET>

Select UNIT ID FOR DISPOSITION: 123456       APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
DISPOSITION: ?

Select from:
   RETURN TO SUPPLIER
   DISCARD
   SEND ELSEWHERE
   MICROBIOLOGY/RESEARCH
   MODIFY
   SALVAGED

DISPOSITION: MICROBIOLOGY/RESEARCH

DISPOSITION DATE: NOW// ?
     Examples of Valid Dates:
       JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
       T   (for TODAY),  T+1 (for TOMORROW),  T+2,  T+7,  etc.
       T-1 (for YESTERDAY),  T-3W (for 3 WEEKS AGO), etc.
     If the year is omitted, the computer uses the CURRENT YEAR.
     If the date is omitted, the current date is assumed.
     Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.
     You may enter a time, such as NOON, MIDNIGHT or NOW.
     Enter only past or present Date/time
DISPOSITION DATE: NOW// T  (JAN 27, 1993)

Select DISPOSITION COMMENT: ?
 ANSWER WITH DISPOSITION COMMENT
     YOU MAY ENTER A NEW DISPOSITION COMMENT, IF YOU WISH
     ANSWER MUST BE 1-80 CHARACTERS IN LENGTH

CHOOSE FROM:
BAG   DISCARD REASON: BAG BROKE
IV   IV INFILTRATED (ENTER AMOUNT GIVEN)
OUTDATED   OUTDATED
WASTE   WASTED (ISSUED/NOT USED)

Select DISPOSITION COMMENT: O  (O)
Select DISPOSITION COMMENT: <RET>

Select UNIT ID FOR DISPOSITION: <RET>
```

Example 2: CPDA-1 Red Cell Unit modified to Washed Cells (Manual)

```
Select Inventory Option: DN  Disposition -not transfused

                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        => <RET>

Select UNIT ID FOR DISPOSITION: A412345       APOS  CPDA-1 RED BLOOD CELLS
 CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
DISPOSITION: MODIFY
DISPOSITION DATE: NOW// <RET>  (JAN 27, 1993@14:47)
VOLUME (ml): 250// <RET>
Select MODIFY TO: ?
 ANSWER WITH MODIFY TO NUMBER
CHOOSE FROM:
   47              CPDA-1 RED BLOOD CELLS, DIVIDED UNIT
   53              RED BLOOD CELLS, WASHED
   54              RED BLOOD CELLS, FROZEN
   56              RBC FROZEN REJUVENATED
   145             SPUN/FILTERED RED BLOOD CELLS
   154             REJUVENATED WASHED RED CELLS
   157             PEDIATRIC CPDA-1 RBC
   160             AUTOLOGOUS FROZEN REJUVENATED RED CELLS

Select MODIFY TO: 53  RED BLOOD CELLS, WASHED

New ID #: A412345 RED BLOOD CELLS, WASHED
DATE/TIME RECEIVED: NOW// <RET>  (JAN 27, 1993@14:47)
EXPIRATION DATE/TIME: JAN 28, 1993@1447// <RET>  (JAN 28, 1993@14:47)
```

NOTES:

- The choices displayed in response to the prompt "Select MODIFY TO" are based on the entries in the BLOOD PRODUCT file (#66). These may be amended by using the Edit Blood Product file option in the Supervisor's Menu.

- The default displayed for the prompt "EXPIRATION DATE/TIME" is based on the entry in the DAYS LEFT field in the BLOOD PRODUCT file (#66). If the new expiration date exceeds the original expiration date, a warning message is displayed.

- If the unit was already selected and assigned to a specific patient when it was modified, the information on the new component will automatically replace the original information in all areas where the component would be displayed/printed.

Example 3: Unit of CPD Whole Blood modified to red blood cells and liquid plasma (manual entry)

```
Select Inventory Option: DN  Disposition -not transfused

                          To use BAR CODE READER
                Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                          => <RET>

Select UNIT ID FOR DISPOSITION: E11111    APOS  CPD WHOLE BLOOD
CPD WHOLE BLOOD     POS   A POS CPD WHOLE BLOOD
DISPOSITION: MODIFY
DISPOSITION DATE: NOW// <RET>  (JAN 28, 1993@08:27)
VOLUME (ml): 500// <RET>
Select MODIFY TO: CPD R
     1   CPD RED BLOOD CELLS        04050      RCPD      1      04050
     2   CPD RED BLOOD CELLS, DIVIDED U  NIT  04051      RC/D          04051
     3   CPD RED BLOOD CELLS, IRRADIATE  D           RC/I
     4   CPD RED BLOOD CELLS, LEUK. REMO  VED  04450     RC/L     1    04450
CHOOSE 1-4: 1
Select MODIFY TO: LIQUID PLASMA, CPD          18401      LPC      1    18401
Select MODIFY TO: <RET>
You have selected the following component(s):
LIQUID PLASMA, CPD                      vol(ml):  230
CPD RED BLOOD CELLS                     vol(ml):  250
                                                 -----
                                  Total vol(ml):  480
     All OK ? YES// <RET>  (YES)

New ID #: E11111 LIQUID PLASMA, CPD
DATE/TIME RECEIVED: NOW// <RET>  (JAN 28, 1993@08:27)
EXPIRATION DATE/TIME: FEB  3, 1993// <RET>  (FEB 03, 1993)

New ID #: E11111 CPD RED BLOOD CELLS
DATE/TIME RECEIVED: NOW// <RET>  (JAN 28, 1993@08:27)
EXPIRATION DATE/TIME: JAN 29, 1993@0827// <RET>  (JAN 29, 1993@08:27)

Select UNIT ID FOR DISPOSITION: <RET>
```

NOTES:

- The volumes/weights displayed as the defaults are based on the entries in the BLOOD PRODUCT file (#66) for the average weight of each component.

- If there is an entry in the Days Left field in the BLOOD PRODUCT file for a given component, the entry becomes the default displayed when a unit is modified and that component is selected.

- If the More Than One Allowed field in the BLOOD PRODUCT file has a "YES" entered, the system will repeat the prompt "MODIFY TO" as shown, to allow selection of more than one component. It then adds the average volumes to make sure that the total of the parts is less than or equal to that of the original.

Example 4: Pooling platelets

```
Select Inventory Option: DN Disposition -not transfused

                    To use BAR CODE READER
          Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                    => 620 (bar code) A POS

Select UNIT ID FOR DISPOSITION: 0211111 (Bar code)UNIT ID: C11111
OPOS PLATELETS, 20-24 C, 5 DAY EXP.       PLATELETS, 20-24 C, 5 DAY EXP.  POS
O POS PLATELETS, 20-24 C, 5 DAY EXP.
DISPOSITION: MODIFY
DISPOSITION DATE: NOW// <RET>  (JAN 28, 1993@12:25)
VOLUME (ml): 55// <RET>
Select MODIFY TO: 12091  POOLED PLATELETS      12091      PLTS      1    12091


                              Unit ID   ABO/Rh

Selection 1 (unit ID to pool): 0222222  O POS

Selection 2 (Unit ID to pool): 0222222(Bar code)UNIT ID: C22222
OPOS  PLATELETS, 20-24 C, 5 DAY EXP.      PLATELETS, 20-24 C, 5 DAY EXP.  POS
O POS PLATELETS, 20-24 C, 5 DAY EXP.

Selection 3 (unit ID to pool): 0222223(Bar code)UNIT ID: C33333
OPOS  PLATELETS, 20-24 C, 5 DAY EXP.      PLATELETS, 20-24 C, 5 DAY EXP.  POS
O POS PLATELETS, 20-24 C, 5 DAY EXP.

Selection 4 (Unit ID to pool): 0222224(Bar code)UNIT ID: D11111
OPOS  PLATELETS, 20-24 C, 5 DAY EXP.      PLATELETS, 20-24 C, 5 DAY EXP.  POS
O POS PLATELETS, 20-24 C, 5 DAY EXP.

Selection 5 (Unit ID to pool): 0222225(Bar code)UNIT ID: D22222
OPOS  PLATELETS, 20-24 C, 5 DAY EXP.      PLATELETS, 20-24 C, 5 DAY EXP.  POS
O POS PLATELETS, 20-24 C, 5 DAY EXP.

Pool will contain the following PLATELETS, 20-24 C, 5 DAY EXP. units:
   ID #                Expiration date
 1 LF22223     O POS   FEB 2, 1992
 2 LF22222     O POS   FEB 2, 1992
 3 LF22223     O POS   FEB 2, 1992
 4 LF22222     O POS   FEB 2, 1992
 5 LF22223     O POS   FEB 2, 1992

ALL OK ? YES// <RET>  (YES)

Select UNIT ID number for POOL: P22222(Bar code)UNIT ID: P22222

New ID #: P22222 POOLED PLATELETS
DATE/TIME RECEIVED: NOW// <RET>  (JAN 28, 1993@12:28)
EXPIRATION DATE/TIME: JAN 28, 1993@1615// <RET>  (JAN 28, 1993@16:15)


Select UNIT ID FOR DISPOSITION: <RET>
```

NOTES:

- Regardless of the order in which the units are pooled, if a mixture of Rh positive and Rh negative units are pooled, the system makes the pool Rh positive.

- If you answer the "ALL OK? YES?// " prompt with a "NO," all the information entered is automatically deleted.

- As units are selected for the pool, the system enters the disposition information for each unit (disposition and date). When the pool number is assigned, the system records the modified to/from data for each of the units in the pool. In the event that a pool number is not assigned or the prompts for the new ID are not completed, the disposition information would have been entered without the modification data. If the process is not completed, for whatever reason, the dispositions for each unit will need to be deleted, using the Edit Pooled Blood Product (9S-EI-PP) option, before the process can be repeated.

- If you enter the pool number, using the Single Unit Information (SU) option in the Inquiries Menu, the system will display the information regarding the contents of the pool. The system will also automatically transfer the supplier information based on the fact that the units were modified once they were in inventory. Subsequent selection of the donor ID for one of the units in the pool shows the disposition for that unit as modified to/from Pooled Platelets, Unit ID: P11111.

Example 5: Shipping units to another facility

```
Select Inventory Option: DN  Disposition -not transfused

                          To use BAR CODE READER
              Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                       => <RET>

Select UNIT ID FOR DISPOSITION: 56H67890       APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
DISPOSITION: SEND ELSEWHERE
DISPOSITION DATE: NOW// <RET>  (JAN 20, 1993@13:33)
Select DISPOSITION COMMENT: <RET>
SHIPPING INVOICE#: 12345
SHIP TO: LOYOLA  (LOYOLA)

Date/time work completed: NOW// <RET>  (JAN 20, 1993@13:33)


Select UNIT ID FOR DISPOSITION: 56H76789       APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
DISPOSITION: SEND ELSEWHERE
DISPOSITION DATE: NOW// <RET>  (JAN 20, 1993@13:34)
Select DISPOSITION COMMENT: <RET>
SHIPPING INVOICE#: 12345
SHIP TO: LOYOLA  (LOYOLA)

Date/time work completed: NOW// <RET>  (JAN 20, 1993@13:34)

Select UNIT ID FOR DISPOSITION: A88888       APOS  CPDA-1 WHOLE BLOOD
CPDA-1 WHOLE BLOOD     POS   A POS CPDA-1 WHOLE BLOOD
DISPOSITION: SEND ELSEWHERE
POSITIVE SCREENING TESTS. WANT TO CONTINUE ? NO// Y  (YES)
DISPOSITION DATE: NOW// <RET>  (JAN 20, 1993@13:34)
Select DISPOSITION COMMENT: PATIENT TRANSFERRED TO LOYOLA.
(Patient transferred to Loyola.)
Select DISPOSITION COMMENT: UNIT SENT TO LOYOLA.  (Unit sent to Loyola.)
Select DISPOSITION COMMENT:<RET>
SHIPPING INVOICE#: 12345
SHIP TO: LOYOLA

Date/time work completed: NOW// <RET>  (JAN 20, 1993@13:34)
```

NOTE: A shipping invoice can now be generated using the Shipping Invoice (ISH) option in the Inventory menu. If the unit has a positive/incomplete test and it is to be included, a notation is also placed on the shipping invoice.

Example 6:

```
Select Inventory Option: DN  Disposition -not transfused

                         To use BAR CODE READER
              Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                        => 510 (bar code) O POS

Select UNIT ID FOR DISPOSITION: 9999999   (Bar code)UNIT ID: 9999999
APOS  AS-1 RED BLOOD CELLS
DISPOSITION: MODIFY
DISPOSITION DATE: NOW// <RET>  (JUN 25, 1993@10:42)
VOLUME (ml): 330// <RET>
Select MODIFY TO: IRRADIATED ADSOL RED BLOOD CEL  AS-1 RED BLOOD CELLS,
IRRADIATED            RS/I

New ID #: 9999999 AS-1 RED BLOOD CELLS, IRRADIATED
DATE/TIME RECEIVED: NOW// <RET>  (JUN 25, 1993@10:43)
EXPIRATION DATE/TIME: JUL 23, 1993// <RET>  (JUL 23, 1993)
Expiration date exceeds original unit expiration date JUN 27, 1993 OK ? NO//
<RET>   (NO)
DATE/TIME RECEIVED: JUN 25,1993@10:43// <RET>
EXPIRATION DATE/TIME: JUL 23,1993// 6-27-93  (JUN 27, 1993)
```

Disposition Relocation (DR)

Relocation of units within the facility can only be accomplished once the units have been selected/assigned to a patient. In the case of those units for which the entry in the BLOOD PRODUCT file for patient/product requirement is "crossmatch," the unit will not be assigned until the crossmatch has been completed and the interpretation is either "Compatible" (C) or "Incompatible-Give with BB Director approval" (IG). For those cases where the crossmatch interpretation is IG, the additional prompt "Enter your initials to allow assigned unit:" must contain the appropriate initials/access code before the unit will be moved to assigned/xmatched and becomes available for issue. In other words, units of red blood cells which have been selected, but for which the crossmatch is incompatible or is incomplete, cannot be issued/released. (This includes units issued in an emergency.) In addition, those units which have been assigned/xmatched which subsequently expired will not be displayed.

In order to minimize potential confusion, a warning message is displayed if the unit has been double crossmatched and is currently assigned to another patient as well at the time of relocation.

In order to ensure that the necessary recheck testing has been performed, the system checks the entries for each unit before allowing relocation, as follows,

- If the component requires a crossmatch, the ABO INTERPRETATION must be entered (using option I-UC),
- If the unit is Rh negative and the component requires a crossmatch, the RH INTERPRETATION must be entered (using option I-UC),
- If the patient has an entry in the Antibodies Identified field, the unit must have a corresponding entry in the RBC Antigen Absent field to indicate that the unit lacks the appropriate antigen (entered using option I-UP or D-DP). This is not true of anti-D. In the case of anti-D, the system checks the unit to determine whether a recheck has been entered. If the Rh interpretation field is "negative," it will allow relocation of the unit,

In order to add one additional measure to prevent homologous blood from being issued when there are autologous units available, an additional flag has been added to the Disposition-Relocation [LRBLIDR] option. Any units in the BLOOD INVENTORY file (#65) will be displayed at the beginning of the option. See Example 2.

NOTE: If the location of the unit is BLOOD BANK (i.e., all CAPs) it means that the unit has not been previously relocated.

Example 1:

```
Select Inventory Option: DR  Disposition -relocation

                              Relocation of units

Select Patient Name: W8888  WASHINGTON,GEORGE   03-01-00   592888888
SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 92  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI K


Unit assigned/xmatched:                     Exp date       Location
 1)   C11112     CPDA-1 RED BLOOD CE  A POS 05/17/91       SICU
 2)   C11113     CPDA-1 RED BLOOD CE  A POS 05/17/91       Blood Bank

                                ( *Expired unit )
Select (1-2): ?
Enter number(s) from 1 to 2
For 2 or more selections separate each with a ',' (ex. 1,3,4)
Enter 'ALL' for all units
Select (1-2): 1
1)    C11112     CPDA-1 RED BLOOD CE  A POS 05/17/91       SICU

DATE/TIME UNIT RELOCATION: NOW// <RET> (JAN 28, 1993@12:50)
INSPECTION: ?
     CHOOSE FROM:
       S        SATISFACTORY
       U        UNSATISFACTORY
INSPECTION: S  SATISFACTORY
LOCATION: SICU
ISSUED TO/REC'D FROM: LARK HOFFMAN
C11112 relocated

Select Patient Name: <RET>
```

NOTES:

- If more than one unit is selected but not ALL, each unit will be displayed again for entry of the necessary information. If the unit selected was selected incorrectly, entry of an "^" at the "DATE/TIME UNIT RELOCATION: NOW//" prompt will skip to the next unit.

- The location must be an entry in the HOSPITAL LOCATION file (#44).

- If an error is made in the initial selection and additional units need to be selected for the same patient, use of the space bar and <RET> will bring back the same patient.

- If a unit has expired, it will be flagged with a "*" and the user will hear a BEEP when the units are displayed. It will not, however, prevent relocation of the unit.

Example 2: New display of restricted units for the patient

```
Select Blood bank Option:  Inventory

Select Inventory Option:  DR  Disposition -relocation

Select PATIENT NAME:   DUSTY,RUSTY      04-27-25     089485948   SC VETERAN

DUSTY,RUSTY ID: 089-48-5948 Physician: WELBY,MARCUS

ABO group: A  Rh type: POS
AGE: 67  DATE OF BIRTH: APR 27, 1925
PATIENT LOCATION: 1C// <RET>

Units restricted for DUSTY,RUSTY
RA22222        AUTOLOGOUS FROZEN REJUVENATED RED CELLS
RA33333        AUTOLOGOUS FROZEN REJUVENATED RED CELLS
RA44444        AUTOLOGOUS FROZEN REJUVENATED RED CELLS

Unit assigned/xmatched:                      Exp date       Location
 1)   A11111     CPDA-1 RED BLOOD CE  A POS 10/30/92      BLOOD BANK
 2)   A11112     CPDA-1 RED BLOOD CE  A POS 10/30/92      BLOOD BANK
 3)   B11111     CPDA-1 RED BLOOD CE  A POS 10/30/92      BLOOD BANK
 4)   RA11111    CPDA-1 RED BLOOD CE  A POS 10/26/92      Blood Bank

                                ( *Expired unit )
Select (1-4): 4
4)    RA11111    CPDA-1 RED BLOOD CE  A POS 10/26/92      Blood Bank

DATE/TIME UNIT RELOCATION: NOW// <RET> 11/3/92 @ 1:30
```

Example 3: There has been a change made to the Disposition-Relocation option You can no longer release units with an answer of "UNSATISFACTORY to the INSPECTION" prompt

```
Select Blood bank Option:  Inventory

Select Inventory Option:  DR  Disposition -relocation

                              Relocation of units

Select Patient Name:    AZINGER,PAUL       03-03-33     124456789
 AZINGER,PAUL ID: 124-45-6789 Physician: BAKER,CAROL

ABO group: A  Rh type: POS
 AGE: 58  DATE OF BIRTH: MAR  3, 1933
 PATIENT LOCATION: 8A M// <RET>
 Unit assigned/xmatched:                      Exp date            Loc
 1)   W21111     CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank
 2)   W222222    CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank
Select (1-2): ALL

DATE/TIME UNIT RELOCATION: NOW// <RET> (DEC 09, 1991@10:50)
INSPECTION: U  UNSATISFACTORY <RET> Are you sure ? NO// Y  (YES)

No entries with incomplete answers or unsatisfactory inspections
can be relocated.  Relocation entry <DELETED>

 Select Patient Name:    AZINGER,PAUL       03-03-33     124456789
 AZINGER,PAUL ID: 124-45-6789 Physician: BAKER,CAROL

ABO group: A  Rh type: POS
AGE: 58  DATE OF BIRTH: MAR  3, 1933
Unit assigned/xmatched:                      Exp date            Loc
 1)   W21111     CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank
 2)   W222222    CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank
Select (1-2): 1,2
1)    W21111     CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank

DATE/TIME UNIT RELOCATION: NOW// <RET> (DEC 09, 1991@10:51)
INSPECTION: U  UNSATISFACTORY <RET> Are you sure ? NO// Y  (YES)

No entries with incomplete answers or unsatisfactory inspections
can be relocated.  Relocation entry <DELETED>

2)    W222222    CPDA-1 RED BLOOD CE  A POS JAN 13, 1992        Blood Bank

DATE/TIME UNIT RELOCATION: NOW// <RET> (DEC 09, 1991@10:51)
 INSPECTION: S  SATISFACTORY
 LOCATION: 5A S
 ISSUED TO/REC'D FROM: SAM
 W222222 relocated
```

Log in Regular (Invoices) (LR)

Units of blood/blood products obtained from outside blood centers must be entered in the system; however, those units drawn at the facility and previously entered through the Donor Menu options will automatically be transferred into inventory once they are labeled and released to stock.

Units may be entered by either manual data entry or by using a bar code reader.

Since all responses revolve around the information built into the BLOOD PRODUCT file (#66) for each blood product, it is particularly important that the fields contain information specific to the institution. This information can be edited using the Edit Blood file (EF-BP) option in the Supervisor's Menu. Four subfields of the blood product which play a crucial role in logging in units are the following:

- SUPPLIER
- SUPPLIER UNIT LABEL NON-STANDARD
- SUPPLIER PREFIX NUMBER
- MAXIMUM STORAGE TIME

HINTS:

1. The supplier entered must reflect the drawing facility rather than the shipping facility for two reasons:

   a. the system checks the Unit Label Non-Standard field to determine whether the input from the bar code reader should be transcribed into alphanumeric format or left as all numeric, and

   b. the system checks the Supplier Prefix Number field to determine whether that supplier, usually ARC centers, uses an eye-readable prefix number that should be added to all units from that supplier.

2. For components such as those that are CMV negative, the component should be entered as a separate component in the BLOOD PRODUCT file (#66). It will then have its own unique cost, etc.

3. As part of the log in process, the system checks the expiration date entered against the Maximum Storage Time field to determine whether the data entered is feasible for that component. If there is no entry for that field in the BLOOD PRODUCT file, the system will display the message "Expiration date exceeds the maximum for that component."

Example 1: Manual entry of units, including one unit of FFP requiring editing of information entered

```
Select Inventory Option: LR  Log in regular (invoices)

                              Blood Component Log in

                              To use BAR CODE READER
                 Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                           => <RET>

Enter INVOICE (or order) NUMBER: ?

ANSWER MUST BE 2-10 CHARACTERS IN LENGTH

Enter INVOICE (or order) NUMBER: 04
DATE/TIME RECEIVED: NOW// T  (JAN 28, 1993)
Must enter a TIME. Future DATE/TIME not allowed.

DATE/TIME RECEIVED: NOW// <RET>  (JAN 28, 1993@13:12)

Invoice number: 04
Select BLOOD COMPONENT: 04060
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
Select SUPPLIER: SELF// LIFESOURCE           57.00

             UNIT ID: G44444
              ABO/Rh: A POS
EXPIRATION DATE/TIME: 2/18  (FEB 18, 1993)

             UNIT ID: G55555
              ABO/Rh: B POS
EXPIRATION DATE/TIME: 2/18  (FEB 18, 1993)

             UNIT ID: G66666
              ABO/Rh: B POS
EXPIRATION DATE/TIME: 2/18  (FEB 18, 1993)

             UNIT ID: <RET>

CPDA-1 RED BLOOD CELLS Source: LIFESOURCE Invoice: 04
Review:     Unit         ABO/Rh Expiration date (*=Expired or expires today)
       1)   G44444       A  POS FEB 18, 1993
       2)   G55555       B  POS FEB 18, 1993
       3)   G66666       B  POS FEB 18, 1993

All OK ? YES// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? YES// <RET>  (YES)
```

```
Invoice number: 04
Select BLOOD COMPONENT: 18201
  FRESH FROZEN PLASMA, CPDA-1      18201      FA1      1      18201
Select SUPPLIER: LIFESOURCE// <RET>          31.00

             UNIT ID: H11111  99H11111     APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
Entry in INVENTORY file.
Add FRESH FROZEN PLASMA, CPDA-1 for this DONOR ID# ? NO// Y  (YES)

Are you SURE ? NO// Y  (YES)

              ABO/Rh: A POS // <RET>

EXPIRATION DATE/TIME: 1/3/94  (JAN 03, 1994)

             UNIT ID: G22222
              ABO/Rh: A POS
EXPIRATION DATE/TIME: 1/3/94  (JAN 03, 1994)

             UNIT ID: <RET>

FRESH FROZEN PLASMA, CPDA-1 Source: LIFESOURCE Invoice: 04
Review:     Unit         ABO/Rh Expiration date (*=Expired or expires today)
       1)   H11111       A  POS JAN  3, 1994
       2)   G22222       A  POS JAN  3, 1994

All OK ? YES// N  (NO)

Select (1-2) to Edit: 2
UNIT ID: G22222// <RET>
ABO GROUP: A// <RET>
RH TYPE: POSITIVE// <RET>
EXPIRATION DATE/TIME: JAN 3,1994// 1/1/94  (JAN 01, 1994)

FRESH FROZEN PLASMA, CPDA-1 Source: LIFESOURCE Invoice: 04
Review:     Unit         ABO/Rh Expiration date (*=Expired or expires today)
       1)   H11111       A  POS JAN  3, 1994
       2)   G22222       A  POS JAN  1, 1994

All OK ? YES// <RET>  (YES)

Invoice number: 04
Select BLOOD COMPONENT: <RET>

Enter INVOICE (or order) NUMBER: <RET>

Select Inventory Option: <RET>
```

NOTES:

- The blood component can be selected by using a product code, the name of the product or the abbreviation of the product.

- The supplier can be selected using a name or reference number.

- During editing you can change the unit ID to a new sequence of characters.

- For units received from suppliers with a 2-number prefix before the alphanumeric, such as ARC centers, enter only the alphanumeric. The 2-digit prefix will then be added to all of the units from that supplier before the units are displayed for review.

- If an error is made during the log in process, it can be corrected as shown above; however, once the data has been accepted, it can only be edited using the Inventory Edit Log in option in the Supervisor's Menu.

Example 2: Bar code entry of units received from a supplier using donor IDs with 1 alpha and 5 numeric characters with a "25" prefix

```
Select Inventory Option: LR Log in regular (invoices)

                              Blood Component Log in

                              To use BAR CODE READER
                 Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                          => 620 (bar code) A POS

Enter INVOICE (or order) NUMBER: 04
DATE/TIME RECEIVED: NOW//  <RET> (JAN 28, 1993@13:20)

Invoice number: 04
Select BLOOD COMPONENT: 004060   (Bar code)
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
Select SUPPLIER: AURORA // <RET>          57.000

             UNIT ID: 0405224   (Bar code)   UNIT ID: 25H05224
              ABO/Rh: 620       (Bar code)    ABO/Rh: A POS
EXPIRATION DATE/TIME: 2/28  (FEB 28, 1993)

             UNIT ID: 0405336   (Bar code)   UNIT ID: 25H05336
              ABO/Rh: 620       (Bar code)    ABO/Rh: A POS
EXPIRATION DATE/TIME: 2/28  (FEB 28, 1993)

             UNIT ID: <RET>

CPDA-1 RED BLOOD CELLS Source: AURORA       Invoice: 04
Review:     Unit        ABO/Rh Expiration date (*=Expired or expires today)
       1)   25H05224       A  POS FEB 28, 1993
       2)   25H05336       A  POS FEB 28, 1993

All OK ? YES// <RET>  (YES)

Invoice number: 04
Select BLOOD COMPONENT: <RET>

Enter INVOICE (or order) NUMBER: <RET>
```

NOTES:

- For units received with eye readable prefix numbers, only the alphanumeric will be read. The two digit prefix number will then be added to all of the units before the units are displayed for review. Therefore, even if the bar code reader is not accepting any given unit and the information is entered manually, **only** the alphanumeric portion should be entered.

- Product labels will show the product code plus a "0" prefix and a "3" suffix.

- When you scan the donor ID number, the numeric bar code read will be displayed, followed by the alphanumeric if the supplier uses an alphanumeric numbering system.

Example 3: Re-entry of a unit into inventory after it was previously shipped to another hospital

```
Select Inventory Option: LR Log in regular (invoices)

                              Blood Component Log in

                              To use BAR CODE READER
                 Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                           => 620 (bar code) A POS

Enter INVOICE (or order) NUMBER: 05
DATE/TIME RECEIVED: NOW// <RET>  (JAN 28, 1993@13:31)

Invoice number: 05
Select BLOOD COMPONENT: 004060   (Bar code)
  CPDA-1 RED BLOOD CELLS      04060      PRBC      1      04060
Select SUPPLIER: LIFESOURCE// SELF          0.00

             UNIT ID: 56H76789            A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS already in inventory with same Unit ID !

DISPOSITION: SENT ELSEWHERE.  Re-enter unit in inventory ? NO// Y  (YES)

             UNIT ID:<RET>
```

NOTES:

- Only units with a disposition of "R" or "S" can be re-entered into inventory.
- If units are reentered into inventory, the unit's record is updated and the previous disposition information becomes labeled as such.

Enter Blood Inventory Typing Charges (LT)

In order to obtain accurate supplier transaction summaries, it is necessary to log in additional charges for unit phenotyping.

Example:

```
Select Inventory Option: LT  Enter blood inventory typing charges


Select BLOOD INVENTORY UNIT ID: 56H67890       APOS  CPDA-1 RED BLOOD CELLS
  CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
TYPING CHARGE: 12.00 // <RET>


Select BLOOD INVENTORY UNIT ID: <RET>
```

NOTE: The exact manner in which these charges are billed, a set per unit screened or a fee unit needed, varies greatly. Therefore, each facility will need to determine its own manner for handling these charges. The appropriate values are entered in the BLOOD INVENTORY file (#66).

Pediatric Unit Preparation (PD)

Since the division of a unit of any blood units into pediatric aliquots involves repeated modifications, it is treated in a slighted different manner from the other modified units.

The permutations of accepted practice in this area can include a variety of components, some CMV negative, some less than five days old, etc. The entries in the BLOOD PRODUCT file (#66) will allow each site to enter its own criteria. The fields used for this application include:

Max Age For Pediatric Use:	This is the maximum age (in days) allowed for making pediatric units.
Pediatric Product:	This is the pediatric component that the present component can be made into. **Only** components containing the word PEDIATRIC can be selected. The original component and the pediatric component **must** have the same anticoagulant.
Specific Gravity:	This is used to convert the volume of the unit in mls. into an equivalent weight in gms.

The other requirements for ABO/Rh and crossmatch can then be specified for the pediatric component being prepared.

The system will automatically assign the next aliquot number to the pediatric unit being prepared and will automatically decrement the volume of the original unit by the volume being removed.

HINT: As with the other unit modifications, the system always carries over the information on any unit phenotypings and the CMV antibody status. Whether it carries the ABO/Rh recheck information or places the unit on the list of those needing retypes (generated by the Inventory ABO/Rh Testing Worklist (I-UW) option depends on the entry in the Retype After Preparation field in the BLOOD PRODUCT file (#66) for the pediatric component being prepared.

Example:

```
Select Inventory Option: PD Pediatric unit preparation

                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                          => <RET>

Blood component for pediatric prep: ?
 ANSWER WITH BLOOD PRODUCT NAME, OR PRODUCT CODE, OR SYNONYM
 DO YOU WANT THE ENTIRE BLOOD PRODUCT LIST? N  (NO)

Blood component for pediatric prep: 04060  CPDA-1 RED BLOOD CELLS     04060
  PRBC      1      04060

Select UNIT: H05336
       H05336        A POS  02/28/93    4 DAYS OLD  250 ml

H05336               A POS  02/28/93   Vol(ml): 250  Wt(gm): 270
   VOL('W' to edit weight, 'V' to edit volume): 250ml// ?

To change the weight enter an 'W'or to change the volume enter a 'V'
Press 'RETURN' or 'ENTER' key to accept default volume.


H05336               A POS  02/28/93   Vol(ml): 250  Wt(gm): 270
   VOL('W' to edit weight, 'V' to edit volume): 250ml// W
Enter corrected weight in grams: 300

H05336               A POS  02/28/93   Vol(ml): 278  Wt(gm): 300
   VOL('W' to edit weight, 'V' to edit volume): 278ml// <RET>

Enter volume(ml) for pediatric unit: 50

H05336PA  A POS vol(ml):50
Expiration date: T  (JAN 28, 1993) ??
Expiration date: T@23:55  (JAN 28, 1993@23:55)

OK to process pediatric unit ? NO// Y  (YES)

Date/time work completed: NOW// <RET>  (JAN 28, 1993@13:56)


Select UNIT: <RET>
```

NOTES:

- Only those blood components with an entry in the Max Age for Pediatric Use field will be accepted.

- Only those units for which the maximum age requirement is met **and** which are not currently assigned to another patient will be accepted.

- You cannot enter today's date as the expiration date unless you include a time.

- If the volume of the unit selected is less than 150 ml, a prompt, "Volume of unit is below 150 ml. Do you still want to use it? NO//," will be displayed.

- If the automatic decrementing of the volume for the unit results in a new volume of zero, a disposition of discard will be assigned with the appropriate date/time. In this case, the Single Unit Information (Q-SU) option for this unit would resemble the following:

```
Select BLOOD INVENTORY UNIT ID: H05336
     1   H05336                          A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
     2   H05336PA                        A POS  PEDIATRIC CPDA-1 RBC
PEDIATRIC CPDA-1 RBC     POS   A POS PEDIATRIC CPDA-1 RBC
     3   H05336PB                        A POS  PEDIATRIC CPDA-1 RBC
PEDIATRIC CPDA-1 RBC     POS   A POS PEDIATRIC CPDA-1 RBC
     4   H05336PC                        A POS  PEDIATRIC CPDA-1 RBC
PEDIATRIC CPDA-1 RBC     POS   A POS PEDIATRIC CPDA-1 RBC
     5   H05336PD                        A POS  PEDIATRIC CPDA-1 RBC
PEDIATRIC CPDA-1 RBC     POS   A POS PEDIATRIC CPDA-1 RBC
     6   H05336PE                        A POS  PEDIATRIC CPDA-1 RBC
PEDIATRIC CPDA-1 RBC     POS   A POS PEDIATRIC CPDA-1 RBC
TYPE '^' TO STOP, OR
CHOOSE 1-6: 1
UNIT ID: H05336                          SOURCE: AURORA
  INVOICE#: 04                           COMPONENT: CPDA-1 RED BLOOD CELLS
  DATE/TIME RECEIVED: JAN 28, 1993@13:20
  EXPIRATION DATE/TIME: FEB 28, 1993     ABO GROUP: A
  RH TYPE: POSITIVE                      LOG IN PERSON: HEMBRY,SHARON
  COST: 57.00                            VOLUME (ml): 0
  DISPOSITION: DISCARD                   DISPOSITION DATE: JAN 28, 1993@14:12
  DISPOSITION ENTERING PERSON: HEMBRY,SHARON
DISPOSITION COMMENT: Pediatric unit prep
PEDIATRIC ALIQUOT MADE: H05336PA         VOLUME (ml): 50
PEDIATRIC ALIQUOT MADE: H05336PB         VOLUME (ml): 50
PEDIATRIC ALIQUOT MADE: H05336PC         VOLUME (ml): 50
PEDIATRIC ALIQUOT MADE: H05336PD         VOLUME (ml): 75
PEDIATRIC ALIQUOT MADE: H05336PE         VOLUME (ml): 50
PEDIATRIC ALIQUOT MADE: H05336PF         VOLUME (ml): 25
TEST/PROCEDURE: UNIT LOG IN/SEND-OUT
COMPLETE DATE/TIME: JAN 28, 1993@13:20   TECH: HEMBRY,SHARON
  INSTITUTION: REGION 7                  MAJOR SECTION: BLOOD BANK
  SUBSECTION: BLOOD BANK
WKLD CODE: Blood, Component/Deriv. External Relocate
  WKLD CODE COUNT: 1
[..............  and so on.]
```

Shipping Invoices for Blood Components (SH)

Based on the data entered through the Disposition-Not Transfused (I-DN) option, the system will generate (on command) an invoice which can be sent with units when shipped.

Any units for which the disease testing is either positive or incomplete will be flagged during data entry.

The content of the paragraph at the end of the shipping invoice is controlled by the LAB LETTER file (#65.9). (See option Edit Lab Letter file [LRBLSLL], Example 5.)

Example 1: Generation of an invoice for a shipment of red blood cells.

```
Select Inventory Option: SH  Shipping invoices for blood components

           INVOICE FOR SHIPMENT OF BLOOD COMPONENTS
Start with Date TODAY// <RET> JAN 20, 1993
Go    to   Date TODAY// <RET> JAN 20, 1993

Enter SHIPPING INVOICE#: 01

Enter name to appear on invoice: VA ELSEWHERE

Enter address line 1: BLOOD BANK (113)
Enter address line 2: 1481 W. 110th St.
Enter address line 3: GREAT BIG CITY, NY 12345
Enter address line 4: <RET>

Select Print Device:  [Enter Print Device Here]
```

NOTE: The shipping invoice number should be the same as the invoice number entered for the unit disposition.

```
JAN 20, 1993  13:48   VAMC                                          Pg: 1
BLOOD BANK            SHIPPING INVOICE#: 01
                      To: VA ELSEWHERE
                          BLOOD BANK (113)
                          1481 W. 110th St.
                          GREAT BIG CITY, NY 12345

                             ABO Rh    UNIT ID        Expiration date
-----------------------------------------------------------------------------

Component: CPDA-1 RED BLOOD CELLS
    1                         A  POS   56H67890       JAN 30, 1993
    2                         A  POS   56H76789       JAN 30, 1993

Component: AS-1 RED BLOOD CELLS
    1                         A  NEG   40GT65463      JAN 31, 1993

-----------------------------------------------------------------------------
Total unit count (all components): 3
-----------------------------------------------------------------------------
    I certify that the blood products listed have been properly maintained
    in accordance with the Code of Federal Regulations while in storage at
    this institution. Each unit is non-reactive for anti-HIV, anti-HTLV1,
    HBsAg and STS by FDA required tests and was inspected when packed for
    shipment and found satisfactory in color and appearance.


     ------------------------------------------ -------------------------
     Signature                                  Date and time packed

     Temperature upon receipt: _______________degrees C
     Container and contents: ___Satisfactory ___Unsatisfactory
```

Example 2: If there is a positive test result or if the testing is incomplete, a warning will be displayed

```
Select Inventory Option: SH  Shipping invoices for blood components

          INVOICE FOR SHIPMENT OF BLOOD COMPONENTS
Start with Date TODAY// <RET>  JAN 20, 1993
Go    to   Date TODAY// <RET>  JAN 20, 1993

Enter SHIPPING INVOICE#: 12345

Enter name to appear on invoice: LOYOLA UNIVERSITY MEDICAL CENTER
Entry must be less than 31 characters with no control characters.

Enter name to appear on invoice: LOYOLA UNIV MED CTR.

Enter address line 1: 1233 RIVER ROAD
Enter address line 2: Dallas, TX 12678
Enter address line 3: <RET>
Select Print Device:  [Enter Print Device Here]


JAN 20, 1993  13:48   DALLAS ISC-DEVELOPMENT ACCOUNT                Pg: 1
BLOOD BANK           SHIPPING INVOICE#: 12345
                     To: LOYOLA UNIV MED CTR.
                         1233 RIVER ROAD
                         Dallas, TX 12678
                            ABO Rh    UNIT ID        Expiration date
-------------------------------------------------------------------------

    1 Pos/Incomplete Tests   A  POS   A88888         JAN 30, 1993

-------------------------------------------------------------------------
Total unit count (all components): 1
-------------------------------------------------------------------------
    I certify that the blood products listed have been properly maintained
    in accordance with the Code of Federal Regulations while in storage at
    this institution. Each unit is non-reactive for anti-HIV, anti-HTLV1,
    HBsAg and STS by FDA required tests and was inspected when packed for
    shipment and found satisfactory in color and appearance.


     ------------------------------------------- ------------------------
     Signature                                   Date and time packed


     Temperature upon receipt: _______________degrees C
     Container and contents: ___Satisfactory ___Unsatisfactory
```

Unit ABO/RH Confirmation (UC)

At the present time the system does not allow the entry of the actual test results. Therefore, it will still be necessary to maintain those records separately. The recheck is required before the system will allow issue of the unit as follows:

1. If the unit requires a crossmatch, the ABO INTERPRETATION is required,

2. If the unit is Rh negative **and** the unit requires a crossmatch, the RH INTERPRETATION is required.

Example 1: ABO and Rh entered/no discrepancy

```
Select Blood bank Option: I  Inventory

Select Inventory Option: UC  Unit ABO/Rh confirmation

                             Inventory ABO/Rh check

                             To use BAR CODE READER
                Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                          => <RET>

Enter TEST COMMENT(s) ? NO// Y  (YES)

              1) Enter by invoice# (batch)
              2) Entry by unit ID
Select 1 or 2:1

Select INVOICE#: 56789
Enter date received: T  (JAN 27, 1993)

...EXCUSE ME , LET ME PUT YOU ON 'HOLD' ...

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:22)

X11111
ABO: A  Rh: POS
ABO INTERPRETATION: ?
     CHOOSE FROM:
       A        A
       B        B
       O        O
       AB       AB
       ND       NOT DONE
ABO INTERPRETATION: A  A

ABO TESTING COMMENT: ?
     ANSWER MUST BE 1-80 CHARACTERS IN LENGTH

CHOOSE FROM:
BADLABEL   Unit label incorrect. Return to supplier.
COLD   STRONG COLD AGGLUTININ PRESENT
```

```
ERRORCK   Error was made in the recheck.
OKLABEL   Error made in the invoice entry. Unit label is correct.
RPT   REPEAT PENDING
XMC   XMATCH COMMENT
ABO TESTING COMMENT: <RET>
RH  INTERPRETATION: ?
     Enter only past or present Date/time
     CHOOSE FROM:
       NEG       NEGATIVE
       POS       POSITIVE
       ND        NOT DONE
RH  INTERPRETATION: POSITIVE
RH TESTING COMMENT: <RET>

X11113
ABO: A  Rh: POS
ABO INTERPRETATION:  required for this unit
ABO INTERPRETATION: A  A
ABO TESTING COMMENT: <RET>
RH  INTERPRETATION: POSITIVE
RH TESTING COMMENT: <RET>

X11115
ABO: O  Rh: NEG
ABO INTERPRETATION: ^

WANT TO STOP LOOPING ? YES// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? YES// <RET>  (YES)

UNIT ID: <RET>

Select Inventory Option: <RET>
```

NOTES:

- If you stop the loop, the option reverts to entry by unit ID. If you answer "NO" to the "WANT TO STOP LOOPING ? YES//" prompt, the option skips the unit and goes on to the next one.

- In order to facilitate entry by batch, the worksheet generated by the Inventory ABO/Rh Testing Worksheet (I-UW) option puts the units in alphanumeric order under a given invoice number. Units appear in this option in the same order.

Example 2: ABO interpretation for which the current testing is in agreement with the unit label, but is not in agreement with information when the unit was logged in

```
Select Inventory Option: UC  Unit ABO/Rh confirmation

                              Inventory ABO/Rh check

                              To use BAR CODE READER
                 Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                           => <RET>

Enter TEST COMMENT(s) ? NO// <RET>  (NO)

               1) Enter by invoice# (batch)
               2) Entry by unit ID
Select 1 or 2:2

UNIT ID: X11115                O NEG  CPDA-1 WHOLE BLOOD     CPDA-1 WHOLE BLOOD
NEG   O NEG CPDA-1 WHOLE BLOOD
ABO: O  Rh: NEG
ABO INTERPRETATION: B  B
B not the ABO group on record
 Present testing OK ? YES// <RET>  (YES)
RH  INTERPRETATION: <RET> required for this unit
RH  INTERPRETATION: NEG  NEGATIVE

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:29)

UNIT ID: R99998                B POS  CPDA-1 RED BLOOD CELLS  CPDA-1 RED BLOOD
CELLS     POS   B POS CPDA-1 RED BLOOD CELLS
ABO: B  Rh: POS
ABO INTERPRETATION: A  A
A not the ABO group on record
 Present testing OK ? YES// N  (NO)
ABO INTERPRETATION: B  B
RH  INTERPRETATION: POSITIVE

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:29)


UNIT ID: <RET>

Select Inventory Option: <RET>
```

NOTE: When the response to the prompt "Is present testing OK?" was "NO," the display reverted to the prompt "ABO INTERPRETATION" to allow reentry of the correct results.

Unit Phenotyping (UP)

For selected patients, the use of CMV negative blood is appropriate. Results of the testing for CMV antibody status are used to evaluate the appropriateness of donor units in these patients.

Data for unit phenotyping is used in selecting units for patients with clinically significant irregular antibodies. A cross check is built in between the Antibodies Identified field and the RBC Antigen Present field to automatically eliminate donor units which are unsuitable for a specific patient.

Entries for both red cell antigens, other than ABO and Rh_0 (D), and HLA antigens are based on the SNOMED Nomenclature (FUNCTION FIELD file (#61.3)).

Phenotyping data for donors, based on previous records, will automatically transfer into the inventory file with the donor units. Therefore, results of repeat testing will not need to be recorded in the system unless the present result is at variance with the previous record.

Entries on donor units entered through this option will automatically transfer back to the donor for future reference. The check shown in Example 2 is done for data in both File #65 and #65.5. If data is changed once the unit has been transferred to BLOOD INVENTORY file (#65), the BLOOD DONOR file (#65.5) will be updated. However, the data change will be included on the audit report.

If the data change is not entered in the DP option until **after** the units are in inventory, the information will not be available in inventory for display in the phenotyping report.

Example 1: Initial Entry of Data

```
Select Inventory Option: UP  Unit phenotyping

Enter 'YES' to record results and workload or 'NO' to record only results:
Was testing performed at this facility ? Y  (YES)

Select BLOOD INVENTORY UNIT ID: X11114       APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS

Select RBC ANTIGEN PRESENT: C
     1   C       50730  C
     2   Ce      50780  Ce
     3   Cw      50790  Cw
     4   Cx      50810  Cx
CHOOSE 1-4: 1
Select RBC ANTIGEN PRESENT: <RET>

Select RBC ANTIGEN ABSENT: c      50750  c
Select RBC ANTIGEN ABSENT: <RET>

CMV ANTIBODY: ?
     CHOOSE FROM:
       0        NEG
       1        POS
CMV ANTIBODY: <RET>

Select HLA ANTIGEN PRESENT: B
 ANSWER WITH HLA ANTIGEN PRESENT
     YOU MAY ENTER A NEW HLA ANTIGEN PRESENT, IF YOU WISH
 ANSWER WITH FUNCTION FIELD IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N  (NO)
Select HLA ANTIGEN PRESENT: <RET>

Select HLA ANTIGEN ABSENT: <RET>

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:35)

Select BLOOD INVENTORY UNIT ID: <RET>
```

NOTES:

- If a "?" is entered as a response to any of the prompts, the screen will display a list of all of the previous entries. Only the most recent entry will be displayed as the default.
- In order to delete a previous entry, enter a "@" in response to the prompt once the data to be deleted is displayed, as shown in the example below.
- The antigen prompts will accept either the code number for the antigen or the abbreviation for the antigen.
- Please note the prompt at the beginning that asks if you want to record the workload.

Example 2: Incorrect entry for unit F11111, which is actually C and c positive, not c(hr') negative as previously entered

```
Select Inventory Option:  UP  Unit phenotyping

Enter 'YES' to record results and workload or 'NO' to record only results:
Was testing performed at this facility ? Y  (YES)

Select BLOOD INVENTORY UNIT ID: F11111      APOS  CPDA-1 RED BLOOD CELLS

CPDA-1 RED BLOOD CELLS   POS   A POS CPDA-1 RED BLOOD CELLS
                                     Antigen(s) present  | Antigen(s) absent
-----------------------------------------------------------------------------
Unit's Phenotype Record:                                C  |                c

Select RBC ANTIGEN PRESENT: C// c      50730  C
         ...OK? YES// N  (NO)
     c                 50750
c antigen cannot be present & absent ??
Select RBC ANTIGEN PRESENT: <RET>

Select RBC ANTIGEN ABSENT: c// @
   SURE YOU WANT TO DELETE THE ENTIRE RBC ANTIGEN ABSENT? Y  (YES)
Select RBC ANTIGEN ABSENT: ^

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:38)


Select BLOOD INVENTORY UNIT ID: F11111      APOS  CPDA-1 RED BLOOD CELLS

CPDA-1 RED BLOOD CELLS   POS   A POS CPDA-1 RED BLOOD CELLS
                                     Antigen(s) present  | Antigen(s) absent
-----------------------------------------------------------------------------
Unit's Phenotype Record:                                C  |

Select RBC ANTIGEN PRESENT: C// 50750  c    50750  c
Select RBC ANTIGEN PRESENT: <RET>

Select RBC ANTIGEN ABSENT: ^

Date/time work completed: NOW// <RET>  (JAN 27, 1993@15:38)


Select BLOOD INVENTORY UNIT ID: <RET>
```

NOTE: Because the system will BEEP and display the comment "antigen cannot be present and absent," the change must be done in two separate steps.

Units Release To Stock (Cancel) By Patient (UR)

Units are initially selected for release to stock by patient (based on previous unit selections), rather than relying solely on donor unit ID. Once the patient is selected, all units currently assigned/xmatched for that patient are displayed.

If units were previously relocated (e.g., to surgery) they **must** be relocated to the Blood Bank **before** they are released, since the Disposition-Relocation (I-DR) option is also based on patient assignments. By including the current location for units in the display, the status can easily be reviewed.

Selection of units to be released/canceled is based on the specific policies and procedures of each institution (e.g., after 24 vs. 48 hours, once per day vs. twice per day).

The Units on Xmatch by Date/Time Xmatched (R-IS-UX) option in the Reports Menu can be used to generate a report of all units assigned/xmatched, by date and time xmatched, which have no final disposition. This report includes the date/time xmatched, the specimen date/time, the unit ID, the ABO/Rh of the unit, the present location of the unit, the expiration date/time of the unit, the component (product) and the patient assigned.

The REASON FOR RELEASE entered in this option is stored with the crossmatch information and will be included on the report generated using the Crossmatch: Transfusion Report (R-UR-CT) option.

Example:

```
Select Inventory Option: B  Units release to stock (cancel) by patient

Select Patient Name: W8888 WASHINGTON,GEORGE       03-01-00     592888888
SC VETERAN

WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 92  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                          MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI K


#  Unit ID     ABO/Rh Component            Exp date    Xmatch date Location
1) C11112       A POS CPDA-1 RED BLOOD CEL 05/17       04/17 09:51 SICU
2) C11113       A POS CPDA-1 RED BLOOD CEL 05/17       04/17 09:51 BLOOD BANK


Date/time work completed: NOW// <RET>  (APR 28, 1993@14:16)
```

```
Select units (1-2) for release: ?
Enter numbers from 1 to 2
For 2 or more selections separate each with a ',' (ex. 1,3,4)
Enter 'ALL' for all units.
Select units (1-2) for release: ALL

Reason for release: ?
   ANSWER MUST BE 2-40 CHARACTERS IN LENGTH

CHOOSE FROM:
BBD   This is an example of a canned comment that is many characters long.
NNS   Unit not needed for surgery
NU   None of units reqst'd were used
PE   Patient expired
PU   Partial usage-not all rqst'd were used
RS   Returned from surgery
UE   Unit expired

Reason for release: RS  (Returned from surgery)

C11112 not returned to BLOOD BANK.  Cannot release.

   All valid releases completed.
```

NOTES:

- If no location is displayed, the unit has never been relocated since it was moved into inventory.
- If the unit is not in the BLOOD BANK, it cannot be released.

Inventory ABO/RH Testing Worksheet (UW)

Since entries in the Unit ABO/Rh confirmation (UC) option record only interpretation of testing, some types of worksheets must be maintained as a permanent record of the actual serological results. Use of this option provides such worksheets.

The text that appears at the bottom of the worksheet should include the key (code or legend) to illustrate and give meaning to numbers, letters, and abbreviations used to record observed results and interpretations used to record observed results and interpretations. It is entered/edited using the S-EF-LL Edit Lab Letter option in the Supervisor Menu. However, the name "INVENTORY WORKSHEET" in the LAB LETTER file (#65.9) must be exact since it is hard coded in the routine.

When a unit is initially placed into inventory, either through the LR option or through automatic transfer from the donor module, the system checks the BLOOD PRODUCT file (#66) to determine if the entry in the Contains Red Blood Cells field is "YES." If so, the necessary information (i.e., donor ID number and ABO/ Rh) is entered in a temporary file to be printed on a worksheet on command (e.g., after log ins are completed, at the beginning of a shift, etc.,).

For those facilities that draw donors, a determination must be made as to whether the units being labeled and automatically transferred from the donor section to the inventory section require ABO/Rh rechecks. If the facility is performing the rechecks **before** labeling of the donor unit, the unit numbers should not appear on this worksheet. The system needs to have the appropriate information entered in the LABORATORY SITE file (#69.9), using the Edit Blood Bank Site Parameter S-EF-SP option in the Supervisor's Menu, in order to automatically transfer the recheck data.

NOTES:

- Because no requirement exists for the ABO/Rh of units of Fresh Frozen Plasma, Platelets, etc., to be rechecked by the institution actually transfusing the unit, these units are not entered on the worksheet automatically. It is possible to add these by entering "YES" and the "donor unit ID number" in response to the prompt "Add/Delete ABO/Rh Worksheet entries?"

- The units included on the worksheet are placed in alphanumeric order within a given invoice number. This will facilitate result entry by batch using the I-UC option.

- The units transferred in inventory from the donor module get an invoice number of 00.

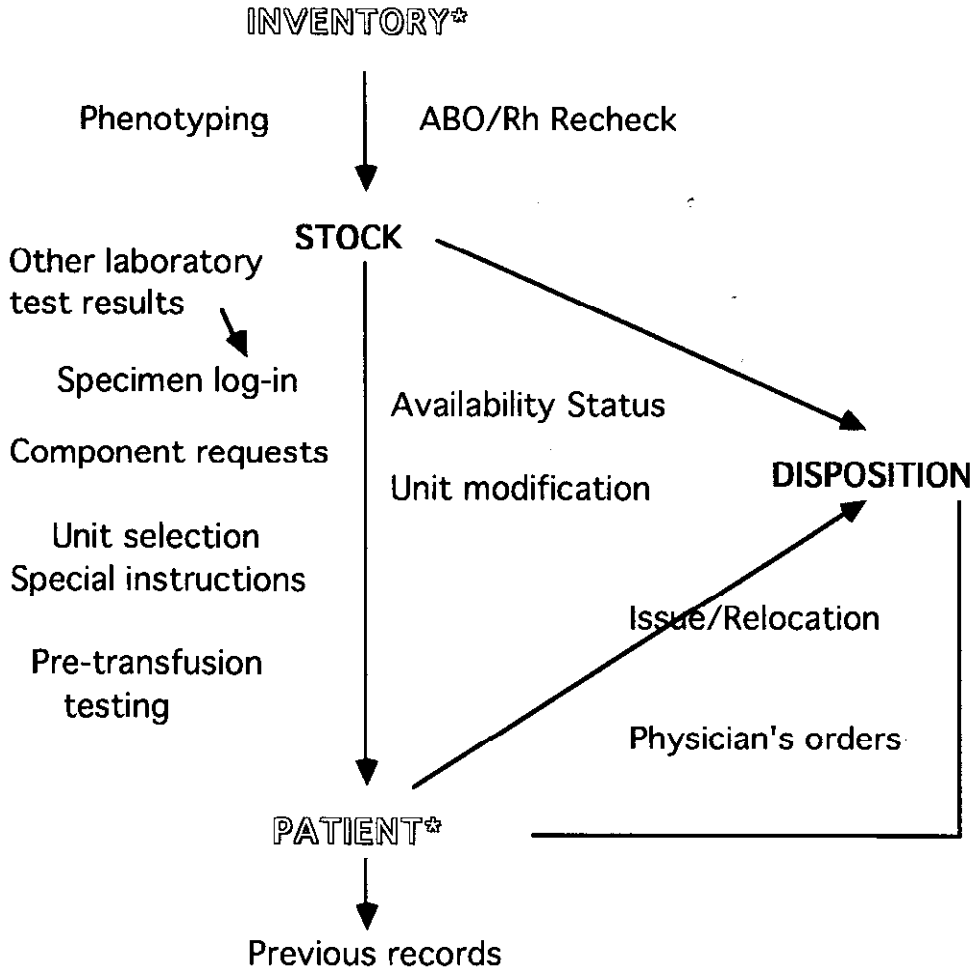
Example:

```
Select Inventory Option: UW Inventory ABO/Rh testing worksheet
                         PRINT ABO/RH INVENTORY WORKSHEET


List ABO/Rh worksheet entries ? NO// Y  (YES)
 1) X11111   A POS                       2) X11113   A POS
 3) X11115   O NEG                       4) A55555   A POS
 5) R99998   B POS                       6) X11114   A POS
 7) A412345   A POS                      8) AM22222   A POS
Add/delete ABO/Rh worksheet entries ? NO// <RET>  (NO)

Save list for repeat printing ? NO// <RET>  (NO)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
JAN 27, 1993  15:06   DALLAS ISC-DEVELOPMENT ACCOUNT                    Pg: 1
LABORATORY SERVICE  INVENTORY ABO/Rh TESTING WORKSHEET
Incubator temp:              Reagent rack:
Num  Donor ID      |Supplier|VA interp |    |---ANTI----|Rh|   |Du|
                   |ABO Rh  | ABO Rh   |tech|A |B |AB| D|Ct|Du|Ct|
-----------------------------------------------------------------------
Invoice #: 56789
  1) X11111         A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
  2) X11113         A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
  3) X11115         O  NEG |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
Invoice #: 00
  1) A55555         A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
  2) R99998         B  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
  3) X11114         A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
Invoice #: A444444
  1) A412345        A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
Invoice #: AM12345
  1) AM22222        A  POS |          |    |  |  |  |  |  |  |  |
-----------------------------------------------------------------------
CLEAR  BACKGROUND: 4+ 1-3 large clumps     3+ Several large clumps
TURBID BACKGROUND: 2+ Medium sized clumps  1+ Tiny clumps  +- Fine clumps
M=Microscopic positive R=Rouleaux MF=Mixed field O=No aggregates
H=Hemolysis S=Saline A=Albumin AHG=Antihuman globulin cc=Check cells
DAHG=Direct antihuman globulin
```

Patient Menu Options

```
P       Blood bank patient [LRBLP]
      DA      Remove an accession [LRDELOG]
      DT      Blood transfusion results [LRBLPT]
      ET      Enter test data [LRBLPET]
      PR      Previous records [LRBLPER]
      RS      Request/select/xmatch blood components [LRBLPC]
            CR      Blood component requests [LRBLPCS]
            US      Select units for patients [LRBLPIC]
            XM      Enter crossmatch results [LRBLPX]
      SI      Special instructions [LRBLPSI]
      SL      Specimen log in [LRBLPLOGIN]
      TA      Add tests to a given accession. [LRADD TO ACC]  Locked: LRLAB
      TD      Delete test from an accession [LRTSTOUT]
      TL      Test worklist [LRBLTTW]
      WL      Accession area worklist [LRUW]
```



Data Flow Chart

Action	Option
1. Log in new specimen	Specimen Log in (SL)
2. Add tests to a specimen previously accessioned	Add Tests to a Given Accession (TA)
3. Delete tests from a specimen previously accessioned	Delete Tests from a Given Accession (TD)
4. Delete a specimen previously accessioned	Remove an Accession (DA)
5. Add additional component requests to previously accessioned specimens	Blood Component Requests (RS-CR)
6. Print a worklist	Test Worklist (TL) Accession Area Worklist (WL)
7. Enter test data (non-XM)	Enter Test Data (ET)
8. Select units for patient	Select Units for Patient (RS-US)
9. Enter crossmatch results	Enter Crossmatch Results (RS-XM)
10. Review/enter previous transfusion history	Previous Records (PR)
11. Enter special instructions/antibody problems	Special Instructions (SI)
12. Enter disposition of units transfused	Blood Transfusion Results (DT)

NOTE: Release of units crossmatched which are not transfused is done through Inventory Option UR.

Remove an Accession (DA)

If a specimen is discovered to be unacceptable after being received and logged in, the accession should be deleted, in order to prevent any confusion when any attempts are made to request or select units for the patient.

If any data has been entered/verified, the accession cannot be removed unless the data is first deleted.

Example:

```
Select Blood bank Option: P  Blood bank patient

Select Blood bank patient Option: DA  Remove an accession
Select Accession: BB 0112 1
Select Patient Name:    BOLE,DC       07-11-25     785204773     NON-VETERAN
(OTHER)
BOLE,DC ID: 785-20-4773 Physician: HARTFIEL,JACQUELINE

ABO group:   Rh type:
AGE: 67  DATE OF BIRTH: JUL 11, 1925
Ward on Adm: 1A  Service: ALLERGY
Adm Date: SEP  7, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1A                        MD: HARTFIEL,JACQUELINE


PATIENT LOCATION: 1A//  <RET>
PROVIDER:  HARTFIEL,JACQUELINE // <RET> BLOOD BANK  (JAN 12, 1993)  1
BOLE,DC                  785-20-4773
Order  Test          Urgency   Status                            Accession
  Lab Order # 797                            Provider: HARTFIEL,JACQUELINE
  BLOOD
  TRANSFUSION REQUEST
                     ROUTINE  Collected          01/12/93 14:42  BB 0112 1
For accession BB 0112 1
  Is this the one? N//Y
For this specimen, remove all associated accessions? N//Y
Reason(s) for deleting accession BB 0112 1
Enter Order Comment:   DUPLICATE SPECIMEN
Accession Removed
```

NOTE: Removing an accession does **not** automatically delete the order. This must be done through a separate action using the Delete Order option in the Supervisor's Menu.

Blood Transfusion Results (DT)

The DATE/TIME TRANSFUSION COMPLETED must be either now or a past date/time. Future dates are not allowed.

Entry of a "?" in response to the prompt "Select TRANSFUSION REACTION TYPE" will provide a listing of choices. Entries need to be made using the Edit Blood Bank Utility file (EF-BU) option in the in the Supervisor Menu. You will need to specify (Transfusion Reaction) "T" at the screen.

At the time the transfusion information is entered, additional information, including treating specialty and the volume of the unit, become part of the patient's transfusion record. The volume is based on the corresponding blood product code when the unit was logged into inventory, unless modification of the unit occurred after receipt into stock.

Once units have been transfused, as determined by whatever method is used by the institution, the final disposition is entered for that donor unit ID. The information is simultaneously recorded both as the disposition for that unit and as a transfusion episode in the patient's record. All units currently assigned/xmatched to the patient will be displayed, regardless of their location, until such time as they are released or given another disposition.

Since electronic white out is not appropriate, changes made to verified data are tracked via the audit trail. A report of data captured on the audit trail can be printed using the Supervisory Menu option, S-SR-AD Print Audit Data Change Audits. For data entered via this option, the following types of data changes are included:

- if the patient has a previous history and the current result entry is not in agreement.

In addition to the warning message which is displayed during the data entry, this attempted data entry is tracked by the audit trail even if the data being entered was corrected and matched the history in order to make the supervisor aware of data entry problems which might adversely affect the patient if they had not gotten caught.

- if the verified results are changed.

If a different tech goes through the option, but does not change any results, it is not captured on the audit trail. However, the original tech initials will be replaced by the initials of the new tech.

NOTES:
The Treating Specialty and Physician are pulled from the MAS files and entered into BLOOD INVENTORY file (#65). If the data is not entered in a timely manner, it will probably be less accurate.

- The Physician comes from the current entry in PATIENT file (#2), field .104. This field is automatically updated when a change is made in the PATIENT MOVEMENT file (#405), field .08 Primary Care Physician. The .19 field in File #405, ATTENDING PHYSICIAN, is not used at the present time because this is not a mandatory field and could be null.
- The Treating Specialty comes from the current entry in File #2, Field .103 which reflects the currently assigned treating specialty. This field is updated automatically when a change is made in the PATIENT MOVEMENT file (#405). In the event that the patient is no longer an inpatient, the user is asked to enter the treating specialty.

Example 1: Routine Data Entry

```
Select Blood bank patient Option: DT  Blood transfusion results

                              Enter transfusion results

Select Patient Name: W8888  WASHINGTON,GEORGE   03-01-00  592888888  SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 92  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                          MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI K

Select PROVIDER: WELBY,HARRY// <RET>

Select TREATING SPECIALTY: ALLERGY// <RET>
     1   ALLERGY          ALLERGY      ALL
     2   ALLERGY CLINIC                BAB
CHOOSE 1-2: 1


      Unit assigned/xmatched:                    Exp date        Loc
 1) C11112       CPDA-1 RED BLOOD CELLS  A POS  05/17/91        SICU
 2) C11113       CPDA-1 RED BLOOD CELLS  A POS  05/17/91        SICU

Select units (1-2) to enter TRANSFUSION results: 1
```

```
DATE/TIME TRANSFUSION COMPLETED: ?
     Examples of Valid Dates:
       JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
       T   (for TODAY),  T+1 (for TOMORROW),  T+2,  T+7,  etc.
       T-1 (for YESTERDAY),  T-3W (for 3 WEEKS AGO), etc.
     If the year is omitted, the computer uses the CURRENT YEAR.
     If the date is omitted, the current date is assumed.
     Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.
     You may enter a time, such as NOON, MIDNIGHT or NOW.

     Enter a date which is less than or equal to N.
DATE/TIME TRANSFUSION COMPLETED: N  (MAR 02, 1993@15:32)
TRANSFUSION REACTION ? NO// <RET>  (NO)

Select Patient Name: <RET>
```

Example 2: Entry of transfusion reaction information associated with a specific unit

```
Select Blood bank Option: P  Blood bank patient

Select Blood bank patient Option: DT  Blood transfusion results

                              Enter transfusion results

Select Patient Name: DUSTY,RUSTY      04-27-25     089485948   NO  SC VETERAN

ANDY,DUSTY ID: 089-48-5948 Physician: WELBY,MARCUS

ABO group: A  Rh type: POS
AGE: 67  DATE OF BIRTH: APR 27, 1925
Adm Date: JUL 1, 1992  15:00  Adm DX: SDF
Present Ward: 5 NORTH                    MD: COUGAR,BIG HARRY
PATIENT LOCATION: 5 N// <RET>
    Blood bank patient special instructions


Select PROVIDER: WELBY,MARCUS

Select TREATING SPECIALTY: MEDICINE          INTERMEDIATE MEDICINE

      Unit assigned/xmatched:                          Exp date          Loc
 1) F33333                CPDA-1 RED BLOOD CELLS     A POS  05/28/91
BLOOD BANK
 2) F44444                CPDA-1 RED BLOOD CELLS     A POS  05/28/91
BLOOD BANK
 3) A11111                CPDA-1 RED BLOOD CELLS     A POS  07/02/92
BLOOD BANK
 4) A11112                CPDA-1 RED BLOOD CELLS     A POS  07/02/92
BLOOD BANK
 5) B11111                CPDA-1 RED BLOOD CELLS     A POS  07/07/92
BLOOD BANK
 6) RA11111               CPDA-1 RED BLOOD CELLS     A POS  10/26/92
Blood Bank
 7) RA99999               AUTOLOGOUS LIQUID PLAS     A POS  11/20/92
Blood Bank
 8) A99999                CPDA-1 RED BLOOD CELLS     O POS  12/31/92
BLOOD BANK
```

```
Select units (1-8) to enter TRANSFUSION results: 3


A11111            CPDA-1 RED BLOOD CELLS  A POS  07/02/92        BLOOD BANK
Is this the unit ? YES// <RET>  (YES)
DATE/TIME TRANSFUSION COMPLETED: T-1-92@       7-1-92@6P  (JUL 01, 1992@18:00)

Prolonged transfusion time (3166 min) OK ? NO// Y  (YES)

TRANSFUSION REACTION ? NO// Y  (YES)
Select TRANSFUSION REACTION TYPE: ?
 ANSWER WITH BLOOD BANK UTILITY NAME, OR FULL NAME
 DO YOU WANT THE ENTIRE BLOOD BANK UTILITY LIST? Y  (YES)
CHOOSE FROM:
   DELAYED HEMOLYTIC      DELAYED HEMOLYTIC TRANSFUSION REACTION
   FEBRILE NON-HEMOLYTIC      FEBRILE NON-HEMOLYTIC TRANSFUSION REACTION
   IMMEDIATE HEMOLYTIC      IMMEDIATE HEMOLYTIC TRANSFUSION REACTION

Select TRANSFUSION REACTION TYPE: IMM   FEBRILE NON-HEMOLYTIC         FEBRILE
NON-HEMOLYTIC TRANSFUSION REACTION
Select TRANSFUSION COMMENT: <RET>
```

NOTES:

- If the patient suffers any delayed adverse effects after the disposition has been entered into the computer, appropriate changes will need to be made in both the inventory file and the patient's record as follows:

- Transfusion reactions can either be associated with specific individual units or they may not be traceable to a specific unit.
  - If the reaction can be attributed to a specific unit, use the Edit unit disposition fields option in the Supervisor Menu, S-EI-DI, to enter the data.
  - If the reaction cannot be attributed to a specific unit, use the Unknown unit transfusion reaction option in the Supervisor Menu, S-EP-TR, to enter the data.

Enter Test Data (ET)

Test results and/or interpretations for tests requested, other than crossmatches, are entered using this option. Crossmatch results must be entered using option RS, suboption XM, since units must first be selected, etc.

Entries for the individual reagents in the Direct Coombs test allow recording of the actual strength of agglutination, based on AGGLUTINATION STRENGTH file (#62.55). Entry of a "?" in response to the prompt will display the choices.

The tests for which data are entered via this option are those in File #60 with the Blood Bank (BB) subscript; i.e., ABO/Rh, Coombs, Direct/Indirect, Transfusion Request, Type & Screen, etc.

The specific prompts displayed for data entry will depend on the entry for Edit Code for the specific test requested in LABORATORY TEST file #60 with the Blood Bank (BB) subscript (i.e., ABO/Rh, Coombs, Direct/Indirect, Transfusion Request, Type & Screen, etc.,) and on the entry for the first default for the Patient option in the LABORATORY SITE file (#69.9). If direct Coombs testing is not routinely performed, you will probably want to exclude those prompt from the edit template using the S-EF-SP option.

Although entry of an "^" in this option will not result in loss of data entered prior to that point, it will leave the test status in an "incomplete status." This might be confusing when the accession list or worklist is printed.

Since electronic white out is not appropriate, changes made to verified data are tracked via the audit trail. A report of data captured on the audit trail can be printed using the Supervisory Menu option, S-SR-AD Print audit data change audits. For data entered via this option, the following types of data changes are included:

- if the patient has a previous history and the current result entry is not in agreement.

In addition to the warning message which is displayed during the data entry, this attempted data entry is tracked by the audit trail even if the data being entered was corrected and matched the history in order to make the supervisor aware of data entry problems which might adversely affect the patient if they had not gotten caught.

- if the verified results are changed.

If a different tech goes through the option, but does not change any results, it is not captured on the audit trail. However, the original tech initials will be replaced by the initials of the new tech.

NOTES:

- The system will check the current entry for both the ABO and the Rh interpretation. If the entries are inconsistent with the previous results, the system displays the message, "(current entry) not ABO group on record. Is present testing OK? NO//." All edits are then recorded in a file for future printing at the supervisor's request, including the original entry, the person entering the original entry, what the entry was changed to, the date of the change and the person entering the change.

- The ABO testing comment and the RH testing comment will accept from 2-80 characters of free text entry or predefined entries. The predefined entries are created using the Edit Blood Bank Description file (EF-BD) option in the Supervisor's Menu (you must specify BB TESTING as the screen)

- If the Direct Coombs interpretation is positive, the system will check the pharmacy section of the system and display a list of all current medications, as demonstrated in Example 2. Both inpatient and outpatient medications are included if the Pharmacy packages are operational. These can also be printed using the Q-PH Patient Medication List option

- Entry of a "?" in response to the prompts "Select SERUM ANTIBODY" and "Select ANTIBODIES IDENTIFIED" and Select "ELUATE ANTIBODY" will display a listing of all previous entries, with the default being the most recent entry.

- Any antibodies entered in response to the prompt "Select SERUM ANTIBODY" and "Select ELUATE ANTIBODY" are recorded for the current specimen only. They are not automatically transferred to the patient's permanent record or to any special transfusion instructions.

- Since the antibodies entered in response to the prompt "Select ANTIBODIES IDENTIFIED" are entered as part of the patient's permanent record and subsequently used to select units of red blood cells with appropriate phenotypes, only clinically significant antibodies should be entered in response to this prompt. In the following example, if blood is requested for the patient, the system will check the units to ensure that the Antigens Present field does not have an entry for either the K or the E antigen. If it does, the system will not allow that unit to be selected for that particular patient.

Example 1: ABO/Rh

```
Select Blood bank patient Option: ET  Enter test data

BLOOD BANK Patient data entry for MAR  5, 1993 ? YES// <RET>  (YES)
Enter TEST COMMENT(s) ? NO// Y  (YES)
Edit SPECIMEN COMMENT(s) ? NO// <RET>  (NO)

Select Accession Number: 4  for MAR  5, 1993
BOLE,DC  ID: 785-20-4773 ABO:  Rh:
Specimen: BLOOD

Test: TYPE & HOLD


ABO:   Rh:
ABO &/or Rh not on file
CAUTION !! No checking can be done.

  ABO INTERPRETATION: A  A              Are you sure ? NO// Y  (YES)
  ABO TESTING COMMENT: <RET>
  RH  INTERPRETATION: POS  POS          Are you sure ? NO// Y  (YES)
  RH TESTING COMMENT: <RET>

Date/time work completed: NOW// <RET>  (MAR 05, 1993@14:19)
```

Example 2: Pretransfusion testing for a patient with a positive direct antiglobulin test and a clinically significant serum antibody with workload turned on.

The prompts displayed after the patient information below are based on having the first default for the Patient option in the LABORATORY SITE file (#69.9) set to "YES." This will include the prompts for the Direct Coombs testing. If you do not wish to have these prompts included, use the Edit Blood Bank Site Parameters (S-EF-SP) option in the Supervisor's Menu to set the default to "NO."

```
Select Blood bank patient Option:  ET Enter test data

BLOOD BANK Patient data entry for MAR  5, 1993 ? YES// <RET>  (YES)
Enter TEST COMMENT(s) ? NO// Y  (YES)
Edit SPECIMEN COMMENT(s) ? NO// <RET>  (NO)

Select Accession Number: 3  for MAR  5, 1993
WASHINGTON,GEORGE  ID: 592-88-8888 ABO: A Rh: POS
Specimen: BLOOD
Antibody present: ANTI K


Test: TRANSFUSION REQUEST

ABO: A  Rh: POS
  ABO INTERPRETATION: A  A
  ABO TESTING COMMENT: <RET>
  RH  INTERPRETATION: POS
  RH TESTING COMMENT: <RET>

  DIRECT AHG(POLYSPECIFIC): 1 1 1+ TINY CLUMPS, TURBID BACKGROUND
  ANTI-IgG: 1 1 1+ TINY CLUMPS, TURBID BACKGROUND
  ANTI-COMPLEMENT: N N NO AGGLUTINATION

  DIRECT AHG INTERPRETATION: ?
     CHOOSE FROM:
       P        POSITIVE
       N        NEGATIVE
       I        INVALID, USE EDTA SPECIMEN
  DIRECT AHG INTERPRETATION: P  POSITIVE

  DIRECT AHG TEST COMMENT: <RET>
  Select ELUATE ANTIBODY: <RET>

  ANTIBODY SCREEN INTERPRETATION: P  POS

  Select SERUM ANTIBODY: E
     1   E  ANTI E    52030  ANTI E
     2   Ew  ANTI E(w)    52110  ANTI E(w)
CHOOSE 1-2: 1  ANTI E
    SERUM ANTIBODY: ANTI E// <RET>
  Select SERUM ANTIBODY: <RET>
  Select ANTIBODY SCREEN COMMENT: <RET>
```

```
Enter '?' for list of antibodies identified to date.

Select ANTIBODIES IDENTIFIED: ANTI K// ANTI E
     1   ANTI E       52030  ANTI E
     2   ANTI E(w)       52110  ANTI E(w)
CHOOSE 1-2: 1
  ANTIBODIES IDENTIFIED COMMENT: <RET>
Select ANTIBODIES IDENTIFIED: <RET>

Date/time work completed: NOW// <RET>  (MAR 05, 1993@14:24)


Enter Antibody Identification Workload
Select EXECUTE CAP CODE EXECUTE WKLD CODE: ?
 ANSWER WITH EXECUTE CAP CODE
CHOOSE FROM:
   46              Antibody Elution       86150.000
   49              Antibody ID w/Antihuman       86152.000
   51              Antibody Ident w/o Antihuman       86154.000

Select EXECUTE CAP CODE EXECUTE WKLD CODE: 49  Antibody ID w/Antihuman
86152.000
  Enter WKLD CODE COUNT if more than one: <RET>
Select EXECUTE CAP CODE EXECUTE WKLD CODE: <RET>

Count  WKLD CODES Selected:
 1    86152.000 Antibody ID w/Antihuman
WKLD CODES selected OK ? YES// <RET>  (YES)

WASHINGTON,GEORGE
Patient has positive direct AHG(BS) test  MEDICATIONS:
OUTPATIENT PHARMACY ITEM: GELUSIL TABLETS
Test:ABO/RH TYPING



ABO: A  Rh: POS
  ABO INTERPRETATION: A// <RET>
  ABO TESTING COMMENT: <RET>
  RH  INTERPRETATION: POS// <RET>
  RH TESTING COMMENT: <RET>

Date/time work completed: NOW// <RET>  (MAR 05, 1993@14:24)


Select Accession Number: <RET>
```

Previous Records (PR)

Upon receipt of a specimen and request for testing on a patient, the system checks the patient's previous records and displays previous entries (if any) for ABO/Rh and Special Instructions. However, it is necessary to use this option for entering additional details on antibodies identified, patient antigen typing, previous units transfused before the computer, etc. Although it is to be used to enter OLD transfusion episodes, it cannot be used to edit these entries. This must be accomplished using the Edit Unit-Patient Fields (S-EI-PP) option in the Supervisor's Menu.

While this option is the only way to enter antigen typing on the patient and transfusions before the implementation of the computer system, the Display Blood Bank Record (DR) option in the Inquiries Menu is preferable if one only needs to review previously entered information.

NOTES

- Since the Antibodies Identified field is used to select units of red blood cells with appropriate phenotypes, it should only be used to enter clinically significant red cell immune antibodies. All other comments and non-clinically significant antibodies should be entered as free text in the Blood Bank Comments field, along with the date and initials of the person entering the information. Information displayed through this field then comes within the purview of the technologist to use appropriately.

- If an attempt is made to use this option to enter a unit which is in inventory, the message "UNIT IN INVENTORY - EDIT TRANSFUSION DATA THERE!??" is displayed, followed by a BEEP.

Example 1: Addition of Anti-E in a patient with a previous history of anti-K and anti-C

```
Select Blood bank patient Option: PR  Previous records

          Blood bank patient data from old records

Select Patient Name: W8888 WASHINGTON,GEORGE   03-01-00  592888888   SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                          MD: WELBY,HARRY
PATIENT LOCATION: 1B//  <RET>
Antibody present: ANTI C
                  ANTI K



Select ANTIBODIES IDENTIFIED: ANTI c// ANTI E
     1   E  ANTI E    52030  ANTI E
     2   Ew  ANTI E(w)    52110  ANTI E(w)
CHOOSE 1-2: 1
  ANTIBODIES IDENTIFIED COMMENT: <RET>

Select RBC ANTIGENS PRESENT: ?
 ANSWER WITH RBC ANTIGENS PRESENT(other)
     YOU MAY ENTER A NEW RBC ANTIGENS PRESENT(other), IF YOU WISH
 ANSWER WITH FUNCTION FIELD SYNONYM, OR SNOMED CODE, OR IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N  (NO)
  RBC ANTIGENS PRESENT: Jk(a)// <RET>
Select RBC ANTIGENS PRESENT: <RET>

Select RBC ANTIGENS ABSENT: K// <RET>
  RBC ANTIGENS ABSENT: K// <RET>
Select RBC ANTIGENS ABSENT: <RET>

Select HLA ANTIGEN PRESENT: <RET>

Select HLA ANTIGENS ABSENT: <RET>

BLOOD BANK COMMENTS:
  1> TRANSFUSE K negative, C negative blood only 8/12/87
  2> Transfuse washed cells only-febrile nonhemolytic reaction 8/20/87
EDIT Option: E
Edit line: 1
1)  TRANSFUSE K negative, C negative blood only 8/12/87
Replace K negative, C negative   With K, C, E negative
Replace 8/12/87  With 9/20/87
Replace <RET>
1) Transfuse K, C, E negative blood only. 9/20/87
EDIT Option: <RET>

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: <RET>
```

Example 2: Entry of previous transfusions (before implementation of module) for a patient already entered in the system

```
Select Blood bank patient Option: PR  Previous records

          Blood bank patient data from old records

Select Patient Name: P0019  PROCESSING,SIMON  08-12-23  300010019  NON-VETERAN
(OTHER)
PROCESSING,SIMON ID: 300-01-0019
ABO group: B  Rh type: NEG
AGE: 69  DATE OF BIRTH: AUG 12, 1923
PATIENT LOCATION: ORTHOPEDICS// <RET>
Antibody present: ANTI K
                  NATI Jk(a)
Select ANTIBODIES IDENTIFIED: ANTI K// <RET>
  ANTIBODIES IDENTIFIED: ANTI K// <RET>
  ANTIBODIES IDENTIFIED COMMENT: <RET>
Select ANTIBODIES IDENTIFIED: <RET>

Select RBC ANTIGENS PRESENT: Jk(a)// <RET>
  RBC ANTIGENS PRESENT: Jk(a)//
Select RBC ANTIGENS PRESENT: <RET>

Select RBC ANTIGENS ABSENT: <RET>

Select HLA ANTIGEN PRESENT: <RET>

Select HLA ANTIGENS ABSENT: <RET>

BLOOD BANK COMMENTS:
  1> <RET>

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87   AUG  6, 1987
  TRANSFUSION RECORD COMPONENT: 04060  CPDA-1 RED BLOOD CELLS   04060  PRBC 1
   TRANSFUSION RECORD COMPONENT ID: G11111
  COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
  COMPONENT ID: G11111// <RET>
  ABO: O  O
  RH: POSITIVE
  UNITS POOLED: <RET>
  TRANSFUSION REACTION: NO
  Select TRANSFUSION COMMENT: <RET>
  Select CROSSMATCH COMMENT: <RET>

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87   AUG  6, 1987
CPDA-1 RED BLOOD CELLS      G11111
For new entries only.  No editing.

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87   AUG  6, 1987
   TRANSFUSION RECORD COMPONENT: 04060  CPDA-1 RED BLOOD CELLS   04060  PRBC 1
   TRANSFUSION RECORD COMPONENT ID: G22222
  COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
  COMPONENT ID: G22222// <RET>
```

```
  ABO: O  O
  RH: POSITIVE
  UNITS POOLED: <RET>
  TRANSFUSION REACTION: NO
  Select TRANSFUSION COMMENT: <RET>
  Select CROSSMATCH COMMENT: <RET>

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: <RET>

Select Patient Name: <RET>
```

Request/Select/Xmatch Blood Components (RS)

Before requesting/selecting blood components, specimens received (if any) with the request should be logged in through the Specimen Log in option. This is necessary to prevent the error messages which are displayed if attempts are made to request or select components when a specimen is not recorded within the required time frame for that particular component.

For example, if you try to order two units of red blood cells and two units of fresh frozen plasma for a patient and the most recent specimen was from three days ago, the computer will accept the request for the FFP because the entry for "Age of Specimen Required" in the BLOOD PRODUCT file (#66) for FFP is 240 hours (ten days). However, for the RBCs the entry is 48 hours so the computer would display the message "No patient blood sample within required time. Obtain a new sample from the patient for crossmatching."

```
Select Blood bank patient Option: RS  Request/select/xmatch blood components

Select Request/select/xmatch blood components Option: ?

   CR     Blood component requests
   US     Select units for patients
   XM     Enter crossmatch results

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Request/select/xmatch blood components Option: <RET>
```

Blood Component Requests (RS-CR)

Requests for blood/blood components, also known as blood products, are entered in a manner similar to other tests. However, additional information, previously evaluated by the technologist under less than optimal circumstances, is displayed and reviewed by the technologist entering the request regularly. The basis for the data displayed is the BLOOD PRODUCT file (#66). Therefore, it is critical that the entries in this file (including whether the component can be requested, the maximum age allowable for the specimen, laboratory tests to be checked and the instructions for its use) must be current and applicable to the policies and procedures of each facility.

Ordering practices can be evaluated by treating specialty and physician using the Crossmatch/Transfusion by Specialty/Physician (R-UR-AA) [LRBLAA] option in the Reports Menu. This uses the data that is captured for the crossmatch in the specimen multiple, i.e., field 65.02,.03. This is captured during specimen accessing in the Specimen Log-in (P-SL) [LRBLPLOGIN] option and put in File #69, field 7 and in field 68.02,6.5 PRACTITIONER. It is **not** based on the REQUESTING PERSON entered with the component request since at that present time, the individual component request information is **not** stored. This component request information was intended for short term use only.

For all requests, the computer will review the tests designated in the BLOOD PRODUCT file (#66) for that specific component, to determine whether the most recent lab values for the tests specified are < or > the value specified. Different criteria can be entered for PreOp and nonPreOp requests. For Example 1, the two tests selected for CPDA-1 Red Blood Cells are hemoglobin and hematocrit, with TESTS TO CHECK values set at >10.0 g/dl and >30%, respectively. Since the patient's most recent hemoglobin was >10.0 g/dl, (11.5 g/dl), the value was displayed with a default of canceling the request.

While the software retrieves the most recent lab value for the tests indicated in File #66, these may not be relevant to the patient's clinical condition if they are not proximate to the time of the component request. Some evaluation/interpretation must be done by the person reviewing the information as to whether it is relevant. No specific time has been set since this time might vary significantly, depending on the tests to be checked.

For requests that are PreOp, the system will check to see if the Surgery Module is being used. If the facility is using the Surgery Module, the system will display the operations for which the patient has been scheduled and will allow entry of PreOp blood requests for that specific procedure. If the facility is not yet using the Surgery Module, the system will check to see if CPT file (#81) is available. If it is available, the system will display a prompt to enter the surgical procedure, as shown in Example 2. It will then check each component request against the maximum number of units for each component, entered through the Maximum Surgical Blood Order Edit (S-EF-MS) [LRBLSMS] option in the Supervisor's Menu.

NOTE: If the Surgery module is in use, the site must utilize the CPT codes as a required field when scheduling surgical procedures in order for the MSBOS to work as designed in the Blood Bank module.

For any requests, either PreOp or nonPreOp, which the system evaluates as potentially inappropriate and where an entry is required to approve the request, the relevant information is recorded for later reporting by the Inappropriate Transfusion Requests (R-UR-IT) option in the Reports Menu.

If the patient has a previous entry in either the Antibodies Identified field or the Blood Bank Comments field, this will be displayed following the patient demographic information as shown in Example 2.

If the patient has any units in the BLOOD INVENTORY file (#65.5) that are RESTRICTED FOR his use, these will be displayed. This includes both autologous and directed units.

Example 1: Request for two units of Red Blood Cells for a patient recently admitted with a GI bleed

```
Select Blood bank Option: P  Blood bank patient

Select Blood bank patient Option: RS  Request/select/xmatch blood components

Select Request/select/xmatch blood components Option: CR  Blood component
requests

               Selection of blood components for a patient
Display instructions for component selected ? NO// <RET>  (NO)

Select Patient Name: DOE,JOE         03-04-56     402030456P     NSC VETERAN
DOE,JOE ID: 402-03-0456P Physician: SKATING,CAMERON

ABO group:   Rh type:
AGE: 37  DATE OF BIRTH: MAR  4, 1956
PATIENT LOCATION: CARDIOLOGY// <RET>


No Patient ABO &/or Rh !

OK TO CONTINUE ? YES// <RET>  (YES)

DOE,JOE 0456P


Is patient Pre-op ?: ?
You must answer 'YES' or 'NO' to enter component request.
Do you want to enter component request at this time ? YES// <RET>  (YES)

Is patient Pre-op ? N  (NO)

Select BLOOD COMPONENT REQUEST: 04060  CPDA-1 RED BLOOD CELLS      04060
PRBC      1
                 No patient blood sample within required time
         Obtain a new sample from the patient for compatibility testing

          03/05 Last HGB: 11.5 g/dL BLOOD
          03/05 Last HCT: 33 %  BLOOD
      Request still OK ? NO// Y  (YES)
  REQUESTING PERSON: DR SMITH
  REQUEST DATE/TIME: T  (MAR 05, 1993)
  NUMBER OF UNITS: 2
  DATE/TIME UNITS WANTED: N  (MAR 05, 1993@14:49)
  COMPONENT REQUEST REASON: PT. ACTIVELY BLEEDING  (Pt. actively bleeding)
  APPROVED BY: DR. JONES
  TREATING SPECIALTY: <RET>
Select BLOOD COMPONENT REQUEST: <RET>

Select Patient Name: <RET>
```

Example 2: PreOp request for patient with a previous history of irregular antibodies and previous transfusion requests

```
Select Blood bank patient Option: RS  Request/select/xmatch blood components

Select Request/select/xmatch blood components Option: CR  Blood component
requests

               Selection of blood components for a patient
Display instructions for component selected ? NO// <RET>  (NO)

Select Patient Name: W8888 WASHINGTON,GEORGE       03-01-00     592888888
SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                          MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K


OK TO CONTINUE ? YES// <RET>  (YES)

WASHINGTON,GEORGE 8888                      A POS
Unit assigned/xmatched:                           Exp date       Loc
 1)   DU11113    CPDA-1 RED BLOOD CELLS    A POS 03/16/93       Blood Bank
 2)   DU11112    CPDA-1 RED BLOOD CELLS    A POS 03/16/93       Blood Bank
 3)   WA11111    CPDA-1 RED BLOOD CELLS    A POS 04/04/93       Blood Bank

Component(s) requested     Units Request date  Date wanted Requestor       By
CPDA-1 RED BLOOD CELLS       3   03/08         04/17       DR JONES        SH
RED BLOOD CELLS, WASHED      2   03/05 14:04   03/05 15:42 DR JONES        SH

Is patient Pre-op ? Y  (YES)

WASHINGTON,GEORGE not in operation schedule file.

Select OPERATION: 44140          PARTIAL REMOVAL OF COLON
CPT file number: 44140
COLECTOMY, PARTIAL;
WITH ANASTOMOSIS
Component: CPDA-1 RED BLOOD CELLS                    MSBOS:2

Select BLOOD COMPONENT REQUEST: CPDA-1 RED BLOOD CELLS // <RET>  (YES)

  BLOOD COMPONENT REQUEST: CPDA-1 RED BLOOD CELLS // <RET>
  REQUESTING PERSON: DR JONES// <RET>
  REQUEST DATE/TIME: MAR 8,1993// T  (MAR 08, 1993)
  NUMBER OF UNITS: 3// <RET>
```

```
Number exceeds maximum surgical blood order number (2) for this component
for this procedure.  Request still OK ? NO// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)
? NO// Y  (YES)
  DATE/TIME UNITS WANTED: MAR 7,1993// T+1@7  (MAR 09, 1993@07:00)
  COMPONENT REQUEST REASON: ?
     ANSWER MUST BE 2-80 CHARACTERS IN LENGTH

CHOOSE FROM:
AB   ACTIVELY BLEEDING
BLD   Patient Actively Bleeding
CD   COAG DEFICIENCY (DIC, LIVER, etc.) - OR SCHEDULED
FIBRIN   FIBRIN GLUE - TOPICAL USE ONLY
GI   GI BLEED
HEART   EXTENSIVE CARDIAC BYPASS SURGERY
HEME   HEMATOLOGY/ONCOLOGY PT. UNDERGOING CHEMO
IP   INVASIVE PROCEDURE SCHEDULED
OR   INTRAOP REQUEST
PO   POST-OP BLEEDING (within 2 hrs)
STREP   STREPTOKINASE THERAPY
VWD   VON WILLEBRAND'S DISEASE

  COMPONENT REQUEST REASON: SEVERE LIVER DISEASE  (SEVERE LIVER DISEASE)
  APPROVED BY: DR JONES
  TREATING SPECIALTY: <RET>
Select BLOOD COMPONENT REQUEST: <RET>
```

NOTES:

- Although the Surgery Module is not available, CPT file (#81) is available.

- Since the patient had previous component requests entered, the defaults will reflect the previous entries **if** the component selected is one for which information was entered. If defaults are displayed following the prompt, the previous entries will be replaced by the new entries.

- The tests displayed at the beginning of the routine may be edited through the Supervisor's Menu in the option Tests for Display on Patient Look Up (EP-LD). All tests selected must be entered, based on the information in LABORATORY TEST file (#60).

- The tests to be checked, including the specific values for each blood component, may be edited through the Supervisor's Menu, option EDIT BLOOD PRODUCT file (EF-BP) [LRBLSEB].

- If you responded "YES" to "Display instructions for component selected?" the system displays the information entered for that component in the BLOOD PRODUCT file (#66) under "Requisition Instructions."

Select Units For Patient (RS - US)

Selection of specific units can be done either by: 1) selecting units from the refrigerator and then entering the information, or 2) asking the system to list the units available, in order by the expiration dates, for a specified component. In both cases the system checks the ABO/Rh of both the unit and the patient to make sure that the ABO/Rh are compatible, followed by a check to make sure that the unit is not expired. Therefore, if no ABO/Rh has been recorded for the patient and there is no previous record, the system will not allow units to be selected.

Unit information, including both the component and the unit ID, may be entered by either manual data entry or by using a bar code reader.

The checks for ABO/Rh are based on entries in several fields in the BLOOD PRODUCT file (#66). For each component, requirements can be made for whether the ABO must match or must be compatible, whether the Rh must match or must be compatible, and whether the plasma and patient must be compatible. For those products requiring plasma/patient compatibility, rather than a crossmatch, the system bases its evaluation of ABO compatibility on donor plasma and patient red cells rather than vice versa.

In those cases in which the patient has an irregular antibody recorded in the Antibodies Identified field, the system will also check the "Antigens Present" and "Antigens Absent" for the corresponding antigen. The system will not allow selection of a unit which is antigen positive.

The system automatically displays all units in inventory which are "restricted for" that patient. In those cases where an attempt is made to select a unit which was originally donated as either an Autologous or Directed Donor unit, the system checks the current entry in the Restricted For field to make sure that the entry is the same as the patient for whom it is being selected. If not, it will not allow selection of the unit. However, if the restriction is removed, using the Free Unit from Autologous Donor (EI-FR) option in the Supervisor's Menu, the unit may be selected for any patient, providing it meets the other criteria.

Before the system will allow specific units to be assigned, the system checks the Patient Specimen Age Allowed field in the BLOOD PRODUCT file (#66) and then searches to see whether a specimen has been logged in on that patient within the time frame required by the entry in that field. If a determination is made that a new specimen is needed, the system will not allow the user to continue in this option. See note at the end of the examples on how to proceed.

Once units have been selected, they will remain assigned to that patient until, 1) results have been entered and they are released through the Unit release to stock (UR) option in the Inventory Menu, **or** 2) the patient assigned is deleted using the Edit Unit-Patient fields (EI-PI) option in the Supervisor's Menu. If the result entered for the crossmatch is other than C (compatible) or IG (Incompatible Give with BB director approval), the unit will automatically be released back to stock.

If the current volume of the unit is less than the entry for the average volume, based on File #66, this is also displayed when the unit is selected. This will permit the technologist to make a decision as to whether the low volume unit is acceptable for that patient.

NOTES:

- If the computer does not accept the donor ID entered, it is either, 1) not the correct component, 2) assigned to another patient, 3) not the correct ABO/Rh, 4) expired, etc.

- Because the patient had entries in the Antibodies Identified field, entering a "??" in response to the prompt "Select UNIT" will cause the computer to display units of the appropriate ABO/Rh, etc., which are either absent for the corresponding antigen or have no entry for the corresponding antigen in the RBC Antigen Present field. The display will, however, display all entries in the RBC Antigen Present field.

- In order to select units, the system checks to make sure that there is a specimen within the specified time period. Since the system assumes the current day for purposes of checking the availability of a current specimen, entry of data from a previous day must be approached differently. When the system is down, specimens can be logged in for a previous day and components can be requested for a previous day, but units cannot be selected. In order to select units, the supervisor must either,
  a) temporarily change the "Maximum Age of Specimen" in the BLOOD PRODUCT file (#66) for the component(s) involved, **or**
  b) use the Edit Unit-Patient Fields (EI-PI) option in the Supervisor's Menu to enter the crossmatch information/assignment information. The remainder of the data regarding relocation and transfusion, etc., can be entered via the usual options once the unit is assigned.

Example 1: Selection of two units of A+ Red Blood Cells for Joe Doe

```
Select Request/select/xmatch blood components Option: US  Select units for
patients

                    Selection of units for a patient

                         To use BAR CODE READER
            Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                      => <RET>
            Select only unassigned/uncrossmatched units ? YES// <RET>  (YES)

Select Patient Name:    DOE,JOE       03-04-56     402030456P     NSC VETERAN
DOE,JOE ID: 402-03-0456P Physician: SKATING,CAMERON

ABO group: A  Rh type: POS
AGE: 37  DATE OF BIRTH: MAR  4, 1956
Ward on Adm: 1 EAST  Service: PSYCHOLOGY
Adm Date: MAR  3, 1993  10:53  Adm DX: STRESS
Present Ward: 1 EAST                    MD: PENNY,JOE M.
```

```
PATIENT LOCATION: CARDIOLOGY// <RET>

OK TO CONTINUE ? YES// <RET>  (YES)

DOE,JOE 0456P                          A POS

Component                   Units Request date  Date wanted Requestor       By
CPDA-1 RED BLOOD CELLS        2   03/05         03/05 14:49 DR SMITH        SH

Blood component for unit selection: 04060  CPDA-1 RED BLOOD CELLS 04060 PRBC 1
1) 03/05/93 15:23 Acc # BB 0305 5

Select UNIT: ?
ANSWER WITH UNIT ID
DO YOU WANT THE ENTIRE BLOOD INVENTORY LIST ? Y  (YES)
       DU11113       A POS  03/16/93
       Q11112        A POS  03/15/93

Select UNIT: Q11112     Q11112
       Q11112        A POS  03/15/93

Q11112 EXPIRES IN 10 DAYS

UNIT OK for DOE,JOE 402-03-0456P  ? YES// <RET>  (YES)

Select UNIT: <RET>
```

Example 2: Selection of 1 unit of A+ Red Blood Cells for George Washington (history of anti-K and anti-c)

```
Select Request/select/xmatch blood components Option: US  Select units for
patients

                    Selection of units for a patient

                         To use BAR CODE READER
             Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                      => 620  (bar code) A POS

             Select only unassigned/uncrossmatched units ? YES// <RET>  (YES)

Select PATIENT NAME: W8888 WASHINGTON,GEORGE     03-01-00     592888888   NO
SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI c
                  ANTI K
```

```
OK TO CONTINUE ? YES// <RET>  (YES)
WASHINGTON,GEORGE 8888                A POS
      Unit assigned/xmatched:                 Exp date          Location
 1)   DU11112    CPDA-1 RED BLOOD CK  A POS 03/16/93            Blood Bank

Component                   Units Request date  Date wanted Requestor       By
CPDA-1 RED BLOOD CELLS        2   04/17         04/17       WELBY,MARCUS    LH
RED BLOOD CELLS, WASHED       1   03/05 14:04   03/05 20:00 DR JONES        SH

Blood component for unit selection: 04060  CPDA-1 RED BLOOD CELLS      04060
  PRBC      1
1) 03/05/93 14:02 Acc # BB 0305 3

Select UNIT: ??
       DU11113       A POS  03/16/93            Antigen(s) ABSENT:
                                                c
                                                K
       Q11112        A POS  03/15/93

Select UNIT: DU11113
       DU11113       A POS  03/16/93            Antigen(s) ABSENT:
                                                c
                                                K
DU11113 EXPIRES IN 11 DAYS

UNIT OK for WASHINGTON,GEORGE 592-88-8888  ? YES// <RET>  (YES)

Select UNIT: <RET>
```

Enter Crossmatch Results (RS-XM)

Only units selected for the patient through Select Units for Patient (US) option may have crossmatch results entered. Because of the logic involved in the process of selecting and assigning units, including the various validity checks, it is not possible to enter crossmatch results without previously selecting them.

In addition, the system checks the sample previously designated as the one being used during the unit selection, to determine whether the necessary pretransfusion testing has been performed on that sample. If the ABO/Rh has not been entered for that specimen, the system will display the message "No ABO &/or Rh results" and will not allow entry of the Xmatch results. If the results of the antibody screening have not been entered for that specimen, the system will display the message "No antibody screen results". However, the system will allow you to proceed. In addition, the system will display the accession information as follows: "spec date: JAN 19, 1987 10:36 acc#: 1."

Although the final checks for all of the necessary testing on the units are done at the time of issue/relocation, the same checks are done at this time. Unlike the Inventory - Disposition Relocation (I-DR) option, in this option the system does not prevent the user from continuing. In most cases, it merely displays the information for corrective action. If the patient has an antibody and the typing have not been entered, the message "E... RBC antigen. Above antigens not entered in RBC Antigen Absent field" will be displayed. If the unit requires a recheck and it has not been entered, the message "ABO not rechecked" or "Rh not rechecked" will be displayed. If the unit recheck information does not match the log in, the message "ABO/Rh recheck does not match. Resolve discrepancy" will be displayed and the system will beep. In this case, the user will not be allowed to continue.

Example 1: Patient with Compatible Crossmatches

```
Select Request/select/xmatch blood components Option: XM  Enter crossmatch
results

                          Enter crossmatch results

Select Patient Name:    WASHINGTON,GEORGE       03-01-00     592888888     SC
VETERAN
WASHINGTON,GEORGE 8888                A POS
      Unit for XMATCHING                          Exp date        Loc

 1)   DU11113    CPDA-1 RED BLOOD CELLS    A POS 03/16/93        Blood Bank
 2)   WA11111    CPDA-1 RED BLOOD CELLS    A POS 04/04/93        Blood Bank

Select units (1-2) to enter XMATCH results: ?
Enter numbers from 1-2
For 2 or more selections separate each with a ',' (ex. 1,3,4 )
Enter 'ALL' for all units.
Select units (1-2) to enter XMATCH results: 1,2
```

```
 1)   DU11113    CPDA-1 RED BLOOD CELLS    A POS 03/16/93       Blood Bank

XMATCH RESULT: COMPATIBLE// ?
     CHOOSE FROM:
       C        COMPATIBLE
       I        INCOMPATIBLE, UNSAFE TO TRANSFUSE
       CD       COMPATIBLE, DON'T TRANSFUSE
       CF       COMPATIBLE, FURTHER STUDY NEEDED
       IG       INCOMPATIBLE, GIVE WITH BB DIRECTOR APPROVAL
XMATCH RESULT: COMPATIBLE// C  COMPATIBLE

Select CROSSMATCH COMMENT: ?
 ANSWER WITH CROSSMATCH COMMENT
     YOU MAY ENTER A NEW CROSSMATCH COMMENT, IF YOU WISH
     ANSWER MUST BE 2-80 CHARACTERS IN LENGTH

CHOOSE FROM:
BADLABEL   Unit label incorrect. Return to supplier.
COLD   STRONG COLD AGGLUTININ PRESENT
ERRORCK   Error was made in the recheck.
OKLABEL   Error made in the invoice entry. Unit label is correct.
RPT   REPEAT PENDING
XMC   XMATCH COMMENT
Select CROSSMATCH COMMENT: <RET>
DATE/TIME UNIT ASSIGNED: MAR 5,1993@15:43// <RET>

 2)   WA11111    CPDA-1 RED BLOOD CELLS    A POS 04/04/93       Blood Bank

XMATCH RESULT: C  COMPATIBLE
Select CROSSMATCH COMMENT: <RET>
DATE/TIME UNIT ASSIGNED: MAR 5,1993@15:44// <RET>

Select Patient Name: <RET>
Do you want to print caution tag labels ? YES// <RET>  (YES)
                              PRINT XMATCH LABELS
                         (There are 2 labels to print)
   Add labels for emergency transfusion ? NO// <RET>  (NO)
Do you want to delete the list of labels ? NO// <RET>  (NO)
Edit LABELS ? NO// <RET>  (NO)
Save list for repeat printing ? NO// <RET>  (NO)

                                REMEMBER TO
            ALIGN THE PRINT HEAD ON THE FIRST LINE OF THE LABEL

                   ENTER  NUMBER OF LINES  FROM
                   TOP OF ONE LABEL TO ANOTHER: 6// <RET>

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

NOTE: Only units whose crossmatch result is either C for "compatible" or IG for "incompatible, give with BB director approval" will be moved into the "xmatched/assigned" status for subsequent issue. If any other result is entered, the unit will not allow subsequent relocation, etc.

Example 2: Incompatible crossmatches on patient with a warm autoantibody. Since any Antibodies Identified or Blood Bank Comments have already been displayed when the request was logged in and units were selected, this information will not be displayed at this time.

```
Select Blood bank patient Option: RS  Request/select/xmatch blood components

Select Request/select/xmatch blood components Option: XM  Enter crossmatch
results

                              Enter crossmatch results

Select Patient Name:    BOLE,DC       07-11-25     785204773     NON-VETERAN
(OTHER)
BOLE,DC 4773                          A POS
      Unit for XMATCHING                          Exp date       Loc

 1)   Q11112     CPDA-1 RED BLOOD CELLS    A POS 03/15/93       Blood Bank
 2)   WA22222    CPDA-1 RED BLOOD CELLS    A POS 04/04/93       Blood Bank

Select units (1-2) to enter XMATCH results: 1,2

 1)   Q11112     CPDA-1 RED BLOOD CELLS    A POS 03/15/93       Blood Bank

XMATCH RESULT: IG  INCOMPATIBLE, GIVE WITH BB DIRECTOR APPROVAL

ENTER YOUR INITIALS TO ALLOW ASSIGNING UNIT: SH
Select CROSSMATCH COMMENT: WARM AUTOANTIBODY IN SERUM AND ELUATE  (Warm
autoantibody in serum and eluate)
Select CROSSMATCH COMMENT: <RET>
DATE/TIME UNIT ASSIGNED: MAR 5,1993@15:55// <RET>

 2)   WA22222    CPDA-1 RED BLOOD CELLS    A POS 04/04/93       Blood Bank
XMATCH RESULT: IG  INCOMPATIBLE, GIVE WITH BB DIRECTOR APPROVAL

ENTER YOUR INITIALS TO ALLOW ASSIGNING UNIT: SH
Select CROSSMATCH COMMENT: WARM AUTOANTIBODY IN SERUM AND ELUATE  (Warm
autoantibody in serum and eluate)
Select CROSSMATCH COMMENT: <RET>

Select Patient Name: <RET>
```

NOTES:

- The entries in Crossmatch Comment will be retained with the crossmatch result for future reference/explanation and will appear on whatever reports contain this field.

- The system will only accept the initials of the person signed onto the system in response to the prompt "Enter your initials to allow assigning unit." In addition, that person must have security access which includes the LRBLSUPER key - usually the Blood Bank Supervisor.

Special Instructions (SI)

Any comments regarding transfusion, etc. which should be displayed in the Specimen Log in (SL) option and the Request/Select/Xmatch (RS) options can be entered using either this option or the Previous Record (PR) option. However, this option contains **only** the Blood Bank Comments field. Thus, if new entries or changes need to be made to the Antibodies Identified field, option Previous Record (PR) should be used instead.

Example: New Patient with Positive Direct Antiglobulin Test

```
Select Blood bank patient Option: SI  Special instructions

          Blood bank patient special instructions

Select Patient Name:    BOLE,DC       07-11-25     785204773   NON-VETERAN
(OTHER)
BOLE,DC ID: 785-20-4773 Physician: HARTFIEL,JACQUELINE

ABO group: A  Rh type: POS
AGE: 67  DATE OF BIRTH: JUL 11, 1925
Ward on Adm: 1A  Service: ALLERGY
Adm Date: SEP  7, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1A                          MD: HARTFIEL,JACQUELINE
PATIENT LOCATION: 1A// <RET>


BLOOD BANK COMMENTS:
  1>Warm autoantibodies in eluate and in serum
  2>Positive Direct Coombs (IgG 2+.C3d neg) 3/5/93 sh
  3><RET>
EDIT Option: <RET>

          Blood bank patient special instructions

Select Patient Name: <RET>
```

Specimen Log in (SL)

Accessioning of specimens for Blood Bank is accomplished by the same basic option (Multipurposing Accessioning) as in the other areas of the laboratory. However, when it is being done as an option in the Blood Bank Module, additional checks are included and additional information is displayed, including:

- check for ABO/Rh from previous records,
- check for any entries in the Antibodies Identified or Special Instructions fields,
- display of the patient's most recent hemoglobin, hematocrit, etc. In addition, specific questions are included relating to the "TRANSFUSION REQUEST" if it is one of the tests selected.

For a discussion of the specific transfusion request audit capabilities, consult the Blood Component Requests (P-RS-CR) option.

For "Type and Screen" or "Type and Hold" requests, enter them as such. Do not enter TRANSFUSION REQUESTS until units are actually requested. This will prevent confusion when the system is asked to display current requests. (See Inquiries option, PR, for further details.) For requests for Fresh Frozen Plasma and Platelets, etc., go ahead and enter TRANSFUSION REQUESTS.

If the test selected is TRANSFUSION REQUEST, the system will check for any other BB accessions within the previous 48 hours, in an effort to decrease duplicate testing.

If the patient has any units in the BLOOD INVENTORY file (#65) which are RESTRICTED FOR his use, these will be displayed. This includes both autologous and directed units.

NOTES:
Ordering practices can be evaluated by treating specialty and physician using the [LTRBLAA] Transfusions by Treating Specialty and Physician option in the Reports Menu. This uses the data that is captured for the crossmatch in the specimen multiple (i.e., field 65.02,.03). This is captured during specimen accessing and put in LAB ORDER ENTRY file (#69), field 7 and in field 68.02,6.5 PRACTITIONER. The default PROVIDER displayed during the log in is based on the entry in LAB DATA file (#63), field .101 Report Routing (PROVIDER). Care in ensuring the accuracy of the information is important. This occurs during ward order entry as well.

Example:

```
Select Blood bank patient Option: SL  Specimen log in
FOR TRANSFUSION REQUESTS: Display instructions for components ? NO// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)
? NO// Y  (YES)

WANT TO ENTER COLLECTION TIMES? Y//?
Answer 'Y' or 'N': N

Select Patient Name: W8888 WASHINGTON,GEORGE    03-01-00    592888888  SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
Antibody present: ANTI K

PATIENT LOCATION: 1B// <RET>
PROVIDER: WELBY,HARRY// <RET>
LAB Order number: 1306
Choose one (or more, separated by commas) ('*' AFTER NUMBER TO CHANGE URGENCY)
1   ABO/RH TYPING                       4   TYPE & HOLD
2   TRANSFUSION REQUEST                 5   TYPE & SCREEN
3   COOMBS, DIRECT/INDIRECT             6   PATIENT PHENOTYPING
TEST number(s): 2
Other tests? N// <RET>

You have just selected the following tests for WASHINGTON,GEORGE  592-88-8888
     entry no. Test                          Sample
     1         TRANSFUSION REQUEST           BLOOD

All satisfactory? YES// ?

Answer 'Yes' or 'No' ('^' to cancel)

All satisfactory? YES// <RET>  (YES)

LAB Order number: 1306


PRINT LABELS ON: LABLABEL// ?
Specify a device with optional parameters in the format
          Device Name;Right Margin;Page Length
                          or
     Device Name;Subtype;Right Margin;Page Length

Enter ?? for more information
PRINT LABELS ON: LABLABEL// FAST  R7 GP

DO YOU WISH TO TEST THE LABEL PRINTER? NO// ?
     Enter 'Y' if you want to test the printer, 'N' if you do not.

DO YOU WISH TO TEST THE LABEL PRINTER? NO// <RET>  (NO)
```

```
For Test: TRANSFUSION REQUEST   BLOOD

WASHINGTON,GEORGE 8888                    A POS
No units currently assigned/xmatched

Component(s) requested     Units Request date  Date wanted Requestor       By
CPDA-1 RED BLOOD CELLS       2   04/17         04/17       WELBY,MARCUS    LH

Is patient Pre-op ? ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? N  (NO)

Select BLOOD COMPONENT REQUEST: CPDA-1 RED BLOOD CELLS
         // <RET>  04800
     1   04800  RED BLOOD CELLS, WASHED      04800      WC      1
     2   04800  REJUVENATED WASHED RED CELLS      04800      RJWC      0
CHOOSE 1-2: 1  RED BLOOD CELLS, WASHED
    1-SF518 per unit requested.  Collect 15 ml blood in red stoppered
    tube.  New specimen required after 48 hours.  Specimen label must
    contain patient's full name & SSN.

    Use for patients suffering repeated febrile nonhemolytic transfusion
    reactions  OR  patients suffering acute renal failure undergoing
    surgery.

          No HGB results
          No HCT results
      Request still OK ? NO// Y  (YES)
  REQUESTING PERSON: DR. SMITH
  REQUEST DATE/TIME: N  (MAR 05, 1993@14:04)
  NUMBER OF UNITS: 2
  DATE/TIME UNITS WANTED: T@2000  (MAR 05, 1993@20:00)
  COMPONENT REQUEST REASON: STREP  (STREPTOKINASE THERAPY)
  APPROVED BY: DR LONG
  TREATING SPECIALTY: <RET>
Select BLOOD COMPONENT REQUEST: <RET>

ACCESSION:  BB 0305 3
TRANSFUSION REQUEST           BLOOD

Select Patient Name: <RET>
```

NOTES:

- The prompt "Provider" after the "Patient Location" prompt will not appear if you do not so designate in the LABORATORY SITE file (#69.9).

- The remainder of the prompts **after** the "DO YOU WISH TO TEST THE LABEL PRINTER? NO//" prompt are displayed **only** if TRANSFUSION REQUEST was one of the tests selected.

- The tests displayed after the component is selected may be changed using the Tests for Display on Patient Look-up (EP-LD) option in the Supervisor's Menu. All tests selected must be entered based on information in LABORATORY TEST file #60.

- The tests to be checked, including the specific values for each blood component, may be edited through the Supervisor's Menu option Edit Blood Product file (S-EF-BP).

- If you wish to continue entering the request, including the justification for the approval which the audit of the values deemed inappropriate, you will answer "YES." If you do not want to continue, <RET> to discontinue the component request entry. If additional information is required which is not immediately available, enter <RET> to stop. If further investigation reveals that the request is approved, this information can be entered through the Blood Component Requests (P-RS-CR) option.

- The Component Request Reason can be either a free text comment of 2-80 characters or a predetermined comment specified by using BB AUDIT as the screen through the S-EF-BD option in the Supervisor's Menu.

- The number of units of each blood component for each surgical procedure may be edited through the Supervisor's Menu option Maximum Surgical Blood Order Edit (S-EF-MS).

Add Tests To A Given Accession (TA)

Tests may be added to a specimen which has already been accessioned, as in the case of requests, originally submitted as "Type and Screen" or "Type and Hold" for which units are now to be crossmatched. In this case, enter TRANSFUSION REQUEST as the test to be added (consult option PA in the Inquiries Menu to obtain the accession number, if necessary).

Example:

```
Select Blood bank patient Option: TA  Add tests to a given accession.
Select Accession: BB 0305 3
BLOOD BANK  (MAR 05, 1993)  3
WASHINGTON,GEORGE             592-88-8888
TESTS ON ACCESSION:
     ABO GROUP/RH TYPE
Add LABORATORY TEST:  TR  TRANSFUSION REQUEST
  ...OK? YES// <RET>  (YES)
Select URGENCY: ROUTINE// <RET>
  ...OK? YES// <RET>  (YES)
     TRANSFUSION REQUEST ADDED
Add LABORATORY TEST: <RET>
Select Accession: <RET>
```

Delete Tests From an Accession (TD)

Tests may be deleted for a given accession number previously assigned.

Example:

```
Select Blood bank patient Option: TD  Delete test from an accession
Select Accession: BB 0305 4
BLOOD BANK  (MAR 05, 1993)  4
BOLE,DC                        785-20-4773
TESTS ON ACCESSION:
     TRANSFUSION REQUEST
Delete LABORATORY TEST: TRANSFUSION REQUEST
Reason(s) for deleting, please comment: WRONG TEST/CHANGE TO TYPE & SCREEN
     TRANSFUSION REQUEST DELETED
No tests left, remove accession? YES// ?
Answer 'Y' or 'N'
No tests left, remove accession? YES// N  (NO)

Select Blood bank patient Option: <RET>
```

Test Worklist (TL)

Worklists can be generated either by accession area or by individual tests within the accession area.

Once the testing has been completed, the test result data will be included on the worklist. For the ABO/Rh and the Coombs (Direct/Indirect), this will include the test result, the date/time completed and the tech's initials. However, because there is no actual "result" for the Transfusion Request, only the date/time completed and the tech's initials will appear.

> **NOTE:** The Transfusion Request is considered completed either when a unit of blood/blood component is selected or when ABO/Rh or Coombs test results have been entered.

Example:

```
Select Blood bank patient Option: TL  Test worklist

                    Single test worklist
Select LABORATORY TEST NAME: COOMBS, DIRECT/INDIRECT
Select ACCESSION AREA INSTITUTION: SALT LAKE CITY// REGION 7          7000
ENTER TEST DATE: T  (MAR 05, 1993)

Start from accn #: 1

Go    to    accn #:   LAST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!



MAR  5, 1993  16:12   7000                                          Pg: 1
BLOOD BANK Worklist                    (* = STAT)
COUNT ACC#       RESULT            Completed Tech   ID   PATIENT      LOCATION
-------------------------------------------------------------------------------

               COOMBS, DIRECT/INDIRECT (COOMBS):
MAR  5, 1993
  1)     1                                        2369 TALLER,WILLIAM MICU
               ---------------------------------------------------------------
  2)     7    Direct:N Indirect:N  03/05 16:11 1207 1234 HENDRY,JOHN    1B
               ---------------------------------------------------------------
  3)     8    Direct: Indirect:    03/05 16:11 1207 8444 FARMER,OMAHA   1B
               ---------------------------------------------------------------
  4)     9    Direct:N Indirect:N  03/05 16:12 1207 4531 GARRETT,PORTLAN1B
               ---------------------------------------------------------------
  5)    10                                        1171 DEARMOND,MIAMI 1B
               ---------------------------------------------------------------
```

Accession Area Worklist (WL)

Worklists can be generated either by accession area or by individual tests within the accession area.

Once the testing has been completed, the test result data will be included on the worklist. For the ABO/Rh and the Coombs (Direct/Indirect), this will include the test result, the date/time completed and the tech's initials. However, because there is no actual "result" for the Transfusion Request, only the date/time completed and the tech's initials will appear. The Transfusion Request is considered completed when a unit of blood/blood component is selected.

Example:

```
Select Blood bank patient Option: WL  Accession area worklist
WORKLIST GENERATOR for: ?
 ANSWER WITH ACCESSION AREA
 DO YOU WANT THE ENTIRE 43-ENTRY ACCESSION LIST? N  (NO)
WORKLIST GENERATOR for: BB  BLOOD BANK
ENTER WORKLIST DATE: T  (MAR 05, 1993)

Start from accn #: 1

Go    to    accn #:    LAST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR  5, 1993  16:13   VAMC                                                Pg: 1
BLOOD BANK Worklist                    (* = STAT)
COUNT ACC#       RESULT            Completed  Tech  ID    PATIENT
-------------------------------------------------------------------------------

             ABO/RH TYPING (ABO/RH):
MAR  5, 1993
  1)     3    A POS                  03/05      SH   8888   WASHINGTON,GEORGE
               ---------------------------------------------------------------
  2)     5    A POS                  03/05      SH   0456P  DOE,JOE
               ---------------------------------------------------------------
             COOMBS, DIRECT/INDIRECT (COOMBS):
MAR  5, 1993
  1)     1                                           2369  TALLER,WILLIAM
               ---------------------------------------------------------------
  2)     7    Direct:N Indirect:N    03/05      SH   1234  HENDRY,JOHN
               ---------------------------------------------------------------
  3)     8    Direct: Indirect:      03/05      SH   8444  FARMER,OMAHA
               ---------------------------------------------------------------
  4)     9    Direct:N Indirect:N    03/05      SH   4531  GARRETT,PORTLAN
               ---------------------------------------------------------------
  5)    10                                           1171  DEARMOND,MIAMI
               ---------------------------------------------------------------
               TRANSFUSION REQUEST (XMATCH):
MAR  5, 1993
  1)     2    Direct: Indirect:N     03/05      FS   2369  TALLER,WILLIAM
               ---------------------------------------------------------------
  2)     3                           03/05      SH   8888  WASHINGTON,GEORGE
               ---------------------------------------------------------------
  3)     6    Direct: Indirect:      03/05      SH   4773  BOLE,DC
               ---------------------------------------------------------------
               TYPE & HOLD (T & H):
MAR  5, 1993
  1)     4    A POS                  03/05      SH   4773  BOLE,DC
               ---------------------------------------------------------------
```

Inquiries Menu Options

```
Q       Inquiries [LRBLQ]
      DI      Single donor demographic information [LRBLQSDD]
      OR      Order/test status [LROS]
      PA      Show list of accessions for a patient [LRUPT]
      PH      Patient Medication List [LRBLPH]
      PR      Patient blood bank record [LRBLQDR]
      SD      Single donor information [LRBLQSD]
      ST      Single unit status [LRBLQST]
      SU      Single unit information- display [LRBLIPSD]
      UA      Units assigned/components requested [LRBLQPR]
      VD      Validation documentation [LRBLVALI]
      VT      Test description information [LREV]
```

Inquiries Menu Data Flow Chart

Action	Option
1. Review of a patient's previous transfusion history	Patient Blood Bank Record (PR)
2. Determine when/whether a specimen has been received in the Blood Bank which can be used for a current request.	Show List of Accessions for a Patient (PA)
3. Print a listing of the patient's current medications if patient has antibody problem	Patient Medication List (PH)
4. Review status of unit availability for a specific patient	Single Unit Status (ST)
5. Review of previous donor history	Single Donor Information (SD)
6. Review of previous donor demographics	Single Donor Demographic Information (DI)
7. Review of all/any transactions recorded for a given unit in inventory	Single Unit Information Display (SU)
8. Review of test description information available to the ward	Test Description Information (VT)
9. Review the status of a particular order for a specific patient	Order/Test Status (OR)

Single Donor Demographic Information (DI)

Displays donor demographic information entered. This option does not include any donation data and therefore requires less security access.

Example:

```
Select Inquiries Option: DI  Single donor demographic information
Select DONOR: DUSTY,RUSTY            M      04-27-25      SALT LAKE CITY
IDENTIFICATION NUMBER: 12               NAME: DUSTY,RUSTY
  SEX: MALE                             DOB: APR 27, 1925
  ABO GROUP: A                          RH TYPE: POSITIVE
  CUMULATIVE DONATIONS: 3               TOTAL AWARDS: 1
  DEMOG ENT/EDIT BY: GINS,RON           DATE REGISTERED/EDITED: OCT 27, 1992
  SSN: 089-48-5948                      CMV ANTIBODY: POS


  ADDRESS LINE 1: 1092 BROWN            CITY: ARLINGTON
  STATE: UTAH


GROUP AFFILIATION: VAH
```

Order/Test Status (OR)

In order to determine whether a patient has had a test ordered and what the current status of the testing is, the system displays all requests for the time period specified.

Example:

```
Select Inquiries Option:  ORDER/test status
Select Patient Name: BLOOD,JOHN T       10-25-14     398029523    NSC VETERAN

DATE to begin review: TODAY//  (DEC 14, 1992)

No orders for 12/14/92
No orders for 12/13/92
No orders for 12/12/92
No orders for 12/11/92
No orders for 12/10/92
Orders for date: 12/09/92 OK? YES// <RET>  (YES)


  Test                Urgency   Status                          Accession
  Lab Order # 1221                              Provider: GINS,RONALD
  BLOOD
  CBC                 ROUTINE  Test Complete       12/09/92 12:32  HE 1209 2
  Lab Order # 1221                              Provider: GINS,RONALD
  BLOOD  PLASMA
  FIBRINOGEN          ROUTINE  Test Complete       12/09/92 11:46  COAG 1209 2
  COAGULATION (PT & PTT)
                      ROUTINE  Test Complete       12/09/92 11:46  COAG 1209 2
  Lab Order # 1222                              Provider: GINS,RONALD
  BLOOD
  TRANSFUSION REQUEST
                      ROUTINE  Test Complete       12/09/92        BB 1209 1
  WKLD CROSSMATCH              Test Complete       12/09/92 13:09  BB 1209 1
No orders for 12/08/92
No orders for 12/07/92
No orders for 12/06/92
No orders for 12/05/92
No orders for 12/04/92
No orders for 12/03/92
No orders for 12/02/92

NO REMAINING ACTIVE ORDERS
```

NOTES:

- **NOTICE** that this option is **not** restricted to Blood Bank tests only!
- If using this option to investigate potentially inappropriate test requests included on the monthly report, check the time period for which orders are left in the system.

Show List Of Accessions For A Patient (PA)

In order to determine whether a new specimen is needed to crossmatch additional units for a patient, the system displays the most recent specimens accessioned for a patient. This display includes information for determining whether requests originally submitted as "Type and Screen" or "Type and Hold" can be converted to "TRANSFUSION REQUESTS."

Example:

```
Select Inquiries Option: PA Show list of accessions for a patient

Select ACCESSION AREA: BLOOD BANK// <RET>

Select Patient Name: W8888  WASHINGTON,GEORGE   03-01-00   592888888   SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 92  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                          MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI K


Is this the patient ? YES// <RET>. (YES)


BLOOD BANK          WASHINGTON,GEORGE ID: 592-88-8888  TESTS ORDERED
Spec Date/time  Acc #           Site/specimen              Tests


04/17/91 10:36  BB 0417 3       BLOOD                    1)COOMBS, DIRECT/IND

04/16/91 09:33  BB 0417 1       BLOOD                    1)TRANSFUSION REQUES
                                                         3)PATIENT PHENOTYPIN

Select Patient Name: <RET>
```

NOTE: If a specimen is accessioned on a date other than the date collected, as shown by BB 0417 1, the accession number will be assigned accordingly. However, the date/time entered for the "collection" will also be reflected. If data is to be entered/corrected for BB 0417 1 on 4-17, you would be entering data for the "same date" as far as the system is concerned, even though the specimen was drawn on the previous day.

Patient Medication List (PH)

Provides a list of all medications received for a selected patient. Information is pulled from inpatient and outpatient pharmacy.

Example:

```
Select Inquiries Option: PH  Patient Medication List
Select Patient Name: W8888  WASHINGTON,GEORGE       03-01-00     592888888
SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

AGE: 92  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>

Select Print Device:  [Enter Print Device Here]


MAR  2, 1993  16:18   VAMC                                          Pg: 1
Medication List for WASHINGTON,GEORGE 592-88-8888
---------------------------------------------------------------------------
OUTPATIENT PHARMACY ITEM: GELUSIL TABLETS



Select Inquiries Option: <RET>
```

Patient Blood Bank Record (PR)

Information displayed in this option is based on the data stored in LAB DATA file (#63) as part of the patient's transfusion record. It includes all transfusion reactions, whether they were associated with specific units or not, as well as the individual units, depending on the response to the prompts, the data can be displayed in a variety of formats.

Example:

```
Select Inquiries Option:  PR  Patient blood bank record

Select Patient Name: DUSTY,RUSTY          04-27-25     089485948    SC VETERAN

DUSTY,RUSTY ID: 089-48-5948 Physician: WELBY,MARCUS

ABO group: A  Rh type: POS
AGE: 67  DATE OF BIRTH: APR 27, 1925
PATIENT LOCATION: SURGERY// <RET>
    Blood bank patient special instructions

Antibody present: ANTI K

TRANSFUSION REACTIONS WITH UNIT IDENTIFIED          UNIT ID        COMPONENT
MAY 28, 1991  13:00  DELAYED HEMOLYTIC              F44444            PRBC
NOV 20, 1992  13:00  FEBRILE NON-HEMOLYTIC          RA99999           ALP
OCT 20, 1992  16:00  FEBRILE NON-HEMOLYTIC          RA11111           PRBC
Transfuse only Spun/Filtered RBCs effective 10-21-92.
MAY 28, 1991  13:00  FEBRILE NON-HEMOLYTIC          F33333            PRBC
MAY 17, 1991  14:00  FEBRILE NON-HEMOLYTIC          C11115            PRBC
This is a febrile non-hemolytic reaction
Another comment
JUN 29, 1992  13:00  ALLERGIC NONHEMOLYTIC          B11111            PRBC

Transfusion comment

TRANSFUSION REACTIONS WITHOUT UNIT IDENTIFIED:
DEC 30, 1992  07:38  FEBRILE NON-HEMOLYTIC
Is this the patient ? YES// <RET>  (YES)

Another patient: ? NO// <RET>  (NO)
List all blood components ? YES// <RET>  (YES)
List only total number of units for each component ? NO// <RET>  (NO)
Start with Date TODAY// <RET> MAR  2, 1993
Go    to   Date TODAY// T-200  (AUG 14, 1992)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR  2, 1993  16:24   VAMC                                          Pg: 1
TRANSFUSION SERVICE/BLOOD BANK REPORT from AUG 14, 1992 to MAR  2, 1993
PATIENT: DUSTY,RUSTY 089-48-5948  A POS
Unit Transfused   Component         (# of Units/ml )       Date/Time Completed
-------------------------------------------------------------------------------

A99999            CPDA-1 RED BLOOD CELLS     (/250)   O POS DEC  1, 1992 13:00
RA11111           CPDA-1 RED BLOOD CELLS     (/250)   A POS OCT 20, 1992 16:00
      Transfuse only Spun/Filtered RBCs effective 10-21-92.
Total RBC: 2

RA99999           AUTOLOGOUS LIQUID PLASMA   (1/225)  A POS NOV 20, 1992 13:00
Total FFP: 1

    Blood bank patient special instructions


RBC Antibody present:ANTI K
```

NOTES:

- The reason for the duplication of the SPECIAL INSTRUCTIONS and the ANTIBODIES IDENTIFIED is based on the display of these items whenever the patient name is selected.

- The volume included as part of the transfusion record is based on the entry in the volume (ml) field in the BLOOD PRODUCT file (#66) unless the product is modified once it is in inventory.

Single Donor Information (SD)

All information entered for a given blood donor is collected and stored with that donor name. It remains in the system until such time as it is deleted. Donors can only be deleted through the Supervisor's option, Donor Collection/Deferral Edit.

The donor can be selected by name, SSN or unit number. If the user indicates that only a single donation date should be included, a list of choices for that donor will be provided.

Example:

```
Select Inquiries Option:   SD Single donor information
Select DONOR:    HOFFMAN,LARK        F      05-17-51      OAK PARK

Select a single donation date ? NO// <RET>  (NO)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
  MAR  5, 1993  11:38   VAMC                                          Pg: 1
 BLOOD DONOR: HOFFMAN,LARK                    DOB: MAY 17, 1951
         SEX: FEMALE                        ABO/RH:  A POS

SSN: 123457834

Antigen(s)  present                         | Antigen(s) absent
A-1                                         |
K, Jk(a), HLA-A1 ANTIGEN                    |Jk(b), HLA-A10 ANTIGEN
HLA-B8 ANTIGEN, HLA-B27 ANTIGEN             |
   Jk(a)
     Jk(a) COMMENT
   Jk(b)
     Jk(b) ABSENT COMMENT
CMV ANTIBODY: POS

SCHEDULING/RECALL: MAR, JUN, SEP, XMAS, EMERGENCY
GROUP AFFILIATION: VA HOSPITAL BLOOD CENTER

   APHERESIS: YES           CUMULATIVE DONATIONS: 8
TOTAL AWARDS:                     GIVE NEW AWARD: YES
  DEMOG EDIT: HEMBRY,SHARON                 DATE REG/EDITED: JAN 25, 1993

   ADDRESS: 301 S HEMPHILL
            OAK PARK, ILLINOIS 60301
HOME PHONE: 388-4240                   WORK PHONE: X1585 LAB

DONATION OR DEFERRAL DATE: JAN 26, 1993 DONATION CODE: WHOLE BLOOD
COLLECTION SITE: VAH                    DONATION GROUP:
ARRIVAL/APPT TIME: JAN 26, 1993  13:57  ENTER/EDIT:
DONATION TYPE: DIRECTED
RESTRICTED FOR: SNERD,SALLY 707000000P  DONOR REACTION:

DONATION OR DEFERRAL DATE: JAN 25, 1993 DONATION CODE: WHOLE BLOOD
COLLECTION SITE: VAH                    DONATION GROUP: VAH
ARRIVAL/APPT TIME: JAN 25, 1993  12:40  ENTER/EDIT:
DONATION TYPE: HOMOLOGOUS               DONOR REACTION:
```

Single Unit Status (ST)

Unlike the Single Unit Information-Display (Q-SU) option, this option provides only the current information on the status of a unit in inventory.

It will indicate the following information, as appropriate:

Unit ID
Blood component
Expiration date
ABO/Rh
Patient assigned (if currently crossmatched/assigned)
Date assigned (if currently crossmatched/assigned)
Current location
Date last relocated (if unit has ever been relocated)

This should be particularly useful when trying to ascertain why a certain unit cannot be selected for another patient, or in trying to investigate problems.

Example:

```
Select Inquiries Option:  ST Single unit status

                    Current status of a unit in inventory file


Select BLOOD INVENTORY UNIT ID: C11112                A POS  CPDA-1 RED BLOOD
CELLS       CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS

Is this the unit ? YES// <RET>  (YES)

Unit #:C11112     Component:CPDA-1 RED BLOOD CELLS

Expiration date:MAR 17, 1993            ABO:A     Rh:POS

Disposition date:MAR  2, 1993  15:32    Disposition:TRANSFUSE


Patient:WASHINGTON,GEORGE 592-88-8888
        Date assigned:FEB 27, 1991  09:51

Current  location:SICU
Date last located:Feb 27, 1993  12:50


Select BLOOD INVENTORY UNIT ID: <RET>
```

Single Unit Information Display (SU)

All information entered for a given blood inventory unit ID is collected and stored with that unit ID. It remains in the system until such time as it is printed on hard copy and deleted.

Example 1: CPDA-1 unit whose final disposition is "modified"

```
Select Inquiries Option:  SU Single unit information- display

Select BLOOD INVENTORY UNIT ID: 12345
     1   12345                              A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
     2   12345                              A POS  RED BLOOD CELLS, FROZEN
RED BLOOD CELLS, FROZEN     POS   A POS RED BLOOD CELLS, FROZEN
CHOOSE 1-2: 1


UNIT ID: 12345                            SOURCE: LIFESOURCE
  INVOICE#: 123                           COMPONENT: CPDA-1 RED BLOOD CELLS
  DATE/TIME RECEIVED: JUL 10, 1992@15:18
  EXPIRATION DATE/TIME: AUG 14, 1992      ABO GROUP: A
  RH TYPE: POSITIVE                       LOG IN PERSON: GINS,RONALD
  COST: 57.00                             VOLUME (ml): 250
  CMV ANTIBODY: POS
PATIENT XMATCHED/ASSIGNED: BELL 4934
BLOOD SAMPLE DATE/TIME: JUL 10, 1992@19:16
  DISPOSITION: MODIFY                     DISPOSITION DATE: JUL 27, 1992@17:40
  DISPOSITION ENTERING PERSON: GINS,RONALD
NUMBER: 1
MODIFIED TO/FROM: RED BLOOD CELLS, FROZEN
  UNIT ID: 12345                          FROM/TO: TO


Select BLOOD INVENTORY UNIT ID: <RET>
```

NOTE: The system will display all of the information entered/collected for the specified unit, in a standard format, with one field followed by the next in a non-columnar fashion.

Example 2: Unit 12345 (FROZEN Cells) which was created from the modification of the CPDA-1 Red Blood Cell Unit - WITH workload turned on

```
Select Inquiries Option:   SU Single unit information- display

Select BLOOD INVENTORY UNIT ID: 12345
     1   12345                              A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
     2   12345                              A POS  RED BLOOD CELLS, FROZEN
RED BLOOD CELLS, FROZEN     POS   A POS RED BLOOD CELLS, FROZEN
CHOOSE 1-2: 2


UNIT ID: 12345                            SOURCE: SELF
  INVOICE#: 00                            COMPONENT: RED BLOOD CELLS, FROZEN
  ABO GROUP: A                            RH TYPE: POSITIVE
  LOG IN PERSON: GINS,RONALD              VOLUME (ml): 250
  RETURN CREDIT: -57.00                   DISPOSITION: SEND ELSEWHERE
  DISPOSITION DATE: JAN 21, 1993@15:26
  DISPOSITION ENTERING PERSON: HEMBRY,SHARON
TEST/PROCEDURE: UNIT LOG IN/SEND-OUT
COMPLETE DATE/TIME: JAN 21, 1993@15:26  TECH: HEMBRY,SHARON
  INSTITUTION: REGION 7
WKLD CODE: Blood, Component/Deriv. External Relocate
  WKLD CODE COUNT: 1
```

Example 3: Unit which was associated with a febrile nonhemolytic transfusion reaction

NOTE: Disposition portion only!

```
Select Inquiries Option: SU  Single unit information- display

Select BLOOD INVENTORY UNIT ID: A11111
DATE/TIME UNIT RELOCATION: JUN 29, 1992@12:52
  INSPECTION: SATISFACTORY                TECH INSPECTING: GINS,RONALD
  LOCATION: 111B                          ISSUED TO/REC'D FROM: SAM
  FOR PATIENT: ANDY,RUSTY               VA PATIENT NUMBER: 38
  DISPOSITION: TRANSFUSE                  DISPOSITION DATE: JUL  1, 1992@18:00
  DISPOSITION ENTERING PERSON: HOFF,LYNN
  PATIENT TRANSFUSED: ANDY,RUSTY 089485948
  PHYSICIAN: WELBY,MARCUS                 TREATING SPECIALTY: MEDICINE
  TRANSFUSION RECORD NUMBER: 7079297.82 TRANSFUSION REACTION: YES
  PROVIDER NUMBER: 1                      TREATING SPECIALTY NUMBER: 5
  TRANSFUSION REACTION TYPE: FEBRILE NON-HEMOLYTIC
  ABO INTERPRETATION: A
  TECH ENTERING-ABO INTERP: HOFF,LYNN
  TECH ENTERING-RH INTERP: HOFF,LYNN
```

Units Assigned/Components Requested (UA)

In order to effectively answer questions regarding current and recent orders for blood/blood components, the system displays all units previously assigned/xmatched for the patient (in order based on date/time assigned, with most recent first) followed by the most recent request for each blood component requested.

Example:

```
Select Inquiries Option: UA  Units assigned/components requested

Select Patient Name: BLOOD,JOHN T       10-25-14     398029523   NSC VETERAN

BLOOD,JOHN T ID: 398-02-9523 Physician: GINS,RON

ABO group: A  Rh type: POS
AGE: 78  DATE OF BIRTH: OCT 25, 1914
PATIENT LOCATION: EMERGENCY ROOM// <RET>


Is this the patient ? YES// <RET>  (YES)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!



BLOOD,JOHN T 9523                A POS
      Unit assigned/xmatched:                    Exp date          Loc
 1)   DAL11117   FRESH FROZEN PLASMA  A POS  DEC  9, 1992       Blood Bank
 2)   DAL11118   FRESH FROZEN PLASMA  A POS  DEC  9, 1992       Blood Bank
 3)   DAL11111   RED BLOOD CELLS, WA  A POS  DEC 10, 1992  14:12Blood Bank

Component Requests          Units Request date  Date wanted Requestor       By
CPDA-1 RED BLOOD CELLS        2   12/09 1224    12/09 1224  SOAK            DRH
POOLED PLATELETS                  /             /                           DRH
```

NOTES:

- In order to ascertain whether a new specimen is needed and if additional units are needed, use the Show List of Accessions for a Patient (PA) option in the Inquiries Menu.

- If the system displays a recent request, but no units assigned/xmatched, it means that the pre-transfusion testing has not been completed, i.e., units have not been selected, **or** crossmatch results have not been entered (if applicable to that component).

- If neither units nor requests are displayed, check the patient accessions to determine whether a specimen was logged in and exactly what was requested.

Validation Documentation (VD)

This option allows the user to view the entries for the validation documentation by option name.

Example 1: Validation Documentation

```
Select Inquiries Option: VD  Validation documentation

Select BLOOD BANK VALIDATION NAME: LRBLJ
     1   LRBLJB          Autologous disposition report
     2   LRBLJM          Edit pooled blood product
     3   LRBLJUT          Transfused RBC for treating specialty CHOOSE 1-3: 1
NAME: LRBLJB                          MENU NAME: Autologous disposition report
MENU ABBREVIATION: AR                 FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION    LIMITED ACCESS: NO

Select BLOOD BANK VALIDATION NAME:  <RET>
```

Example 2: Print Blood Bank Validation

```
Select Reports Option: VD  Print blood bank validation
START WITH NAME: FIRST// <RET>
Select Print Device:  [Enter Print Device Here]

BLOOD BANK VALIDATION LIST                    AUG 19,1994  13:39    PAGE 1
-------------------------------------------------------------------------
NAME: LRADDTOACC  MENU NAME: Add tests to a given accession
MENU ABBREVIATION: TA                  FUNCTIONAL AREA: PATIENT
OPTION DESCRIPTION: DATA EDITING       LIMITED ACCESS: NO
NAME: LRBLA  MENU NAME: Blood Bank Administrative Data
MENU ABBREVIATION: AD                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLAA  MENU NAME: Crossmatch/Transfusions by Specialty/Physician
MENU ABBREVIATION: AA                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLAD                             MENU NAME: Print data change audits
MENU ABBREVIATION: AD                  FUNCTIONAL AREA: SUPERVISOR
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: YES
NAME: LRBLAR                             MENU NAME: Remove data change audits
MENU ABBREVIATION: RA                  FUNCTIONAL AREA: SUPERVISOR
OPTION DESCRIPTION: PURGING DATA/FILE ENTRIES  LIMITED ACCESS: YES
NAME: LRBLC  MENU NAME: Inventory ABO/Rh re-check counts
MENU ABBREVIATION: IR                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLCN  MENU NAME: Blood bank consultation reports
MENU ABBREVIATION: BR                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLDA  MENU NAME: Donor collection/deferral edit
MENU ABBREVIATION: DC                  FUNCTIONAL AREA: SUPERVISOR
OPTION DESCRIPTION: DATA EDITING       LIMITED ACCESS: YES
NAME: LRBLDAP                            MENU NAME: Apheresis donor list
MENU ABBREVIATION: PL                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLDAWARD  MENU NAME: Acknowledge donor award by deletion
MENU ABBREVIATION: DA                  FUNCTIONAL AREA: SUPERVISOR
OPTION DESCRIPTION: DATA EDITING       LIMITED ACCESS: YES
NAME: LRBLDC                             MENU NAME: Donor collection/processing
MENU ABBREVIATION: DC                  FUNCTIONAL AREA: DONOR
OPTION DESCRIPTION: DATA ENTRY         LIMITED ACCESS: NO
NAME: LRBLDCD                      MENU NAME: Collection disposition report
MENU ABBREVIATION: CD                  FUNCTIONAL AREA: REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
NAME: LRBLDCP  MENU NAME: Collection disposition/component preparation
MENU ABBREVIATION: CP                  FUNCTIONAL AREA: DONOR
OPTION DESCRIPTION: DATA ENTRY         LIMITED ACCESS: NO
OPTION IN USE: NO
NAME: LRBLDCR                          MENU NAME: Component preparation report
MENU ABBREVIATION: CR                  FUNCTIONAL AREA: DONOR/REPORTS
OPTION DESCRIPTION: FORM/REPORT GENERATION  LIMITED ACCESS: NO
...
```

[The report would continue listing all the blood bank options and what information was entered in the file.]

Example 3: Blood Bank Validation Documentation

```
Select Edit blood bank files Option: VD  Blood bank validation documentation

Select BLOOD BANK VALIDATION NAME: LRBL
     1   LRBLA          Blood Bank Administrative Data
     2   LRBLAA          Crossmatch/Transfusions by Specialty/Physician
     3   LRBLAD          Print data change audits
     4   LRBLAR          Remove data change audits
     5   LRBLC          Inventory ABO/Rh re-check counts
     6   LRBLCN          Blood bank consultation reports
TYPE '^' TO STOP, OR
CHOOSE 1-6: 5
OPTION IN USE: YES
Select DATE/TIME VALIDATED: T   AUG 19, 1994
  ARE YOU ADDING 'AUG 19, 1994' AS A NEW DATE/TIME VALIDATED (THE 1ST FOR THIS
BLOOD BANK VALIDATION)? Y   (YES)
REASON FOR VALIDATION: CHANGE OF SOFTWARE VERSION??
     In accordance with M-2, Part VI, Chapter 5, validation testing must be
     performed at these specific times.
     CHOOSE FROM:
       1        NEW VERSION
       2        PATCH
       3        RETROSPECTIVE
       4        LOCAL MODIFICATION
  REASON FOR VALIDATION: 1  NEW VERSION
  VERSION NUMBER: 5.2
  PATCH NUMBER: <RET>
  Select PERSON PERFORMING VALIDATION: EMBREE,SUE
  ARE YOU ADDING 'EMBREE,SUSAN ' AS     A NEW PERSON PERFORMING VALIDATION
  (THE 1ST FOR THIS DATE/TIME VALIDATED)? Y  (YES)
  Select PERSON PERFORMING VALIDATION: <RET>
  OUTCOME: SA??
     CHOOSE FROM:
       1        ACCEPTABLE
       2        ACCEPTABLE WITH CORRECTIVE ACTION
       3        NOT ACCEPTABLE
  OUTCOME: 1  ACCEPTABLE
  APPROVED BY: BJ  WELBY,HARRY
  DATE APPROVED: T  (AUG 19, 1994)
  DATE IMPLEMENTED: T+10  (AUG 29, 1994)
  COMMENT:
  1><RET>
Select DATE/TIME VALIDATED: <RET>

Select BLOOD BANK VALIDATION NAME: <RET>
```

Test Description Information (VT)

Basic information regarding collection samples, requisitions, etc., entered in the LABORATORY TEST file (#60) is available for each test. This information is also displayable, through the Test Description Information (TI) option on the Ward Menu.

Example 1: ABO/RH TYPING

```
                              BLOOD BANK

Select Inquiries Option: VT  Test description information

Select LABORATORY TEST NAME: ABO/RH TYPING


Lab test     Highest allowed urgency  Cost
ABO/RH TYPING                ASAP
Synonym:
     ABO GROUP/RH TYPE
Collection Sample    VA Lab Slip     Container                Vol Req(ml)
BLOOD                                GENERAL


Select LABORATORY TEST NAME: TYPE &
     1   TYPE & HOLD
     2   TYPE & SCREEN
CHOOSE 1-2: 2


Lab test     Highest allowed urgency  Cost
TYPE & SCREEN                ASAP
Synonym:
     T & S
Collection Sample    VA Lab Slip     Container                Vol Req(ml)
BLOOD                                GENERAL                        7


Select LABORATORY TEST NAME: TRANSF
     1   TRANSFERRIN
     2   TRANSFUSION REACTION WORKUP
     3   TRANSFUSION REQUEST
CHOOSE 1-3: 3


Lab test     Highest allowed urgency  Cost
TRANSFUSION REQUEST          STAT
Collection Sample    VA Lab Slip     Container                Vol Req(ml)
BLOOD                                GENERAL                       10


Select LABORATORY TEST NAME: <RET>
```

Reports Menu Options

```
R       Reports [LRBLR]
      AR      Patient antibody report (short list) [LRBLPR]
      BR      Blood bank tests report [LRBLPBR]
            1       Add BB patient(s) to report queue [LRBLP ADD]
            2       Delete BB report print queue [LRBLP DELETE]
            3       Print single BB patient report [LRBLP PRINT SINGLE]
            4       Print all BB patient reports on print queue [LRBLP PRINT
                     ALL ON QUEUE]
            5       Blood bank consultation reports [LRUCN]  Locked:
                     LRBLSUPER
      CT      Unit CAUTION tag labels [LRBLILA]
      CV      CMV Antibody Status Report [LRBLICV]
      DR      Donor summary reports [LRBLDSR]
            CD      Collection disposition report [LRBLDCD]
            DR      Blood donor recruitment reports [LRBLDRPTS]
                  DA      Gallon donor report [LRBLDDA]
                  DD      Donor deferral report [LRBLDDR]
                  DL      List of donors by last attempt date [LRBLDPL]
                  DS      Donor scheduling report [LRBLDSC]
                  ED      Emergency donor report [LRBLDEDR]
                  FD      First time blood donors [LRBLDFD]
                  GA      Group affiliation report [LRBLDGA]
                  GD      Group donation report [LRBLDGDR]
                  MC      Mobile (Collection Site) report [LRBLDMC]
                  ML      Donor month/holiday recall list [LRBLDMR]
                  PC      Patient credits from blood donations [LRBLDPCR]
                  PL      Apheresis donor list [LRBLDAP]
                  SD      Donor short draw report [LRBLDSD]
                  XD      Donor lists/labels/letters [LRBLDL]
            DS      Donor unit supplemental testing prooflist [LRBLDTRS]
            DT      Donor unit testing prooflist [LRBLDTR]
            PD      Permanent donor deferral report [LRBLDPD]
            PR      Blood product rejection report [LRBLDPRR]
      IS      Blood inventory status reports [LRBLIS]
            DU      Disposition-not transfused [LRBLIDU]
            SU      Single unit (display/print) information [LRBLQSU]
                  SD      Single unit information- display [LRBLIPSD]
                  SP      Single unit information- print [LRBLIPSP]
            UA      Units available (indate/no disposition) [LRBLRUA]
            UN      Units with no disposition [LRBLRUN]
            UX      Units on Xmatch by date/time xmatched [LRBLIX]
      IT      Blood inventory transaction reports [LRBLITX]
            IN      Supplier invoices (inventory) [LRBLRIN]
            IS      Special typing charges (inventory) [LRBLRIS]
            IT      Supplier transactions (inventory) [LRBLRIT]
      PL      Patient accession list [LRBLPAL]
      TC      Transfusion reaction count [LRBLTA]
      TR      Transfusion reaction report [LRBLIPTR]
      UP      Phenotyped units available [LRBLIPH]
      UR      Blood utilization & summary reports [LRBLIUS]
            AA      Crossmatch/Transfusions by Specialty/Physician [LRBLAA]
            AR      Autologous Disposition report [LRBLJD]
            CT      Crossmatch:Transfusion report [LRBLRCT]
            IS      Unit issue book entries [LRBLIRB]
            IT      Inappropriate transfusion requests report [LRBLPRIT]
```

```
        PT      Prolonged transfusion times [LRBLPIT]
        RS      Transfused RBC for treating specialty [LRBLJUT]
        TH      Patient transfusions & hematology results [LRBLPCH]
        TR      Transfusion data report [LRBLITR]
        TS      Transfusion by treating specialty/physician
                [LRBLITS]
        TX      Transfusion follow-up tests [LRBLTXA]
VD       Print blood bank validation [LRBLVALP]
WK       Blood bank workload reports [LRBLRWK]
        AD      Blood Bank Administrative Data [LRBLA]
        CR      Component preparation report [LRBLDCR]
        CT      Test counts by treating specialty [LRUPACT]
        IR      Inventory ABO/Rh re-check counts [LRBLC]
        TC      Test counts by location [LRBLRTC]
```

Reports Menu Data Flow Chart

Action	Option(s)
Routinely	
1. Print Caution Tag labels	Unit CAUTION Tag Labels (CT)
2. Print listing of units already phenotyped	Phenotyped Units Available (UP)
3. Print listing of units in inventory already typed for CMV antibody	CMV Antibody Status Report (CV)
4. Print information on a given unit in inventory	Single Unit Information Print (IS-SU-SP)
5. Print listing of accessions or review of incomplete work prior to end of shift	Patient Accession List (PL)
Daily	
6. Print listing of accessions from the previous day for quick reference	Patient Accession List (PL)
7. Print Blood Bank Cumulative Reports	Blood Bank Tests Report (BR)
8. Print Blood Bank consultation Reports for patients with antibody problems/positive direct Coombs tests	Blood Bank Consultation Reports (BR-5)
9. Print report of result entries from the previous day for supervisory review	Patient Antibody Report (short list) (AR)
10. Print listing of units which are currently assigned/xmatched which have no disposition entries	Units on Xmatch by Date/Time Xmatched (IS-UX)
11. Print listing of all units, by component, which are indate & have no disposition (may/may not be assigned to pt.)	Units Available (Indate/No Disposition) (IS-UA)
12. Print listing of potential cases of transfusion transmitted diseases	Transfusion Follow-up Tests (UR-TX)

Periodically (weekly/as needed)

13. Print listing of units with no disposition entered to investigate those which have outdated & have no entries	Units with No Disposition (IS-UN)
14. Print listing of supplier invoices/ transactions to verify billing	Supplier Invoices (Inventory) (IT-IN) **or** Supplier Transactions (Inventory) (IT-IT)
15. Print listing of any special typing charges to verify billing	Special Typing Charges (Inventory) (IT-IS)
16. Print listing of autologous units disposition to evaluate utilization	Autologous Disposition Report (UR-AR)
17. Print list of donors based on arrival/appt. times	Donor Scheduling Report (DR-DR-DS)
18. Print listing of potential donors to cover blood shortages	Emergency Donor Report (DR-DR-ED)
19. Print listing of potential apheresis donors	Apheresis Donor List (DR-DR-PL)
20. Print listing of donors who are affiliated with **or** who previously donated for a specific group	Group Affiliation Report (DR-DR-GA) **or** Group Donation Report (DR-DR-GD)
21. Print listing of donors based on collection site	Mobile (Collection Site) Report (DR-DR-MC)
22. Print thank you letters for blood	Donor Lists/Labels/Letters (DR-DR-XD)
23. Print mailing labels for a specific group	Donor Lists/Labels/Letters (DR-DR-XD)
24. Print list of permanently deferred donors	Permanent Donor Deferral Report (DR-PD)

Monthly

25. Print utilization & summary reports to be used for the preparation of reports & to save as hard copies	Blood Bank Administrative Data (WK-AD) Transfusion Reaction Count (TC) Component Preparation Report WK-CR) Collection Disposition Report (DR-CD) *Blood Product Rejection Report (DR-PR)* Donor Unit Testing Prooflist (DR-DT) Donor Unit Supplemental Testing Prooflist (DR-DS) Donor Short Draw Report (DR-SD)
26. Print donor recruitment reports	All of the following are under DR-DR: Donor Deferral Report (DD) Gallon Donor Report (DA) List of Donors by Last Attempt Date (DL) First Time Donors (FD) Donor Month/Holiday Recall List (ML) Patient Credits from Blood Donations (PC)

For Blood Transfusion Committee

27. Print reports of data to be reviewed as part of Blood Usage Review or other Transfusion Committee functions	Crosshatch/Transfusions by Specialty/ Physician (UR-AA) Autologous Disposition Report (UR-AR) Crossmatch:Transfusion Report (UR-CT) Inappropriate Transfusion Requests (UR-IT) Prolonged Transfusion Times (UR-PT) Transfused RBC for Treating Specialty (UR-RS) Patient Transfusions & Hematology Results (UR-TH) Transfusion Data Report (UR-TR) Transfusions by Treating *Specialty/Physician* (UR-TS) Transfusion Reaction Count (TR)

Annually

28. Print list of donors who have not donated in >1 year	*Donor Lists/Labels/Letters (DR-DR-XD)*

Patient Antibody Report (Short List) (AR)

Based on a review of all specimens accessioned for Blood Bank, this report can be printed to be used for several purposes, as shown by the various examples, including:

a. weekly/monthly report of patients with antibody problems (i.e., entries in either the Blood Bank Comments or Antibodies Identified field) for reference when the computer system is down, and
b. daily report of all specimens accessioned, showing a comparison of current results with previous results, for supervisory review of activity.

Printing a cumulative biannually or annually can be accomplished using the Patient Antibody report (long list) option in the Supervisor's Menu. This draws from a different file option, allowing sorting/printing of data from less recent specimens.

NOTES:

- If you answer "NO" to the "Print only patients with antibodies/special instructions? YES//" prompt, you will include all accessions for the time period specified.

- The "Enter the maximum number of specimens to display in reverse chronological order for each patient:" prompt, gives you the following results depending on the number entered:
  0 for listing only, with not specimen results
  1 for listing with current specimen results
  2 for listing with both current specimen/results and the one previous
  etc., to include desired number of specimens.

- If you press <RET>, you will return to the menu.

Example 1: Listing for all patients with antibody problems, including only the most recent specimen results

```
Select Reports Option: AR Patient antibody report (short list)

                    PRINT CURRENT PATIENT BLOOD BANK RECORDS

The dates asked will be from the BLOOD BANK ACCESSION LIST:
Start with Date TODAY// <RET> MAR 10, 1993
Go    to   Date TODAY// T-7  (MAR 03, 1993)

Print only patients with antibodies/special instructions ? YES// <RET>  (YES)

Enter the maximum number of specimens to display
in reverse chronological order for each patient: 1

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 10, 1993  14:14   VAMC                                                    Pg: 1
BLOOD BANK PATIENTS from DEC 10, 1992 to MAR 10, 1993
          Patient                  SSN            DOB    ABO Rh
-----------------------------------------------------------------------------
ADAMS,HOUSTON                   121-22-3333    06/18/62   A POS
    DAT NEG WITH 3X WASHED EDTA CELLS 3/5/93 ch


    Date/time        ABO Rh  AHG(D) AHG(I)
    03/05/93 12:35    A POS    N      N

ANDY,DUSTY                      089-48-5948    04/27/25   A POS
    Blood bank patient special instructions

TRANSFUSION REACTIONS WITH UNIT IDENTIFIED          UNIT ID     COMPONENT
MAY 28, 1991  13:00  DELAYED HEMOLYTIC              F44444         PRBC
NOV 20, 1992  13:00  FEBRILE NON-HEMOLYTIC          RA99999        ALP
OCT 20, 1992  16:00  FEBRILE NON-HEMOLYTIC          RA11111        PRBC
Transfuse only Spun/Filtered RBCs effective 10-21-92.
MAY 28, 1991  13:00  FEBRILE NON-HEMOLYTIC          F33333         PRBC
MAY 17, 1991  14:00  FEBRILE NON-HEMOLYTIC          C11115         PRBC
This is a febrile non-hemolytic reaction
Another comment
JUN 29, 1992  13:00  ALLERGIC NONHEMOLYTIC          B11111         PRBC
Transfusion comment

TRANSFUSION REACTIONS WITHOUT UNIT IDENTIFIED:
DEC 30, 1992  07:38  FEBRILE NON-HEMOLYTIC
    Antibodies identified:  ANTI K
    Date/time        ABO Rh  AHG(D) AHG(I)
    03/03/93 15:43

BOLE,DC                         785-20-4773    07/11/25   A POS
    Warm autoantibodies in eluate and in serum Positive Direct Coombs (IgG
    2+.C3d neg) 3/5/93 sh


    Date/time        ABO Rh  AHG(D) AHG(I)
    03/05/93 15:53    A POS

WASHINGTON,GEORGE               592-88-8888    03/01/00   A POS
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93


    Antibodies identified:
```

```
MAR 10, 1993  14:14   VAMC                                                Pg: 2
BLOOD BANK PATIENTS from DEC 10, 1992 to MAR 10, 1993
          Patient                  SSN            DOB   ABO Rh
-----------------------------------------------------------------------------
WASHINGTON,GEORGE              592-88-8888[See previous page (Pg 1)]
    Antibodies identified (cond't):  ANTI C ANTI E ANTI K
    Date/time       ABO Rh  AHG(D) AHG(I)
    03/05/93 14:02    A POS    P      P
                    Serum  antibody: ANTI E
```

Example 2: Listing for all specimens accessioned, including the test results for both the current specimen and the most recent previous specimen for comparison

```
Select Reports Option: AR  Patient antibody report (short list)

                    PRINT CURRENT PATIENT BLOOD BANK RECORDS

The dates asked will be from the BLOOD BANK ACCESSION LIST:
Start with Date TODAY// T-1  (MAR 11, 1993)
Go    to   Date TODAY// T-1  (MAR 11, 1993)

Print only patients with antibodies/special instructions ? YES// N  (NO)

Enter the maximum number of specimens to display
in reverse chronological order for each patient: 2
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 11, 1993  08:06   VAMC                                          Pg: 1
BLOOD BANK PATIENTS from OCT  2, 1992 to MAR 11, 1993
          Patient                  SSN            DOB    ABO Rh
-------------------------------------------------------------------------


BLOOD,JANE T                    771-25-1129    10/18/21   O POS

    Antibodies identified:  ANTI K
    Date/time        ABO Rh  AHG(D) AHG(I)
    03/11/93 12:56    O POS    N      P
                     Serum  antibody: ANTI K

DEARMOND,MIAMI                  216-18-1171    03/21/15

    Date/time        ABO Rh  AHG(D) AHG(I)
    03/11/93 16:10

GARRETT,PORTLAND                535-10-4531    05/08/17

    Date/time        ABO Rh  AHG(D) AHG(I)
    03/11/93 16:09              N      N

SMITH,JOHN Q                    123-45-6789    11/11/19   A POS

    Date/time        ABO Rh  AHG(D) AHG(I)
    02/08/93 06:57    A POS    N      N
    01/28/93 14:11    A POS    P      n
```

NOTE: The lack of results for the current specimens for Dearmond and the change in results for Smith.

Blood Bank Tests Report (BR)

Since all of the Blood Bank tests have a BB subscript, rather than a CH subscript, these tests are not included in the regular cumulative reports. Instead, the reports will be generated by the Blood Bank personnel and distributed in accordance with the policies of the facility.

Whenever test results are entered using the Enter Test Data (P-ET) option in the Patient Menu, that patient is automatically entered into the print queue for this report. The print queue continues to accumulate patients until the reports are printed and the list is deleted.

In addition to the current test results, the report will include all entries in the Antibodies Identified field for the patient and all previous test results in reverse chronological order until the page is filled. The results of the ABO/Rh, Direct Coombs and Indirect Coombs are printed, adjacent to the specimen data. It includes only the interpretations of the tests, **not** the actual test results.

```
Select Reports Option: BR  Blood bank tests report

Select Blood bank tests report Option: ?

   1      Add BB patient(s) to report queue
   2      Delete BB report print queue
   3      Print single BB patient report
   4      Print all BB patient reports on print queue
   5      Blood bank consultation reports

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood bank tests report Option: <RET>
```

Add BB Patient(s) Report Queue (BR-1)

If a hard copy is requested for a patient who is not entered in the print queue, this option will add the patient specified to the print queue and that patient's report will be printed the next time that the Print All BB Patients Reports On Print Queue option is run.

Example:

```
Select Blood bank tests report Option: 1  Add BB patient(s) to report queue

Select Patient Name: W8888 WASHINGTON,GEORGE   03-01-00   592888888   SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K


Select Patient Name: <RET>
```

Delete BB Report Print Queue (BR-2)

If the facility wishes to print the Blood Bank Tests Report for only specified patients, it will be necessary to use this option to delete those patients automatically entered into the print queue. Once those patients have been deleted as shown below, the Add BB Patient(s) to Report Queue option can be used to specify the patients to be printed.

Example:

```
Select Blood bank tests report Option: 2  Delete BB report print queue
                              (3 patients)

OK TO DELETE THE BLOOD BANK TEST REPORT QUEUE LIST? NO// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? NO// Y  (YES)
LIST DELETED !
```

Print Single BB Patient Report (BR-3)

If a hard copy report is requested for a patient who is not entered in the print queue, this option will allow printing of the report on command.

Example:

```
Select Blood bank tests report Option: 3  Print single BB patient report

Select Patient Name: W8888 WASHINGTON,GEORGE   03-01-00   592888888  SC
VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ACUTE DEPRESSION
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K

Print  component  requests  ? NO// Y  (YES)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

NOTE: Answering "YES" to the "Print component requests? NO//" prompt prints the listing of the units currently assigned and the most recent blood component requests. A "NO" would print only the test results.

```
MAR 11, 1993  08:34   VAMC                                                  Pg: 1
                    BLOOD BANK TEST REPORT
-------------------------------------------------------------------------------
          Patient                  SSN       Birth Date  ABO Rh
          -------                  ---       ----------  --- --
WASHINGTON,GEORGE               592-88-8888  03/01/00     A POS


    Antibodies identified: ANTI C; ANTI E; ANTI K;

      Unit assigned/xmatched:                  Exp date          Loc
 1)   DU11113    CPDA-1 RED BLOOD CE  A POS  MAR 16, 1993       Blood Bank
 2)   DU11112    CPDA-1 RED BLOOD CE  A POS  MAR 16, 1993       Blood Bank
 3)   WA11111    CPDA-1 RED BLOOD CE  A POS  APR  4, 1993       Blood Bank

Component requests       Units Request date   Date wanted    Requestor     By
CPDA-1 RED BLOOD CELLS     3   03/08/93       03/09/93 07:00 DR JONES      SH
RED BLOOD CELLS, WASHED    2   03/05/93 14:04 03/05/93 15:42 DR JONES      SH

                          |---     AHG(direct)     ---|   |-AHG(indirect)-|
  Date/time       ABO Rh    POLY IgG  C3   Interpretation   (Antibody screen)
  ---------       --- --    ---- ---  ---  --------------   -----------------
  03/05/93 14:02   A POS    1    1    Neg   Pos                Pos
  04/17/91 10:36            Pos             Pos                Pos
ELUATE ANTIBODY: ANTI K
  04/17/91 09:33   A POS    Neg             Neg                Pos


-------------------------------------------------------------------------------
WASHINGTON,GEORGE               592-88-8888   03/01/00    A POS
Location: 1B                            Physician:  WELBY,JOE
CUMULATIVE BLOOD BANK TEST REPORT                   PERMANENT COPY
(discard earlier copies)
```

Print all BB Patient Reports on Print Queue (BR-4)

Whenever test results are entered using the Enter Test Data (P-ET) option in the Patient Menu, that patient is automatically entered into the print queue for this report. In addition, any patients added to the print queue will be included.

Example:

```
Select Blood bank tests report Option: 4  Print all BB patient reports on
print queue

                                (2 patient)

Save reports for reprinting ? NO// <RET>  (NO)

Print  component  requests  ? NO// <RET>  (NO)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 11, 1993  08:27   VAMC                                                  Pg: 1
                    BLOOD BANK TEST REPORT
-------------------------------------------------------------------------------
          Patient                  SSN       Birth Date  ABO Rh
          -------                  ---       ----------  --- --
WASHINGTON,GEORGE               592-88-8888  03/01/00     A POS

  Antibodies identified: ANTI C; ANTI E; ANTI K;

                            |---     AHG(direct)     ---|   |-AHG(indirect)-|
  Date/time        ABO Rh    POLY IgG  C3   Interpretation (Antibody screen)
  ---------        --- --    ---- ---  ---  --------------   ---------------
  03/05/93 14:02    A POS    1    1    Neg  Pos              Pos
  04/17/91 10:36             Pos            Pos              Pos
ELUATE ANTIBODY: ANTI K
  04/17/91 09:33    A POS    Neg            Neg              Pos
```

```
-------------------------------------------------------------------------------
WASHINGTON,GEORGE               592-88-8888   03/01/00    A POS
Location: 1B                              Physician:  WELBY,JOE
CUMULATIVE BLOOD BANK TEST REPORT                    PERMANENT COPY
(discard earlier copies)
```

```
MAR 11, 1993  08:22   VAMC                                                    Pg: 2
                    BLOOD BANK TEST REPORT
-----------------------------------------------------------------------------
          Patient                  SSN       Birth Date  ABO Rh
          -------                  ---       ----------  --- --
ADAMS,HOUSTON                   121-22-3333  06/18/62     A POS

   Antibodies identified:

                                |---     AHG(direct)     ---|  |-AHG(indirect)-|
 Date/time        ABO Rh       POLY IgG  C3   Interpretation  (Antibody screen)
 ---------        --- --       ---- ---  ---  --------------  -----------------
 03/05/93 12:35    A POS       Neg  Neg  Neg  Neg             Neg
 08/11/92 14:25                Pos  Pos  Neg  Pos             Pos
 06/09/92 14:47    A POS       Neg  Neg  Neg  Neg             Neg
```

```
-----------------------------------------------------------------------------
ADAMS,HOUSTON                   121-22-3333   06/18/62    A POS
Location: ER                            Physician:  WELBY,JOE
CUMULATIVE BLOOD BANK TEST REPORT                   PERMANENT COPY
(discard earlier copies)
```

Blood Bank Consultation Reports (BR-5)

Clinical pathology consultation reports are routinely generated on patients with positive direct and/or indirect antiglobulin tests. Based on data entered through the Enter Test Data (P-ET) option, it is possible to generate patient specific reports which include not only the identity of the antibody, but additional information useful to the patient's physician.

a. Use the Edit Corresponding Antigen/Antibody (S-EF-AA) option to enter/edit the data for each antibody.

b. Use the Edit Lab Letter file (S-EF-LL) option to enter/edit the other parameters of the report; i.e., format, introductory paragraph, and the paragraph used for negative eluates.

For those patients having allo antibodies, the report includes the identity of the antibody, a free text description of its clinical significance, the percent of donor units compatible for that antibody and the appropriate journal references (if any). At the end of the report, the patient's ABO/Rh and a calculation of the overall percent compatibility (based on all antibodies identified) are included.

For those patients with a positive direct antiglobulin test, the results of both the serum and eluate testing are included in the same report, with parameters similar to those described above. If the eluate is negative, a free text description of the implications of that result are included instead.

Example 1: Allo Antibody

```
Select Blood bank tests report Option: 5  Blood bank consultation reports

                    CONSULTATION REPORT
Select CONSULTATION: ?
 ANSWER WITH LAB LETTER NAME
CHOOSE FROM:
   ALLO ANTIBODY REPORT
   DIRECT COOMBS TEST REPORT

Select CONSULTATION: ALLO ANTIBODY REPORT
Select Patient Name: C8275 CARON,JOHN    07-30-14     592888275   SC VETERAN
CARON,JOHN  ID: 592-88-8275 Physician: WELBY,HARRY

ABO group: AB  Rh type: POS
AGE: 78  DATE OF BIRTH: JUL 30, 1914
Ward on Adm: 6W  Service: ALLERGY
Adm Date: SEP 19, 1992  Adm DX: RESPITE
Present Ward: 6W                          MD: WELBY,MARCUS
PATIENT LOCATION: 6W// <RET>

Antibody present: ANTI E
                  ANTI Fy(a)
```

```
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


-----------------------------------------------------------------------------
CLINICAL RECORD ALLO ANTIBODY REPORT
Hines VAMC
-----------------------------------------------------------------------------
Patient has atypical red cell antibodies.  Blood will not be available in an
emergency since, unless otherwise noted, the patient must continue to receive
antigen negative blood even though the antibody may not always be demonstrable
by routine techniques.  When requesting blood for this patient, please submit
at least 2 full 10-15 ml red top tubes and allow a minimum of 2 hours for the
Blood Bank to find compatible blood for this patient.  Under normal
circumstances, this will be sufficient time to locate two units of blood.  If
the % compatible (noted below) is less than 5%, more time may be needed.

SERUM ANTIBODY: ANTI E  % Compatible Units: 70.0
Anti-E(rh'') is an Rh antibody most often occurring after transfusion or
pregnancy.  Anti-E may also be found as a naturally occurring IgM antibody.
The antibody can cause acute hemolytic transfusion reactions and hemolytic
disease of the newborn.  Anti-E is frequently implicated as a cause of delayed
hemolytic transfusion reactions.

SERUM ANTIBODY: ANTI Fy(a) % Compatible Units: 34.0
Anti-Fy(a)  is an antibody most often occurring after transfusion or
pregnancy. The antibody can cause delayed hemolytic transfusion reactions and
hemolytic disease of the newborn.

Patient is AB POS.  23.8 % OF THE POPULATION WILL BE COMPATIBLE.


-----------------------------------------------------------------------------
                            (End of report)
LYNN HOFF, MT(ASCP)SBB
BLOOD BANK SUPERVISOR                                MAR 05, 1993
-----------------------------------------------------------------------------
CARON,JOHN      LOC: 6W
SSN:XXX-XX-XXXX  SEX:M  DOB: JUL 30, 1914  AGE: 78
ADM:SEP 19, 1992  DX:RESPITE     WELBY,MARCUS
```

Example 2: Warm Autoantibody

> **NOTE:** The references included are entered for the individual SNOMED code in the Function field file using the Edit Corresponding Antigen/Antibody [LRBLSNO] option in the Supervisor's Menu. See Example 2.

```
Select Blood bank tests report Option: 5  Blood bank consultation reports

                    CONSULTATION REPORT
Select CONSULTATION: DIRECT COOMBS TEST REPORT
Select Patient Name: R4808 RODDY,WILLIAM  05-12-25   111223333  SC VETERAN
RODDY,WILLIAM ID: 111-22-3333 Physician: PIERCE,HAWKEYE

ABO group: O  Rh type: NEG
AGE: 67  DATE OF BIRTH: NOV 12, 1925
Ward on Adm: 1B  Service: ALLERGY
Adm Date: JAN 22, 1993  Adm DX:
Present Ward: ECC 1-C                          MD: PIERCE,HAWKEYE
PATIENT LOCATION: ECC 1-C// <RET>
    WARM AUTO ANTIBODY IN ELUATE ONLY. DAT(B.S +vw, IgG+vw,C3d neg.)
    PATIENT NOT PHENOTYPED DUE TO RECENT TRANSFUSION. NEEDS A LIABILITY
    RELEASE. 2-28-93 DJS

Antibody present: WARM AUTOANTIBODY


Select BLOOD BANK DATE/TIME SPECIMEN TAKEN: ?
 ANSWER WITH BLOOD BANK
CHOOSE FROM:
   7069693.859755  03-05-1993 @ 14:02:45
   7089581.896362  04-17-1991 @ 10:36:38
   7089581.906678  04-17-1991 @ 09:33:22

Select BLOOD BANK DATE/TIME SPECIMEN TAKEN: 3/5/93   MAR  5, 1993 ??
Select BLOOD BANK DATE/TIME SPECIMEN TAKEN: 03-05-1993@14:02:45   MAR  5,
1993@14:02:45
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
--------------------------------------------------------------------------
     CLINICAL RECORD DIRECT COOMBS TEST REPORT        |
     VAMC                                             |Specimen:03/05/93 14:02
--------------------------------------------------------------------------
Patient has atypical red cell antibodies.  Blood will not be available in an
emergency.  When requesting blood for this patient, please submit at least 2
full 10-15 ml red top tubes and allow a minimum of 2 hours for the Blood Bank
to find compatible blood for this patient.  Under normal circumstances, this
will be sufficient time to locate two units of blood.

SERUM ANTIBODY:  WARM ANTIBODY      % Compatible Units: 0.0
Warm autoantibodies react at 37 degrees C.  These antibodies react with the
patient's own cells, as well as with any transfused donor cells.  Very little
autoantibody may be free in the serum as it is continuously being absorbed by
red cells in vivo.  Specificity of the antibody is very complex.  Transfusion
is definitely contraindicated in these patients except in life-threatening
situations, as it will stimulate more antibody production and cell survival
will be very limited.

Note:  It is serologically impossible to differentiate between the antibody
found in warm autoimmune hemolytic anemia and that induced by Aldomet or
related drugs.

Reference:  Autoimmune hemolytic anemia.
DAVIE JV.
ARCH INTER MED  Vol. 135  Pg:1293  Date: 1975

Reference: Transfusion Therapy for Autoimmune Hemolytic Anemia.
ROSENFIELD RE.
SEMIN HEMATOL Vol.13 Pg:311 Date: OCT 1976

ELUATE ANTIBODY: WARM AUTOANTIBODY     % Compatible Units: 0.0
Warm autoantibodies react at 37 degrees C.  These antibodies react with the
patient's own cells, as well as with any transfused donor cells.  Very little
autoantibody may be free in the serum as it is continuously being absorbed by
red cells in vivo.  Specificity of the antibody is very complex.  Transfusion
is definitely contraindicated in these patients except in life-threatening
situations, as it will stimulate more antibody production and cell survival
will be very limited.

Note:  It is serologically impossible to differentiate between the antibody
found in warm autoimmune hemolytic anemia and that induced by Aldomet or
related drugs.

--------------------------------------------------------------------------
            (See next page)
LYNNE HOFF, MT(ASCP)SBB
BLOOD BANK SUPERVISOR      MAR 07, 1993
--------------------------------------------------------------------------
RODDY,WILLIAM  LOC: ECC 1-C
SSN:111-22-3333  SEX:M  DOB: MAY 12, 1925  AGE:67
DX:      PIERCE,HAWKEYE MD

--------------------------------------------------------------------------
     CLINICAL RECORD DIRECT COOMBS TEST REPORT        |
     VAMC                                             |Specimen:03/05/93 14:02
--------------------------------------------------------------------------
```

```
Reference:  Autoimmune hemolytic anemia.
DAVIE JV.
ARCH INTER MED  Vol. 135  Pg:1293  Date: 1975

Reference: Transfusion Therapy for Autoimmune Hemolytic Anemia.
ROSENFIELD RE.
SEMIN HEMATOL Vol.13 Pg:311 Date: OCT 1976

Patient is O NEG.       0.0 % OF THE POPULATION WILL BE COMPATIBLE.


-----------------------------------------------------------------------------
            (End of report))
LYNNE HOFF, MT(ASCP)SBB
BLOOD BANK SUPERVISOR      MAR 07, 1993
-----------------------------------------------------------------------------
RODDY,WILLIAM  LOC: ECC 1-C
SSN:111-22-3333  SEX:M  DOB: MAY 12, 1925  AGE:68
                    DX:    PIERCE,HAWKEYE MD
```

Unit Caution Tag Labels (CT)

Labels to overlay the Caution Tag, VA Form 10-2984, are automatically generated, on command, when a unit is placed in the assigned/xmatched status. The label contains the necessary information, based on entries into the system to print the Caution Tag label. Since the "tech ID" on this label is that of the technologist performing the crossmatch, the "tech ID" shown on the lower right of tag (not covered by the 1 by 3 inch overlay label) should be the initials of the tech placing the label on the tag and the tag on the unit.

For those components requiring a crossmatch, the crossmatch results will be printed as the fourth line on the label.

NOTES:

- If you answer "YES" to the "Edit Labels? NO//" prompt, you will be allowed to print additional labels. These labels can be duplicates or labels for other than usual purposes.
- The default for how many lines from the top of one label to another, can be edited using the Edit Number of Lines in a Label (S-LL) option.
- The first label is for a pool of ten units of platelet concentrate which did not require a crossmatch, the next two labels are for units of red blood cells which required a crossmatch, and the last two labels are for the extra labels requested prior to the completion of testing.

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: CT  Unit CAUTION tag labels
                              PRINT XMATCH LABELS
                          (There are 3 labels to print)
   Add labels for emergency transfusion ? NO// Y  (YES)
Select Patient Name: ADAMS,SAM          01-23-34     432994321     NON-VETERAN
(OTHER)
ADAMS,SAM ID: 432-99-4321 Physician: GINS,RON

ABO group:   Rh type:
AGE: 59  DATE OF BIRTH: JAN 23, 1934
PATIENT LOCATION: 9EI// <RET>

Enter number of crossmatch labels wanted: 2

Do you want to delete the list of labels ? NO// <RET>  (NO)
Edit LABELS ? NO//  <RET>  (NO)
Save list for repeat printing ? NO// <RET>  (NO)
```

```
                    REMEMBER TO
ALIGN THE PRINT HEAD ON THE FIRST LINE OF THE LABEL

        ENTER  NUMBER OF LINES  FROM
        TOP OF ONE LABEL TO ANOTHER: 6// <RET>

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


GARRETT,PORTLAND 535-10-4531
Patient O POS 03/11/93 14:03
Unit    O POS # Q45678   sh
NO CROSSMATCH REQUIRED

WA33333
WASHINGTON,GEORGE 592-88-8888
Patient A POS 03/11/93 14:10
Unit    A POS # WA33333   SH
COMPATIBLE

WW12345
WASHINGTON,GEORGE 592-88-8888
Patient A POS 03/11/93 14:11
Unit    A POS # WW12345   SH
COMPATIBLE

MAR 11, 1993  14:12
ADAMS,SAM 432-99-4321
Patient ABO/Rh:
Unit    ABO/Rh:        Unit#:
Crossmatch:            Tech :

MAR 11, 1993  14:12
ADAMS,SAM 432-99-4321
Patient ABO/Rh:
Unit    ABO/Rh:        Unit#:
Crossmatch:            Tech :
```

CMV Antibody Status Report (CV)

When attempting to find units for a patient requiring CMV negative components, units in inventory which might be acceptable can be located using this option. By allowing the tech to specify whether a report of CMV Antibody positive or CMV Antibody negative units is desired, a determination can be made of which units are: 1) unacceptable, 2) not yet tested, or 3) acceptable.

NOTES:

- If you answer P for POS at the "Select CMV ANTIBODY" prompt, you would get a list of positive CMV units.
- The units are sorted based on the entry in the CMV Antibody field in the BLOOD INVENTORY file (#65). Data is entered into this field using the Unit Phenotyping (I-UP) option in the Inventory Menu.

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: CV  CMV Antibody Status Report

                    CMV ANTIBODY tested units

Select CMV ANTIBODY: NEG// <RET>
Select BLOOD COMPONENT: 04060   CPDA-1 RED BLOOD CELLS      04060      PRBC  1
Select ABO group: A
Select Rh type: POS
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 11, 1993  14:24   VAMC                                          Pg: 1
LABORATORY SERVICE
CPDA-1 RED BLOOD CELLS  A POS  CMV NEG units
     Unit            Exp date
-------------------------------------------------------------------------------
  1) DU11112         03/16/93
-------------------------------------------------------------------------------
  2) DU11113         03/16/93
-------------------------------------------------------------------------------
  3) WA11111         04/04/93
-------------------------------------------------------------------------------
  4) WA22222         04/04/93
-------------------------------------------------------------------------------
```

Donor Summary Reports (DR)

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: ?

   CD     Collection disposition report
   DR     Blood donor recruitment reports ...
   DS     Donor unit supplemental testing prooflist
   DT     Donor unit testing prooflist
   PD     Permanent donor deferral report
   PR     Blood product rejection report

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Donor summary reports Option: <RET>
```

Collection Disposition Report (DR-CD)

Units which are quarantined/discarded prior to components preparation have corresponding entries in the Collection Disposition field. This report includes all of those units for the dates specified.

Since the report is designed to print on a page that is 11 by 15 inches (132 characters wide) rather than 81/2 by 11 inches (80 characters wide), the example shown does not include all of the fields. Those actually included in the report are as follows:

DONATION OR DEFERRAL DATE
UNIT NUMBER
COLLECTION SITE
COLLECTION TIME STARTED
COLLECTION TIME COMPLETED
COLLECTION VOLUME
DONOR REACTION CODE
PHLEBOTOMIST
COLLECTION DISPOSITION
COLLECTION DISPOSITION COMMENT

Example:

```
Select Donor summary reports Option: CD  Collection disposition report
START WITH DONATION OR DEFERRAL DATE: FIRST// 7-1-92
GO TO DONATION OR DEFERRAL DATE: LAST// 7-31-92
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


COLLECTION DISPOSITION REPORT                    JUL 11,1992  14:26    PAGE 1
DONATION DATE UNIT #  SITE  ETC. VOL  REACTION  PHLEB  DISPOSITION  COMMENTS
-------------------------------------------------------------------------------

JUL  1,1992   B56567  VAH   ETC. 442  NONE              DISCARD COL
JUL 13,1992   T12345  VAH   ETC, 451  NONE              DISCARD COL
JUL 21,1992   R99999  VAH   ETC. 450  NONE       SH     DISCARD COL
```

Blood Donor Recruitment Reports (DR-DR)

```
Select Reports Option: DR  Donor summary reports


   CD     Collection disposition report
   DR     Blood donor recruitment reports ...
   DS     Donor unit supplemental testing prooflist
   DT     Donor unit testing prooflist
   PD     Permanent donor deferral report
   PR     Blood product rejection report

Select Donor summary reports Option: DR  Blood donor recruitment reports


   DA     Gallon donor report
   DD     Donor deferral report
   DL     List of donors by last attempt date
   DS     Donor scheduling report
   ED     Emergency donor report
   FD     First time blood donors
   GA     Group affiliation report
   GD     Group donation report
   MC     Mobile (Collection Site) report
   ML     Donor month/holiday recall list
   PC     Patient credits from blood donations
   PL     Apheresis donor list
   SD     Donor short draw report
   XD     Donor lists/labels/letters

Select Blood donor recruitment reports Option: DA   Gallon donor report
```

Gallon Donor Report (DR-DR-DA)

A listing of all donors who have received awards may be obtained on command. The data will be sorted according to the number of awards received, i.e., one gallon, two gallons, etc.

Example:

```
Select Blood donor recruitment reports Option: DA  Gallon donor report
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


GALLON DONORS                                    MAR 11,1993  15:27    PAGE 1
DONOR                              TOTAL UNITS  GROUP AFFILIATION
-------------------------------------------------------------------------------
        TOTAL AWARDS:      1
INGLES,BENT                                 9
JONES,JOHN                                 10    VA EMPLOYEE
SMITH,JOAN                                  8    VA EMPLOYEE
```

NOTES:

- In order for a given donor to be included in the report, the fact that the donor was given the award must have been entered using the Acknowledge Donor Award by Deletion (SR-DA) option in the Supervisor's Menu. The system does not automatically update the AWARD field when a donor's total number of units reaches 8, 16, etc.

- Based on the data entered through the Donor Collection/Processing (DC) option in the Donor Menu, each donation of whole blood or cytapheresis is counted toward the total number of donations for that donor. However, in order for the report to reflect the current totals in the TOTAL UNITS column in this report, the system must recalculate/update the Cumulative Donations field. This can be done using the Cumulative Donations and Awards option in the Supervisor's Menu.

Donor Deferral Report (DR-DR-DD)

In order to identify trends or problems in deferrals, the system provides a listing, on command, by collection site, for a designated period of time.

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: DD  Donor deferral report
  START WITH COLLECTION SITE: FIRST// VAH
  GO TO COLLECTION SITE: LAST// VAH
    START WITH DONATION OR DEFERRAL DATE: FIRST// 1-1-93
    GO TO DONATION OR DEFERRAL DATE: LAST// T 1-27-93
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
DEFERRAL REPORT                                  JAN 27,1993  15:31    PAGE 1
SITE      DEFERRAL DATE       DONATION GRP  DONOR                  REASON
-----------------------------------------------------------------------------

        DONATION/DEFERRAL CODE: NO DONATION


VAH       JAN 12,1993         VAH           HOFFMAN,LAURA          HCT
VAH       JAN 14,1993         VAH           WATER,RANDY            HCT
VAH       JAN 19,1993         UNK           HOFF,LYNN              HCT
VAH       JAN 19,1993         VAH           DONOR,ANOTHER          HEPATITIS
VAH       JAN 25,1993         VAH           JONES,SUSAN            BP
```

NOTES:

- This report may be queued to print during times of non-peak activity.
- The Collection Site is based on previous entries in the BLOOD BANK UTILITY file (#65.4).

List of Donors by Last Attempt Date (DR-DR-DL)

Data may be obtained from the system for all donors who attempted to donate within a specified date range. The donors are sorted, based on entries in the Group Affiliation field, using the Donor Registration (DR) or the Donor Demographics (DD) options.

Based on the data entered through the Donor Collection/Processing (DC) option, each donation of whole blood or cytapheresis is counted toward the total number of donations for that donor. However, in order for the report to reflect the current totals in the Cumulative Donations field, it is necessary to have the computer recalculate/update the information by **first** running the Cumulative Donations and Awards (SR-CD) option in the Supervisor's Menu.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: DL  List of donors by last
attempt date

             BLOOD DONOR LIST BY LAST ATTEMPT DATE


Start with Date TODAY// 1-1-93  (JAN 1, 1993)
Go    to   Date TODAY// <RET> JAN 30, 1993
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
JAN 30, 1993  15:34   VAMC                                                Pg: 1
BLOOD DONORS (from: JAN 01, 1993 to JAN 30, 1993)
DONOR NAME                      WORK PHONE     LAST ATTEMPT CODE CUM DONATIONS
-------------------------------------------------------------------------------

Donation Group: VAH
------------------
AARDVARK,TOM                    UNKNOWN        JAN 17, 1993   W        2
FREEBLOOD,JANE T                UNKNOWN        JAN 17, 1993   W        1
FREEBLOOD,JOHN T                UNKNOWN        JAN 17, 1993   W        1
HEMBRY,SHARON                   UNKNOWN        JAN 21, 1993   W        1
HOFF,LYNN                       3812553        JAN 21, 1993   W        6
JONES,SUSAN                     UNKNOWN        JAN 25, 1993   N        1
MORASCH,ANNETTE                 UNKNOWN        JAN 25, 1993   C        6
SEEGER,JOE                      UNKNOWN        JAN 27, 1993   W        2
SMITH,JEREMY,L.                 UNKNOWN        JAN 25, 1993   W        1
SMITH,SALLY                     UNKNOWN        JAN 21, 1993   W        1
SMITH,SAM                       UNKNOWN        JAN 27, 1993   W        4
SNERD,MORIMER                   UNKNOWN        JAN 25, 1993   W        1

Donation Group: PK-V
------------------
SMITH,RANDY                     544-6789       JAN 26, 1993   W        2

Donation Group: ?
------------------
ANDY,DUSTY                      UNKNOWN        JAN 21, 1993   W        3
HOFFMAN,LARK                    X1585 LAB      JAN 26, 1993   W        2
SNERD,SALLY                     544-2888       JAN 26, 1993   W        2
```

NOTES:

- Even though the printed report obtained from the Cumulative Donation and Awards (SR-CD) option will only include donors who have cumulative donations in excess of eight, the totals are updated for everyone.

- Repeated running of the Cumulative Donation and Awards (SR-CD) option will not affect the report. Names are not deleted from this listing until the Acknowledge Donor Award by Deletion (SR-DA) option in the Supervisor's Menu is run.

- The WORK PHONE is included since this may be used to indicate specified services for hospital employees, i.e., those whose GROUP AFFILIATION is VAH.

Donor Scheduling Report (DR-DR-DS)

The data entered through the Donor Registration (DR) option in the Donor Menu for ARRIVAL/APPT TIME is sorted such that it can be used to provide reports which can be used to evaluate staffing needs.

The report generated also includes the final outcome, i.e., donation or deferral, and any patient credit. In this way, it is possible to determine how much time might have been required for any given donor and whether a "group" of donors came in to replace blood for a specific patient.

Example:

```
Select Blood donor recruitment reports Option: DS Donor scheduling report


          DONOR SCHEDULING REPORT BY DONATION OR DEFERRAL DATE
Start with Date TODAY// T (JAN 01, 1993)
Go    to   Date TODAY// 1-30-93 (JAN 30, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 11, 1993  15:38   VAMC                                                Pg: 1
DONOR SCHEDULING REPORT FROM JAN 01, 1993 TO JAN 30, 1993
ARRIVAL/APPT   UNIT ID      DON/DEF        DON. TYPE  PATIENT CREDIT
-------------------------------------------------------------------------------

  DONATION OR DEFERRAL DATE: 01/06/93
01/06/93 08:00 A88888       WHOLE BLOOD    AUTOLOGOUS
  Subtotal WHOLE BLOOD   :       1
             AUTOLOGOUS :  1

  DONATION OR DEFERRAL DATE: 01/10/93
01/10/93 08:52 DAL00001     WHOLE BLOOD    HOMOLOGOUS ANY VET
01/10/93 08:54 DAL00002     WHOLE BLOOD    HOMOLOGOUS
  Subtotal WHOLE BLOOD   :       2
             HOMOLOGOUS :  2

  DONATION OR DEFERRAL DATE: 01/21/93
01/21/93 09:10 R99999       WHOLE BLOOD    HOMOLOGOUS
01/21/93 09:32 R99998       WHOLE BLOOD    HOMOLOGOUS
  Subtotal WHOLE BLOOD   :       2
             HOMOLOGOUS :  2

  DONATION OR DEFERRAL DATE: 01/25/93
01/25/93 10:00 A55555       WHOLE BLOOD    HOMOLOGOUS
01/25/93 ??:??              NO DONATION    HOMOLOGOUS
01/25/93 10:08 A55558       WHOLE BLOOD    AUTOLOGOUS
01/25/93 10:44 A22222       WHOLE BLOOD    AUTOLOGOUS
01/25/93 11:17 A22223       WHOLE BLOOD    AUTOLOGOUS
01/25/93 12:13 A22224       WHOLE BLOOD    HOMOLOGOUS
01/25/93 12:40 A22225       WHOLE BLOOD    HOMOLOGOUS
01/25/93 20:00 V11234       WHOLE BLOOD    HOMOLOGOUS
  Subtotal NO DONATION   :       1
           WHOLE BLOOD   :       7
             AUTOLOGOUS :  3
             HOMOLOGOUS :  4

  DONATION OR DEFERRAL DATE: 01/26/93
01/26/93 ??:?? V12345       WHOLE BLOOD    HOMOLOGOUS
01/26/93 13:54              WHOLE BLOOD    AUTOLOGOUS        RABBIT,RAPID
01/26/93 13:57              WHOLE BLOOD    DIRECTED
  Subtotal WHOLE BLOOD   :       3
             AUTOLOGOUS :  1
             HOMOLOGOUS :  1
             DIRECTED   :  1

  DONATION OR DEFERRAL DATE: 01/27/93
01/27/93 08:09 X11112       WHOLE BLOOD    HOMOLOGOUS
01/27/93 ??:?? X11114       WHOLE BLOOD    HOMOLOGOUS
01/27/93 08:52 X11111       WHOLE BLOOD    HOMOLOGOUS
  Subtotal WHOLE BLOOD   :       3
             HOMOLOGOUS :  3
```

NOTE: If an appointment time is not entered, at the time of donation, question marks (**??:??**) will print instead of the time.

Emergency Donor Report (DR-DR-ED)

The data entered into the Donors Scheduling/Recall field is used to provide lists, on command, which can be used to contact previous donors who had indicated a willingness to be called in an emergency.

The dates entered for the prompts "Start with Donation or Deferral Date" and "Go to Donation or Deferral Date" merely determine the date ranges which will be included in the report. These cannot be used to exclude donors, merely information from the report.

NOTES:

- By selecting T-12M for the date to start, only recent donors/donations are included.
- By including the results of each donation attempt, as well as the actual donation dates, the person contacting the previous donors can eliminate those who have donated within the last week or who have a history of being deferred.
- No evaluation is made as to whether the donor is permanently deferred. If this is the case, some type of change can be made in the donor's phone number so that he/she is not called.

Example:

```
Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: ED  Emergency donor report
  START WITH DONATION OR DEFERRAL DATE: FIRST// T-12M
  GO TO DONATION OR DEFERRAL DATE: LAST// <RET>
    START WITH ABO GROUP: FIRST// O
    GO TO ABO GROUP: LAST// O
      START WITH RH TYPE: FIRST// P
      GO TO RH TYPE: LAST// P
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


EMERGENCY DONOR LIST                                MAR 11,1993  15:42    PAGE 1
DONOR                 ABO  RH  HOME        WORK        LAST DATE    DONATION
-----------------------------------------------------------------------------

        DONOR SCHEDULING/RECALL: EMERGENCY
HOFFMAN,LAURA         A    POS 488-4943    X3333 LAB   MAY 12,1992  WHOLE BLOOD
                                                       FEB  4,1990  WHOLE BLOOD
HOFF,LYNN             A    POS 708383494   3812553     OCT 26,1992  WHOLE BLOOD
                                                       JUN 19,1992  NO DONATION
                                                       FEB 26,1992  WHOLE BLOOD
                                                       APR 17,1991  PLASMAPHERES
MORASCH,ANNETTE       A    POS                         AUG 21,1992  CYTAPHERESIS
                                                       APR 23,1991  WHOLE BLOOD
OWCZARZAK,MARGARET    O    POS 895-3066    2262        APR 24,1992  WHOLE BLOOD
```

First Time Blood Donors (DR-DR-FD)

In order to maintain a donor pool of a certain size, it is necessary to continue to add new donors to the pool to replace those no longer donating. The system stores the names of these new donors based on the Date Registered/Edited field. Data can then be retrieved as to source of the new donors (collection site, donation group, etc.,) for a specified time period.

Remember, if a donor name is edited, it will create a new entry and the donor will be treated as a new entity.

NOTES:

- The fields shown in the report are:
  - COLLECTION SITE (SITE)
  - DONATION GROUP (GROUP)
  - DONOR
  - WORK PHONE
  - DONATION OR DEFERRAL DATE (DATE)
  - DONATION TYPE (DONATION)
  - REASON FOR DEFERRAL (DEF)
- For VAH employees, VAH is listed as the DONATION GROUP and the work phone is used to designate the service within the hospital.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: FD  First time blood donors
START WITH DATE REGISTERED/EDITED: FIRST// 1/21/93 (JAN 21, 1993)
GO TO DATE REGISTERED/EDITED: LAST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
FIRST TIME DONORS                                        JAN 30,1993  15:44   PAGE 1
DONOR                 WORK PHONE  DATE        DONATION        SITE   GROUP DEF
-------------------------------------------------------------------------------

        DATE REGISTERED/EDITED: JAN 21,1993
AARDVARK,TOM                      JAN 27,1993 WHOLE BLOOD     VAH    VAH
                                  JAN 21,1993 WHOLE BLOOD     VAH    VAH
JONES,SUSAN                       JAN 25,1993 NO DONATION     VAH    VAH    BP
                                  JAN 21,1993 WHOLE BLOOD     VAH    VAH
SMITH,SALLY                       JAN 21,1993 WHOLE BLOOD     VAH    VAH
        DATE REGISTERED/EDITED: JAN 25,1993
FREEBLOOD,JON
HOFFMAN,LARK          X1585 LAB   JAN 26,1993 WHOLE BLOOD     VAH
                                  JAN 25,1993 WHOLE BLOOD     VAH    VAH
HOFFMAN,LYNEETY
SMITH,JEREMY,L.                   JAN 25,1993 WHOLE BLOOD     VAH    VAH
SNERD,MORIMER                     JAN 25,1993 WHOLE BLOOD     VAH    VAH
SNERD,SALLY           544-2888    JAN 26,1993 WHOLE BLOOD     VAH
                                  JAN 25,1993 WHOLE BLOOD     VAH    VAH
        DATE REGISTERED/EDITED: JAN 26,1993
HOFFMAN,LAURA         X3333 LAB   MAY 12,1990 NO DONATION     VAH    VAH    HCT
                                  MAY  2,1990 WHOLE BLOOD     VAH    VAH
                                  FEB  4,1990 WHOLE BLOOD     VAH    VAH
SMITH,RANDY           544-6789    JAN 26,1993 WHOLE BLOOD     PK-V   PK-V
                                  JAN 25,1993 WHOLE BLOOD     PK-V   PK-V
```

Group Affiliation Report (DR-DR-GA)

Based on data entered for the Group Affiliation field through either the Donor Registration (DR) or the Donor Demographics (DD) options, information can be retrieved regarding the donation history for all donors affiliated with that group. This information can then be used for reviewing previous donation attempts, etc., for donors who might potentially donate on a given mobile.

If these donors are to be targeted for specific recruitment efforts for an upcoming mobile, etc., the labels for direct mailing may be generated through the Donor Lists/Labels (XD) option.

NOTES:

- The Group Affiliation field is **not** the same as the Donation Group field which relates specifically to a particular donation. The groups from which the user can select are, however, the same for both these fields, i.e., those groups designated as G or GC in the BLOOD BANK UTILITY file (#65.4).

- Because the option allows you to specify the range for the DONATION OR DEFERRAL DATE, the report will use a new line for each donation, regardless of whether it is the same donor.

- If more than one GROUP AFFILIATION is selected, a new page will be printed for each group.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: GA  Group affiliation report
START WITH GROUP AFFILIATION: FIRST// ?
TO SORT ONLY UP TO A CERTAIN GROUP AFFILIATION,
     TYPE THAT GROUP AFFILIATION
     '@' MEANS 'INCLUDE NULL GROUP AFFILIATION FIELDS'
START WITH GROUP AFFILIATION: FIRST// VAH
GO TO GROUP AFFILIATION: LAST// VAH
    START WITH DONATION OR DEFERRAL DATE: FIRST// ?
TO SORT IN SEQUENCE, STARTING FROM A CERTAIN DONATION OR DEFERRAL DATE,
     TYPE THAT DONATION OR DEFERRAL DATE
    START WITH DONATION OR DEFERRAL DATE: FIRST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
GROUP AFFILIATION REPORT                          MAR 11,1993  15:48    PAGE 1
DONOR                  ABO RH   DATE          DONATE/DEFER  REACTION   DEFERRAL
-----------------------------------------------------------------------------

        GROUP AFFILIATION: VAH
FREEBLOOD,JANE T       O   NEG  DEC 10,1992   WHOLE BLOOD   NONE
FREEBLOOD,JOHN T       A   POS  DEC 10,1992   WHOLE BLOOD   NONE
GINS,RONALD            A   POS  APR 17,1991   WHOLE BLOOD   NONE
HOFFMAN,LARK                    JAN 26,1993   WHOLE BLOOD
HOFFMAN,LAURA          A   POS  FEB  4,1990   WHOLE BLOOD   NONE
HOFFMAN,LAURA          A   POS  MAY  2,1990   WHOLE BLOOD   NONE
HOFFMAN,LAURA          A   POS  MAY 12,1990   NO DONATION              HCT
MORASCH,ANNETTE        A   POS  APR 17,1991   WHOLE BLOOD   NONE
MORASCH,ANNETTE        A   POS  APR 23,1991   WHOLE BLOOD   NONE
MORASCH,ANNETTE        A   POS  AUG 21,1992   CYTAPHERESIS  NONE
OWCZARZAK,MARGARET     O   POS  APR 24,1991   WHOLE BLOOD   NONE
TALL,WILLIAM                    MAR  9,1993   WHOLE BLOOD   NONE
```

Group Donation Report (DR-DR-GD)

Based on data entered for the Donation Group field through either the Donor registration (DR) or the Donor collection/processing (DC) option, information can be retrieved regarding the donation history for all donors who donated for a particular group on any given donation. This information can then be used for reviewing previous donations.

> **NOTE:** The Donation Group field is **not** the same as the Group Affiliation field, in that it relates only to a specific donation, rather than to any of several groups with which a particular donor might wish to be affiliated. The groups from which the user may select are, however the same for both these fields (i.e., those groups designated as G or GC in the BLOOD BANK UTILITY file (#65.4)).

Example: Listing of donors' donation at Downers Grove VFW (DG-V) on January 25, 1993

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: GD  Group donation report
START WITH DONATION GROUP: FIRST// DG-V
GO TO DONATION GROUP: LAST// DG-V
    START WITH DONATION OR DEFERRAL DATE: FIRST//1-25-93 (JAN 25, 1993)
    GO TO DONATION OR DEFERRAL DATE: LAST// 1-25-93 (JAN 25, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
GROUP DONATION REPORT                              JAN 25,1993  15:52  PAGE 1
DONOR                  ABO RH   DATE          DONATE/DEFER  REACTION DEFERRAL
-------------------------------------------------------------------------------

        DONATION GROUP: PK-V
SMITH,RANDY                     JAN 25,1993   WHOLE BLOOD   NONE
        DONATION GROUP: VAH
AARDVARK,TOM           A   POS  JAN 25,1993   WHOLE BLOOD   NONE
FREEBLOOD,JANE T       O   NEG  JAN 25,1993   WHOLE BLOOD   NONE
JONES,SUSAN                     JAN 25,1993   NO DONATION             BP
SMITH,JEREMY,L.        A   NEG  JAN 25,1993   WHOLE BLOOD   NONE
SMITH,SAM              A   POS  JAN 25,1993   WHOLE BLOOD   NONE
SNERD,MORIMER                   JAN 25,1993   WHOLE BLOOD
SNERD,SALLY            B   POS  JAN 25,1993   WHOLE BLOOD   NONE
```

Mobile (Collection Site) Report (DR-DR-MC)

Based on data entered for the Collection Site field through either the Donor Registration (DR) option or the Donor Collection/Processing (DC) option, information can be retrieved regarding the donation history of all donors who donated at a particular collection site for the time period specified. This information can then be used in planning for future mobiles, etc.

Example:

```
Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: MC  Mobile (Collection Site)
report
START WITH COLLECTION SITE: FIRST// PK-V
GO TO COLLECTION SITE: LAST// PK-V
    START WITH DONATION OR DEFERRAL DATE: FIRST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!

MOBILE REPORT                                   MAR 11,1993  15:58    PAGE 1
DONOR                           DATE        DONATION        DEFERRAL REASON
-------------------------------------------------------------------------------

        COLLECTION SITE: PK-V
           DONATION GROUP: PK-V
SMITH,RANDY                     JAN 25,1993 WHOLE BLOOD
SMITH,RANDY                     JAN 25,1993 WHOLE BLOOD
           DONATION GROUP: VAH
HOFFMAN,LAURA                   MAY 12,1990 WHOLE BLOOD
HOFFMAN,LAURA                   MAY 12,1990 NO DONATION     HCT
MORASCH,ANNETTE                 APR 24,1991 WHOLE BLOOD
SEEGER,JOE                      APR 24,1991 WHOLE BLOOD
MORASCH,ANNETTE                 APR 24,1991 WHOLE BLOOD
OWCZARZAK,MARGARET              APR 24,1991 WHOLE BLOOD
HOFF,LYNN                       FEB 26,1992 WHOLE BLOOD
HOFFMAN,LAURA                   FEB 26,1992 WHOLE BLOOD
```

Donor Monthly/Holiday Recall List (DR-DR-ML)

The data entered into the Donor Scheduling/Recall field is used to provide lists which can be used to contact previous donors who had a willingness to donate at specific times or time intervals.

The dates entered for the prompts "Start with Donation or Deferral Date" and "Go to Donation or Deferral Date" merely determine the date ranges which will be included on the printed report. These **cannot** be used to exclude donors; they merely exclude information from the report.

NOTES:

- You may choose from:

1	JAN
2	FEB
3	MAR
4	APR
5	MAY
6	JUN
7	JUL
8	AUG
9	SEP
10	OCT
11	NOV
12	DEC
13	7/4
14	LABOR DAY
15	XMAS
16	EMERGENCY

- More than one holiday/month may be selected, by entering the appropriate responses to the prompts.

- The Emergency Donor Report (ED) option should be used to get the listing of emergency donors, i.e., those whose entry was 16, since this option does not allow one to specify a particular ABO/Rh.

- This report does not exclude donors who are permanently deferred. As a temporary measure, some change should be made to the donor's phone number in order to indicate that the individual should not be called.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: ML  Donor month/holiday recall
list
START WITH DONOR SCHEDULING/RECALL: FIRST// 1
GO TO DONOR SCHEDULING/RECALL: LAST// 1
  START WITH NAME: FIRST// <RET>
    START WITH DONATION OR DEFERRAL DATE: FIRST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MONTHLY RECALL LIST                          MAR 11,1993  16:00        PAGE 1
DONOR                HOME PHONE   WORK PHONE·ABO RH    LAST DATE     DONATION
-------------------------------------------------------------------------------

        DONOR SCHEDULING/RECALL: JAN
DANOT,NEWEL                                              JUN  9,1992   WHOLE BL
HOFF,LYNN            7083834943      3812553   A POS    APR 17,1991   PLASMAPH
HOFF,LYNN            7083834943      3812553   A POS    FEB 26,1992   WHOLE BL
HOFF,LYNN            7083834943      3812553   A POS    JUN 19,1992   NO DONAT
HOFF,LYNN            7083834943      3812553   A POS    OCT 26,1992   WHOLE BL
HOFFMAN,LAURA          488-4943    X3333 LAB   A POS    FEB  4,1990   WHOLE BL
HOFFMAN,LAURA          488-4943    X3333 LAB   A POS    MAY  2,1990   WHOLE BL
HOFFMAN,LAURA          488-4943    X3333 LAB   A POS    MAY 12,1990   NO DONAT
```

Patient Credits from Blood Donations (DR-DR-PC)

In order to provide feedback as to the effectiveness of any recruitment efforts directed at the friends and relatives of patients, data entered in the Patient Credit field through the Donor Collection/Processing (DC) option may be retrieved.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: PC  Patient credits from blood
donations
START WITH PATIENT CREDIT: FIRST// A
GO TO PATIENT CREDIT: LAST// Z
  START WITH DONATION OR DEFERRAL DATE: FIRST// 12-09-92 (DEC 09, 1993)
  GO TO DONATION OR DEFERRAL DATE: LAST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
PATIENT CREDIT LIST                          MAR 11,1993  16:02    PAGE 1
PATIENT                DONOR                DONATION DATE
-----------------------------------------------------------------------

ANY VET                FREEBLOOD,JOHN T       DEC 10,1992
RABBIT,RAPID           SMITH,SAM              DEC 10,1992
SCHMIDT,ALEXANDER SR   SCHMIDT,ALEXANDER      JAN 23,1993
SCHMIDT,ALEXANDER SR   NELSON,WILLIAM         JAN 23,1993
```

Apheresis Donor List (DR-DR-PL)

In order to provide a listing of those donors who had either (1) indicated that they would be willing to be apheresis donors, or (2) had not responded as to whether they were interested in apheresis, the computer searches for entries in the Apheresis Code field to find those that are either "YES" or null (i.e., empty). These donors are then included in the listing of potential apheresis donors.

The listing of potential donors will include all donation attempts within the time period specified, so that previous deferrals will be included for evaluation.

NOTES:

- Since T-6M was entered, only the donations within the past six months are included in the listing.
- Although Lynn Koffee was previously deferred for a low hematocrit, she would probably be acceptable for apheresis. However, Tom Aardvark would not, since he has a history of high blood pressure.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: PL  Apheresis donor list
  START WITH ABO GROUP: FIRST// A
  GO TO ABO GROUP: LAST// A
    START WITH RH TYPE: FIRST// <RET>
      START WITH DONATION OR DEFERRAL DATE: FIRST// T-6M
      GO TO DONATION OR DEFERRAL DATE: LAST// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
APHERESIS DONORS                                    MAR 12,1993  09:24    PAGE 1
DONOR                  HOME PHONE  WORK PHONE  DATE         DONATION    DEFERRAL
-------------------------------------------------------------------------------

        APHERESIS CODE: yes
           ABO GROUP: A


              RH TYPE: POSITIVE
FREEBLOOD,JOHN T     2222222222                DEC 10,1992 WHOLE BLOOD
KOFFEE,LYNN          7038834943  3812553       OCT 26,1992 WHOLE BLOOD
                                               OCT 25,1991 NO DONATION  HCT

        APHERESIS CODE:   EMPTY
           ABO GROUP: A


              RH TYPE: NEGATIVE
SMITH,JEREMY,L.                                JAN 25,1993 WHOLE BLOOD


              RH TYPE: POSITIVE
AARDVARK,TOM                                   JAN 27,1993 WHOLE BLOOD
                                               JAN 21,1993 NO DONATION  HCT
SMITH,SAM                                      JAN 27,1993 WHOLE BLOOD
                                               JAN 25,1993 WHOLE BLOOD
```

Donor Short Draw Report (DR-DR-SD)

In order to provide feedback to the supervisor regarding trends in short draws and need to evaluate employee performance, quality control, etc., the system searches for entries in which the "COLLECTION VOLUME" is less than 405 ml. The report also includes the "COLLECTION SITE" and whether the donor had a reaction, to enable better evaluation of the data.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: SD  Donor short draw report
  START WITH DONATION OR DEFERRAL DATE: FIRST// 1-1-93
  GO TO DONATION OR DEFERRAL DATE: LAST// 3-10-93
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
SHORT DRAW REPORT                                MAR 12,1993  09:29    PAGE 1
UNIT #      VOL  REACTION  PHLEB  DATE         SITE
-----------------------------------------------------------------------------

B23456      398  NONE      SALLY  JAN 10,1993 VAH
B23457      388  NONE      SH     JAN 10,1993 VAH
B23460      370  NONE      SALLY  FEB 02,1993 PR-V
B23463      375  NONE      SALLY  FEB 02,1993 PR-V
B23470      368  NONE      SALLY  FEB 02,1993 PR-V
```

Donor Lists/Labels/Letters (DR-DR-XD)

Printing of listings or labels for various groupings of donors can be useful for several purposes, as shown by the various examples, including:

a. listing of all donors whose most recent donation or deferral date was prior to the date specified,

b. listing of donors within a specific group affiliation whose most recent donation or deferral date was prior to the date specified,

c. labels for a donor with a specific group affiliation, to be used for directed mailings regarding upcoming mobiles,

d. labels for all donors to be used for mailing newsletters, etc.

In addition, two types of letters can be generated: previsit letters for specific recruitment efforts (Examples 4 and 5) and post-visit letters for homologous donors (Example 6). The content of these letters should be site specific and can be edited using the Edit Lab Letter file (S-EF-LL) option in the Supervisor Menu.

Example 1: Listing of all donors who have not donated within the last 12 months, to be targeted for special recruitment efforts before being deleted from the donor base

```
Select Blood bank Option: R  Reports

Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                    PRINT BLOOD DONOR LIST/LABELS/LETTERS

            1. DONOR LIST
            2. DONOR LABELS
            3. DONOR PRE -VISIT LETTERS
            4. DONOR POST-VISIT LETTERS
Select (1-4): 1
Date since last donation: T-12M  (MAY 12, 1993)

DONORS FROM A SPECIFIC GROUP AFFILIATION ? NO// <RET>  (NO)

Start with BLOOD DONOR NAME: FIRST// <RET>

Specify ABO Group and/or Rh Type ? NO// <RET>  (NO)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAY 12, 1994  15:04   VAMC                                                  Pg: 1
BLOOD BANK
NO DONATIONS SINCE MAY 17, 1993
Donor                  Last donation          Group            Home phone  Work phone
-----------------------------------------------------------------------------------
GINS,RON               APR 17, 1993  VFW                       861-8181
                                     VA HOSPITAL BLOOD CENTER  861-8181
HOFFMAN,LAURA          MAY 12, 1993  VA HOSPITAL BLOOD CENTER  488-4943    X3333 LAB
OWCZARZAK,MARGARET     APR 24, 1993  VA HOSPITAL BLOOD CENTER  895-3066    2262
WATER,RANDY            MAR  4, 1993  VA HOSPITAL BLOOD CENTER
```

NOTE: The DONATION GROUP for that specific donation date is shown on the same line as the donor's name under the heading "'GROUP." If the donor was affiliated with any other groups, they are listed on the next lines.

Example 2: Labels for all donors who have not donated within the last twelve months to be used for mailing letters to encourage them to donate before being deleted from the donor base

```
Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                        PRINT BLOOD DONOR LIST/LABELS/LETTERS

              1. DONOR LIST
              2. DONOR LABELS
              3. DONOR PRE -VISIT LETTERS
              4. DONOR POST-VISIT LETTERS
Select (1-4): 2
Date since last donation: T-12M  (MAY 12, 1993)

DONORS FROM A SPECIFIC GROUP AFFILIATION ? NO// <RET>  (NO)

Start with BLOOD DONOR NAME: FIRST// <RET>

Specify ABO Group and/or Rh Type ? NO// <RET>  (NO)

                                REMEMBER TO
             ALIGN THE PRINT HEAD ON THE FIRST LINE OF THE LABEL

                    ENTER  NUMBER OF LINES  FROM
                    TOP OF ONE LABEL TO ANOTHER: 6// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!

NEWONE DONOR
443 CARTER ST.
ALBANY, NY 12345



PATCH DONOR
7896 GARDEN CR.
OURTOWN, IL 98765



JANE FREEBLOOD
1295 PRIMROSE LN
DETROIT, MI 48987



JOHN T FREEBLOOD
1295 PRIMROSE
DETROIT, MI 48927

...
```

Example 3: Labels for donors whose group affiliation is Downer's Grove VFW POST #3857, to be used for mailing postcards regarding the upcoming blood drive to be held in Downer's Grove

```
Select Donor summary reports Option: DR  Blood donor recruitment reports

Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                    PRINT BLOOD DONOR LIST/LABELS/LETTERS

              1. DONOR LIST
              2. DONOR LABELS
              3. DONOR PRE -VISIT LETTERS
              4. DONOR POST-VISIT LETTERS
Select (1-4): 2
Date since last donation: T-8W  (MAY 5, 1994)

DONORS FROM A SPECIFIC GROUP AFFILIATION ? NO// Y  (YES)
Select DONOR GROUP AFFILIATION: DGV          DOWNERS GROVE VFW #3857

Start with BLOOD DONOR NAME: FIRST// A
Go to BLOOD DONOR NAME: LAST// Z

Specify ABO Group and/or Rh Type ? NO// <RET>  (NO)

                          REMEMBER TO
             ALIGN THE PRINT HEAD ON THE FIRST LINE OF THE LABEL

                   ENTER  NUMBER OF LINES  FROM
                   TOP OF ONE LABEL TO ANOTHER: 6// <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


DUSTY ANDY
529 CHIPETA WAY
SALT LAKE CITY, UT 24352



JANE T BLOOD
5467 VEIN COURT
ARLINGTON, TX 70506



MARTIE WASHINGTON
12 MAIN STREET
OURTOWN, TX 79786



TOM WRONG
101 CHARLATOWN ST.
PERRO, IL 33333
...
```

Example 4: Recruitment Letters for a Specific Blood Drive

```
Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                        PRINT BLOOD DONOR LIST/LABELS/LETTERS

              1. DONOR LIST
              2. DONOR LABELS
              3. DONOR PRE -VISIT LETTERS
              4. DONOR POST-VISIT LETTERS
Select (1-4): 3

Letter for a single donor ? NO// <RET>  (NO)


Date since last donation: T-6M  (NOV 13, 1993)

DONORS FROM A SPECIFIC GROUP AFFILIATION ? NO// Y  (YES)
Select DONOR GROUP AFFILIATION: VFW          VFW

Start with BLOOD DONOR NAME: FIRST// <RET>

Specify ABO Group and/or Rh Type ? NO// <RET>  (NO)

Select BLOOD DONOR LETTER: DONATION GROUP DRIVE
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

MAY 13, 1994

DONALD GINS
103 EUCLID AVE
ALBANY, NY 12009

Dear Donald,

Your church group is having a blood drive on May 31, 1994 from 10 - 2 p.m. at the VFW.

Since you have donated at previous drives, we hoped that you would be willing to do so again. Please contact Eleanor Brown at 598-5873 if you are able to do so and have not already scheduled an appointment.

I hope you can come and help make the drive a success.

Sincerely,

Example 5: Recruitment of Rare Blood Type Donors

```
Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                        PRINT BLOOD DONOR LIST/LABELS/LETTERS

              1. DONOR LIST
              2. DONOR LABELS
              3. DONOR PRE -VISIT LETTERS
              4. DONOR POST-VISIT LETTERS
Select (1-4): 3

Letter for a single donor ? NO// <RET>  (NO)


Date since last donation: T-6M  (NOV 13, 1994)

DONORS FROM A SPECIFIC GROUP AFFILIATION ? NO// <RET>  (NO)

Start with BLOOD DONOR NAME: FIRST// <RET>

Specify ABO Group and/or Rh Type ? NO// Y  (YES)
ABO GROUP: O
Rh TYPE: P

Select BLOOD DONOR LETTER: RBC ANTIGEN ABSENT, DONOR

Select RBC ANTIGEN ABSENT: 50760  e              50760
Select RBC ANTIGEN ABSENT: <RET>
Select Print Device:  [Enter Print Device Here]
```

MAY 13, 1994

Blood Bank (113)
VA Hospital
City,State,Zip

OLLIE BROWN
ANYWHERE USA

Dear Ollie,

You are a special person and a VERY special blood donor!!!!

In most cases, we only test for and talk about blood types in terms of ABO and Rh. Your ABO group is O and Rh type is POSITIVE. However, there are actually nearly 500 different blood group proteins present on the red blood cell surface. Our concern for matching blood types between donor and recipient is limited to ABO/Rh until the recipient develops antibodies to these other blood group proteins as a result of either pregnancy or transfusion.

Our testing revealed that you do not have the following blood group protein or proteins: e. The frequency of finding someone else without these factors is less than 1 per 100. This means you are a VERY special blood donor.

We have recently transfused your blood, which we can keep frozen for up to ten years, to a patient with antibodies. We would like you to come in and donate another unit as soon as it is convenient for you.

Your last donation was December 24, 1993; therefore you are eligible to donate now. You may make an appointment by calling 216-2237. Please bring this letter with you when you come in. Hope to see you soon.

Sincerely,

NAME
Blood Bank Supervisor

Example 6: Thank You Letters

```
Select Blood donor recruitment reports Option: XD  Donor lists/labels/letters


                        PRINT BLOOD DONOR LIST/LABELS/LETTERS

              1. DONOR LIST
              2. DONOR LABELS
              3. DONOR PRE -VISIT LETTERS
              4. DONOR POST-VISIT LETTERS
Select (1-4): 4

                            Post-visit letter list
                         There are 17 donors on the list

                         1. Add    a donor to   the list
                         2. Remove a donor from the list
                         3. Show the donors in  the list
                         4. Delete the donor letter list
                         5. Print  the donor letters

Select 1, 2, 3, 4, or 5: 5 Print post-visit donor letters
Print letters for visits no earlier than: T-1W  (MAY 05, 1994)
Select Print Device:  [Enter Print Device Here]
```

NOTE: An example of both a WHOLE BLOOD and a NO DONATION letter are included.

Example 1: Whole Blood

MAY 13, 1993

Blood Bank (113)
VA Hospital
ANYWHERE USA

MARY LAMB
MAIN ST.
ANYWHERE USA

Dear Mary,

Thank you for your blood donation on May 6, 1994 at the VETERANS ADMINISTRATION HOSPITAL for the WAC VETERANS ASSOCIATION donation group.

Your blood, a most precious natural resource, provides the gift of life to at least two other people. Patients' lives are saved and their health is restored as a result of blood donations by caring individuals like you. As the demand for blood is continuous, and no substitute currently exists, we sincerely urge you to continue your support of the Blood Donor Center, and to assist us in recruiting your friends to also become regular donors. Blood is one of the few things in life that you can give to others at no cost to yourself.

Your blood type is A POSITIVE. Unless you are otherwise notified, all test results for unexpected antibodies, hepatitis B virus, HIV (AIDS) virus antibody and syphilis have been found to be negative.

Remember, you have a special gift that someone else needs -- blood, the gift of life. Thank you for sharing your gift.

Sincerely,

NAME
Blood Donor Recruiter

Example 2: No Donation

May 13, 1994

Blood Bank (113)
VA Hospital
ANYWHERE, USA

WILLIAM KIDD
MAIN ST.
ANYWHERE USA

Dear William,

We greatly appreciate the effort which you made to donate on March 9, 1993 at the VETERANS ADMINISTRATION HOSPITAL.

Donors are deferred for one of two reasons, either to 1) protect the potential blood donor or 2) to protect the intended recipient. Despite the fact that we could not allow you to donate blood at this time, we urge you to continue your support of the blood donor program. If you were temporarily deferred, please call the Blood Donor Center at 216-2237 to make an appointment, if you have a change in your medical history or medications.

Thank you again,

NAME
Blood Donor Recruiter

Donor Units Supplemental Testing Prooflist (DR-DS)

Review of the donor unit supplemental testing prooflist before the actual labeling of the donor units will allow the technologist to review the test results for the current donation, as well as the previous *ABO/Rh for the donor, if any, and to determine if* the donor is listed as a "permanent deferral." If the unit has already been labeled, the labeling information (labeling tech and verification tech) will be included.

Units for which the COLLECTION DISPOSITION is other than "Prepare components" must be reviewed/edited by the supervisor before they can be released for labeling.

The print template for the report is based on spacing of 132 across, rather than the usual 80 for 8 1/2 by 11 inch page. Therefore the content has been abbreviated in the following example. The fields included on the actual report are:

DONATION OR DEFERRAL DATE
DONOR UNIT NUMBER
DONOR RECORD NUMBER
PERMANENT DEFERRAL
ABO (from donor record)
RH (from donor record)
HEPATITIS B CORE ANTIBODY (HBcAb)
ALT
HCV Antibody (HCV Ab)
COLLECTION DISPOSITION (COLL.DISP.)
COMPONENT
EXPIRATION DATE
LABELING TECH (LTc)
VERIFYING TECH (VTc)

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DS  Donor unit supplemental testing
prooflist
START WITH DONATION OR DEFERRAL DATE: FIRST// 1-25-93
GO TO DONATION OR DEFERRAL DATE: LAST// 1-29-93
Select Print Device:  [Enter Print Device Here]
```

BLOOD DONOR SUPPLEMENT JAN 27,1993 09:29 PAGE 1

DONATION DATE	UNIT#	DONOR	PDef	PR REC	HBcAb	ALT	HCV Ab	COLL.DISP ETC.
JAN 25,1993	A22222	23	YES	A NEG	NEGATIVE	ELEVATED	NEGATIVE	PREPARE C etc.
JAN 25,1993	A22223	24		B POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.
JAN 25,1993	A55555	9		A POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.
JAN 25,1993	V11234	27		O POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.
JAN 26,1993	V12345	27		AB POS	NEGATIVE	RPT.PEND	NEGATIVE	PREPARE C etc.
JAN 27,1993	X11111	18		A POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.
JAN 27,1993	X11112	6		B POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.
JAN 27,1993	X11114	9		A POS	NEGATIVE	NOT ELEV	NEGATIVE	PREPARE C etc.

NOTE:

- For unit V12345, the donor's current test results indicate an elevated ALT. In addition, the donor for A22222 has a positive HBsAg and therefore, the supervisor already entered the permanent deferral information. The collection disposition (i.e., PREPARE COMPONENTS) has not yet been changed to DISCARD.

Donor Unit Testing Prooflist (DR-DT)

The print template for the report is based on spacing of 132 across, rather than the usual 80 for 8 1/2 by 11 inch page. Therefore the content has been abbreviated in the following example. In order to provide a permanent hard copy record, by donor unit number, the report generated includes the following information:

Donation or deferral date
Donor unit number
Donor record number
Permanent deferral
ABO (from donor record)
Rh (from donor record)
ABO (from current testing)
Rh (from current testing)
Antibody screen
Syphilis serology
HBsAg
HIV Antibody
HT1
Collection disposition
Component
Component disposition
Expiration date
Labeling tech
Verifying tech

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: DT  Donor unit testing prooflist
START WITH DONATION OR DEFERRAL DATE: FIRST// 3-8-93
SGO TO DONATION OR DEFERRAL DATE: LAST// N (NOW
Select Print Device:  [Enter Print Device Here]
```

```
BLOOD DONOR LIST                                          MAR  10,1993  09:53    PAGE 1

                                   EXPIRATION
DONATION DATE UNIT #  ETC. COLL.DISP COMPONENT        DISPO.  DATE         LTc VTc
-------------------------------------------------------------------------------------

MAR  8,1993   030593  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  8,1993  SH  LB
MAR  8,1993   030893  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  8,1993  LB  SH
MAR  8,1993   030893A ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  8,1993  LB  SH
MAR  8,1993   12345A  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  8,1993  LB  SH
MAR  8,1993   12345B  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  8,1993  LB  SH
MAR  9,1993   12345C  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   12345D  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   12345E  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   23456A  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   23456B  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   23456C  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
MAR  9,1993   23456H  ETC. PREPARE C CPDA-1 RED BLOO  RELEASE APR  9,1993  LB  SH
```

NOTE:

- To review the content represented by "etc.," see the example shown in the Donor Unit Testing Prooflist (DU-DR) option in the Donor Menu, since it represents the same template.

Permanent Donor Deferral Report (DR-PD)

In order to provide current information regarding permanent deferral status to Blood Bank personnel who are drawing donors at remote sites where a computer system is not accessible, the system will generate a listing of all donors who have been designated permanent deferrals.

In an effort to protect the privacy of the donor, the listing includes only the donor's name, date of birth, and internal file number and does not include the reason for the permanent deferral. Donors who have been permanently deferred for medical history reasons, severe donor reactions, etc., are included as well as those with previous positive test results for HBsAg, HBcAb, etc.

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: PD  Permanent donor deferral report
  START WITH NAME: FIRST// <RET>
Select Print Device:  [Enter Print Device Here]


PERMANENT DONOR DEFERRAL LIST              MAY 12,1993  10:05    PAGE 1
                                                IDENTIFICATION
NAME                              DOB           NUMBER
-----------------------------------------------------------------------

        PERMANENT DEFERRAL: YES
ADAMS,JOHN                        APR  5,1967       11
HILL,JANES                        JUN 17,1968        1
JONES,SUSAN                       JAN 25,1960       16
```

Blood Product Rejection Report (DR-PR)

For those units which are collected and which subsequently have components prepared, each of the components must have a disposition entered (COMPONENT DISPOSITION) rather than having the disposition assigned to the entire collection. This report includes all of the components quarantined/discarded for the dates specified.

Because the print template for this report is based on spacing of 132 across, rather than the usual 80 for an 8 1/2 by 11 inch page, the content has been abbreviated in the above example. The fields actually included in the report are:

UNIT NUMBER
COLLECTION TIME STARTED
COLLECTION VOLUME
DATE/TIME PROCESSED
TECH
COMPONENT
DATE/TIME STORED (for component)
NET WEIGHT (for component)
COMPONENT DISPOSITION
COMPONENT DISPOSITION TIME
COMPONENT DISPOSITION COMMENT

Example:

```
Select Reports Option: DR  Donor summary reports

Select Donor summary reports Option: PR  Blood product rejection report
START WITH DONATION OR DEFERRAL DATE: FIRST// 1-1-93
GO TO DONATION OR DEFERRAL DATE: LAST// 1-31-93
Select Print Device:  [Enter Print Device Here]
```

```
PRODUCT REJECTION REPORT                                          MAY 12,1994  15:09    PAGE 1
UNIT # COLLECTION  TIME  VOL COMP PREPARATION TECH  COMPONENT      STORED          N.Wt COMPONENT DISPOSITION
-------------------------------------------------------------------------------------------------------------

        DONATION OR DEFERRAL DATE: JAN 25,1993

A22222 JAN 25,1993 15:00 450 JAN 25,1993 17:00 HEMB FRESH FROZEN PL JAN 25,1993 17:00 250 DISCARD
       JAN 25,1993  15:20                                                          +Antibody screen
```

Blood Inventory Status Reports (IS)

Example:

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: ?

   DU     Disposition-not transfused
   SU     Single unit (display/print) information ...
   UA     Units available (indate/no disposition)
   UN     Units with no disposition
   UX     Units on Xmatch by date/time xmatched

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood inventory status reports Option: <RET>
```

Disposition not Transfused (IS-DU)

For purposes of collecting data for utilization reports, etc., this report includes all units with a final disposition other than "transfused" or "modified."

> **NOTE:** The fields included depend on the DISPOSITION since information relevant for one is not the same as that for another. With the exception of Disposition-Modify, the fields are as shown above. Any DISPOSITION COMMENTS are included below the unit ID. For the modified units, the report includes the component into which the unit was modified and the new unit ID instead of the SOURCE, ABO/Rh, and DATE RECEIVED.

Example:

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: DU  Disposition-not transfused

Select DISPOSITION: ?

Select from:
   D  for DISCARD
   M  for MICROBIOLOGY/RESEARCH
   MO for MODIFY
   R  for RETURN TO SUPPLIER
   S  for SEND ELSEWHERE
   SA for SALVAGED

Select DISPOSITION: D  DISCARD
Start with Date TODAY// 1-31-93
Go    to   Date TODAY// 12-1-92  (DEC 01, 1992)
Select Print Device:  [Enter Print Device Here]


MAR 16, 1993  13:39   VAMC                                          Pg: 1
BLOOD BANK
UNIT DISPOSITION: DISCARD (from DEC  1, 1992 to JAN  31, 1993)
UNIT ID        DISP DATE      SOURCE                    ABO/Rh DATE RECEIVED
-------------------------------------------------------------------------

CPDA-1 RED BLOOD CELLS
H05224         01/28/93 14:12 AURORA AREA BLOOD BANK     A+   01/28/93 13:20
   Pediatric unit prep

RED BLOOD CELLS, FROZEN
54321          12/27/92 17:45 SELF                       A+   12/27/92 17:43
   DISCARD REASON: BAG BROKE
N12345         12/27/92 17:52 SELF                       A+   12/27/92 17:52
   DISCARD REASON: BAG BROKE
F12321         12/28/92 09:22 SELF                       A+   12/28/92 07:23
```

Single Unit (Display/Print) Information (IS-SU)

Example:

```
Select Blood inventory status reports Option: SU  Single unit (display/print)
information

Select Single unit (display/print) information Option: ?

   SD     Single unit information- display
   SP     Single unit information- print

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Single unit (display/print) information Option: <RET>
```

Single Unit History Display (IS-SU-SD)

All information entered for a given blood inventory unit ID is collected and stored with that unit ID. It remains in the system until such time as it is printed on hard copy and deleted, usually 180 days after disposition.

> **NOTE:** The system will display all of the information entered/collected for the specified unit, in a standard format, with one field followed by the next in a non-columnar fashion.

Example 1: CPDA-1 unit whose final disposition is "modified"

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: SU  Single unit (display/print)
information

Select Single unit (display/print) information Option: SD  Single unit
information- display

Select BLOOD INVENTORY UNIT ID: DAL11111
     1   DAL11111                          A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
     2   DAL11111                          A POS  RED BLOOD CELLS, WASHED
RED BLOOD CELLS, WASHED     POS   A POS RED BLOOD CELLS, WASHED
CHOOSE 1-2: 1
UNIT ID: DAL11111                        SOURCE: LIFESOURCE
  INVOICE#: ARC120992                    COMPONENT: CPDA-1 RED BLOOD CELLS
  DATE/TIME RECEIVED: DEC  9, 1992@11:49
  EXPIRATION DATE/TIME: JAN  8, 1993     ABO GROUP: A
  RH TYPE: POSITIVE                      LOG-IN PERSON: HOKE,DANNY R.
  COST: 57.00                            VOLUME (ml): 250
PATIENT XMATCHED/ASSIGNED: BLOOD 9523
  DATE/TIME UNIT ASSIGNED: DEC  9, 1992@13:09
  LAST SPECIMEN DATE XMATCHED: DEC  9, 1992@12:24
BLOOD SAMPLE DATE/TIME: DEC  9, 1992@12:24
  PHYSICIAN: SUMNER,AUDREY               XMATCH RESULT: COMPATIBLE
  XMATCH TECH: HOKE,DANNY R.             PATIENT SAMPLE ACC #: BB 1209 1
  PROVIDER NUMBER: 46
  DATE/TIME CROSSMATCHED: DEC  9, 1992@13:09
  RELEASE REASON: MODIFY while on x-match
  DISPOSITION: MODIFY                    DISPOSITION DATE: DEC  9, 1992@14:12
  DISPOSITION ENTERING PERSON: HOKE,DANNY R.
NUMBER: 1
MODIFIED TO/FROM: RED BLOOD CELLS, WASHED
  UNIT ID: DAL11111                      FROM/TO: TO

Press RETURN to continue or '^' to exit: <RET>
```

```
  ABO INTERPRETATION: A                TECH ENTERING-ABO INTERP: HOKE,DANNY R.
  RH  INTERPRETATION: POSITIVE         TECH ENTERING-RH INTERP: HOKE,DANNY R.
TEST/PROCEDURE: UNIT ABO RECHECK
COMPLETE DATE/TIME: DEC  9, 1992@12:18  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 7
WKLD CODE: ABO Cell Typing, Slide or Tube
  WKLD CODE COUNT: 1
TEST/PROCEDURE: UNIT RH RECHECK
COMPLETE DATE/TIME: DEC  9, 1992@12:18  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 7
WKLD CODE: Rh(D) Typing, Slide or Tube  WKLD CODE COUNT: 1
TEST/PROCEDURE: UNIT MODIFICATION
COMPLETE DATE/TIME: DEC  9, 1992@14:13  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 7
WKLD CODE: Packed Red Blood Cells       WKLD CODE COUNT: 1
TEST/PROCEDURE: UNIT LOG-IN/SEND-OUT
COMPLETE DATE/TIME: DEC  9, 1992@11:49  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 7                 MAJOR SECTION: BLOOD BANK
  SUBSECTION: BLOOD BANK
WKLD CODE: Blood, Component/Deriv. External Relocate
  WKLD CODE COUNT: 1

Press RETURN to continue or '^' to exit: <RET>


Select BLOOD INVENTORY UNIT ID: <RET>
```

Example 2: Unit DAL11111 (Washed Cells) which was created from the modification of the CPDA-1 Red Blood Cell Unit

```
Select Single unit (display/print) information Option: SD  Single unit
information- display

Select BLOOD INVENTORY UNIT ID: DAL11111
     1   DAL11111                          A POS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
     2   DAL11111                          A POS  RED BLOOD CELLS, WASHED
RED BLOOD CELLS, WASHED    POS   A POS RED BLOOD CELLS, WASHED
CHOOSE 1-2: 2

UNIT ID: DAL11111                        SOURCE: SELF
  INVOICE#: 00                           COMPONENT: RED BLOOD CELLS, WASHED
  DATE/TIME RECEIVED: DEC  9, 1992@14:13
  EXPIRATION DATE/TIME: DEC 10, 1992@14:12
  ABO GROUP: A                           RH TYPE: POSITIVE
  LOG-IN PERSON: HOKE,DANNY R.           COST: 57.00
  VOLUME (ml): 250
PATIENT XMATCHED/ASSIGNED: BLOOD 9523
  DATE/TIME UNIT ASSIGNED: DEC  9, 1992@13:09
  LAST SPECIMEN DATE XMATCHED: DEC  9, 1992@12:24
BLOOD SAMPLE DATE/TIME: DEC  9, 1992@12:24
  PHYSICIAN: SUMNER,AUDREY               XMATCH RESULT: COMPATIBLE
  XMATCH TECH: HOKE,DANNY R.             PATIENT SAMPLE ACC #: BB 1209 1
  PROVIDER NUMBER: 46
  DATE/TIME CROSSMATCHED: DEC  9, 1992@13:09
NUMBER: 1                          MODIFIED TO/FROM: CPDA-1 RED BLOOD CELLS
  UNIT ID: DAL11111                      FROM/TO: FROM


Select BLOOD INVENTORY UNIT ID: <RET>
```

NOTE: The system will display all of the information entered/collected for the specified unit, in a standard format, with one field followed by the next in a noncolumnar fashion.

Single Unit Information Print (IS-SU-SP)

All information entered for a given blood inventory unit ID is collected and stored with that unit ID. It remains in the system until such time as it is printed on hard copy and deleted.

Example:

```
Select Blood inventory status reports Option: SU  Single unit (display/print)
information

Select Single unit (display/print) information Option: SP  Single unit
information- print

Select BLOOD INVENTORY UNIT ID: 1118B       APOS  CPDA-1 RED BLOOD CELLS
  CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


Unit inquiry VAMC                                MAR 16,1993  14:33    PAGE 1
-------------------------------------------------------------------------------

        UNIT ID: 1118B

UNIT ID: 1118B                            SOURCE: LIFESOURCE
  INVOICE#: 011118                        COMPONENT: AS-1 RED BLOOD CELLS
  DATE/TIME RECEIVED: NOV 18, 1992@12:04
  EXPIRATION DATE/TIME: DEC 29, 1992      ABO GROUP: O
  RH TYPE: POSITIVE                       LOG-IN PERSON: HOKE,DANNY R.
  COST: 57.00                             VOLUME (ml): 330
PATIENT XMATCHED/ASSIGNED: TEST 0108P
  DATE/TIME UNIT ASSIGNED: NOV 18, 1992@12:15
  LAST SPECIMEN DATE XMATCHED: NOV 18, 1992@12:01:40
BLOOD SAMPLE DATE/TIME: NOV 18, 1992@12:01:40
  PHYSICIAN: FERGUSON,MARK                XMATCH RESULT: COMPATIBLE
  XMATCH TECH: HOKE,DANNY R.               PATIENT SAMPLE ACC #: BB 1118 1
  PROVIDER NUMBER: 5
  DATE/TIME CROSSMATCHED: NOV 18, 1992@12:15
  ABO INTERPRETATION: O                 TECH ENTERING-ABO INTERP: HOKE,DANNY R.
  RH  INTERPRETATION: POSITIVE          TECH ENTERING-RH INTERP: HOKE,DANNY R.
TEST/PROCEDURE: UNIT ABO RECHECK
COMPLETE DATE/TIME: NOV 18, 1992@12:05  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 5
WKLD CODE: ABO Cell Typing, Slide or Tube
  WKLD CODE COUNT: 1
TEST/PROCEDURE: UNIT RH RECHECK
COMPLETE DATE/TIME: NOV 18, 1992@12:05  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 5
WKLD CODE: Rh(D) Typing, Slide or Tube  WKLD CODE COUNT: 1
TEST/PROCEDURE: UNIT LOG-IN/SEND-OUT
COMPLETE DATE/TIME: NOV 18, 1992@12:04  TECH: HOKE,DANNY R.
  INSTITUTION: REGION 5
WKLD CODE: Blood, Component/Deriv. External Relocate
  WKLD CODE COUNT: 1
```

Units Available (Indate/No Disposition) (IS-UA)

"Units available" are those which are indate and have no final disposition; however, they may be crossmatched for a patient and may have been relocated. They will be displayed in order of expiration date. A total will be included for each ABO/Rh for each component, as well as an overall total for the component. In addition, if the unit is autologous or directed, the patient's name is also included.

Example 1: A Pos CPDA-1 Red Blood Cells

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: UA  Units available (indate/no
disposition)


Select: (A)ll blood components or (S)pecific component: S
Select BLOOD COMPONENT: 04060  CPDA-1 RED BLOOD CELLS      04060     PRBC  1
Select: (A)ll units or (S)pecific ABO/Rh: S
ABO GROUP: A
Rh TYPE: P
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 16, 1993  14:35   VAMC                                                Pg: 1
Transfusion Service Units of CPDA-1 RED BLOOD CELLS available (no disposition)
                                                   *Autologous/Directed
ABO Rh ID           Expiration Date    Location   Patient Assigned  Spec Date
-------------------------------------------------------------------------------

A  POS DU11112      MAR 16, 1993       Bld Bank  WASHINGTON,GEORGE 03/05 14:02
A  POS DU11113      MAR 16, 1993       Bld Bank
A  POS WA11111      APR  4, 1993       Bld Bank
A  POS WA22222      APR  4, 1993       Bld Bank
A  POS WA33333      APR  4, 1993       Bld Bank  WASHINGTON,GEORGE 03/11 14:05
A  POS WW12345      APR 13, 1993       Bld Bank  WASHINGTON,GEORGE 03/11 14:05
    Total A POS units: 6
```

Example 2: O POS CRYOPRECIPITATE displayed on CRT screen

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: UA  Units available (indate/no
disposition)


Select: (A)ll blood components or (S)pecific component: S
Select BLOOD COMPONENT: 10100  CRYOPRECIPITATE, CPDA-1   10100      CA1    1
Select: (A)ll units or (S)pecific ABO/Rh: S
ABO GROUP: O
Rh TYPE: P
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!

MAR 16, 1993  14:41   VAMC                                                Pg: 1
Transfusion Service
Units of CRYOPRECIPITATE, CPDA-1 available (no disposition)
                                                  *Autologous/Directed
ABO Rh ID            Expiration Date  Location   Patient Assigned  Spec Date
-----------------------------------------------------------------------------


O  POS R16829        APR 15, 1993     Bld Bank
O  POS 059248        APR 16, 1993     Bld Bank
O  POS C003962       APR 30, 1993     Bld Bank
O  POS C003972       APR 30, 1993     Bld Bank
O  POS C0003978      APR 30, 1993     Bld Bank
O  POS 1309768       MAY 15, 1993     Bld Bank
O  POS R18293        MAY 25, 1993     Bld Bank
    Total O POS units: 7
CRYOPRECIPITATE, CPDA-1 Total units: 7
```

Units With no Disposition (IS-UN)

Periodic review of units, both indate and outdated, which have no disposition entered, can be performed using this report. For units that have been cross matched/assigned and relocated, the most recent location and the patient assignment information are included.

A total will be included for each ABO/Rh for each component, as well as an overall total for the component.

Example:

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: UN  Units with no disposition

Select: (A)ll blood components or (S)pecific component: S
Select BLOOD COMPONENT: 04060  CPDA-1 RED BLOOD CELLS    04060     PRBC  1
Select: (A)ll units or (S)pecific ABO/Rh: A
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


JAN  3, 1993  15:22   VAMC                                          Pg: 1
Transfusion Service
Units of CPDA-1 RED BLOOD CELLS in & out date  (no disposition)
                                                 *Autologous/Directed
ABO Rh ID          Expiration Date  Location   Patient Assigned  Spec Date
-------------------------------------------------------------------------

A  POS DAL1114     JAN  8, 1993     Bld Bank
A  POS Y66666      FEB  4, 1993     Bld Bank
A  POS Y77777      FEB  4, 1993     Bld Bank  ADAMS,HOUSTON     12/28 12:35
A  POS H05336      FEB 28, 1993     Bld Bank
A  POS A55555      MAR  1, 1993     Bld Bank  SMITH,JOHN Q      12/27 06:57
A  POS X11114      MAR  3, 1993     Bld Bank
A  POS H23456      MAR 15, 1993     Bld Bank  SMITH,JOHN Q      12/27 06:57
A  POS H23457      MAR 15, 1993     Bld Bank  SMITH,JOHN Q      12/27 06:57
A  POS Q11112      MAR 15, 1993     Bld Bank  BOLE,DC           01/01 14:10
A  POS DU11112     MAR 16, 1993     Bld Bank  WASHINGTON,GEORGE 01/02 14:02
A  POS DU11113     MAR 16, 1993     Bld Bank
A  POS WA11111     APR  4, 1993     Bld Bank
A  POS WA33333     APR  4, 1993     Bld Bank  WASHINGTON,GEORGE 01/02 14:05
A  POS WW12345     APR 13, 1993     Bld Bank  WASHINGTON,GEORGE 01/02 14:05
    Total A POS units: 14
CPDA-1 RED BLOOD CELLS Total units: 14


A  NEG LG77777       FEB  1, 1993        Bld Bank
A  NEG C88885        FEB  4, 1993        Bld Bank
    Total A NEG units: 2
CPDA-1 RED BLOOD CELLS Total units: 2
ETC.
```

Units on Xmatch by Date/Time Xmatched (IS-UX)

Once specific units are crossmatched and/or assigned to a specific patient, they remain in this status until they are either released or a final disposition is entered. By including all units in this "assigned" status in chronological order by date/time assigned, this report can be used for several purposes, including:

a. evaluating which units should be canceled/released,

b. evaluating which units have been relocated and possibly transfused, for which no empty bag has been returned, and

c. providing a quick reference as to units available on a specific patient, including the date/time of the specimens used.

The location shown is the present location of the unit, based on relocation information (if any) entered into the system.

Example:

```
Select Reports Option: IS  Blood inventory status reports

Select Blood inventory status reports Option: UX  Units on Xmatch by date/time
x matched

          Units on crossmatch by date/time crossmatched

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 16, 1993  15:46   VAMC                                                    Pg: 1
Blood Bank
XMATCHED      SPECIMEN                                EXPIRES
Mo/Da TIME  Mo/Da TIME  Unit ID   Type Loc  Mo/Da TIME  Prod  Patient/SSN
-------------------------------------------------------------------------------
01/09 13:08             DAL11117   A+ BB   12/09       TFFP  BLOOD,JOHN T
01/09 13:08             DAL11118   A+ BB   12/09       TFFP  BLOOD,JOHN T
01/09 13:09 12/09 12:24 DAL11111   A+ BB   12/10 14:12 WC    BLOOD,JOHN T
01/09 13:19 12/09 12:56 DAL11115   O+ BB   01/01       PRBC  BLOOD,JANE T
01/09 13:19 12/09 12:56 DAL1116    O+ BB   01/09       PRBC  BLOOD,JANE T
01/28 15:50 12/28 15:45 TT11       O+ 111A 01/31       AS-1  SOMEBODY,SAM
01/30 12:47 12/31 12:35 Y77777     A+ BB   02/04       PRBC  ADAMS,HOUSTON
02/08       02/08 06:57 H23456     A+ BB   03/15       PRBC  SMITH,JOHN Q
02/08 07:08 02/08 06:57 H23457     A+ BB   03/15       PRBC  SMITH,JOHN Q
02/08 07:24 02/08 06:57 A55555     A+ BB   03/01       PRBC  SMITH,JOHN Q
03/05 15:15 03/05 14:02 DU11112    A+ BB   03/16       PRBC  WASHINGTON,GEORGE
03/05 15:55 03/05 14:10 Q11112     A+ BB   03/15       PRBC  BOLE,DC
03/11 14:03             Q45678     O+ BB   03/12       PREF  GARRETT,PORTLAND
03/11 14:10 03/11 14:05 WA33333    A+ BB   04/04       PRBC  WASHINGTON,GEORGE
03/11 14:11 03/11 14:05 WW12345    A+ BB   04/13       PRBC  WASHINGTON,GEORGE
```

NOTES:

- The component shown in the report is based on the entry in the abbreviation field in the BLOOD PRODUCT file (#66). It can be changed using the Edit Blood Product file (EF-BP) option in the Supervisor's Menu.
- The patients SSN does not appear in the example because of space limitations.

Blood Inventory Transaction Reports (IT)

```
Select Blood bank Option: R  Reports

Select Reports Option: IT  Blood inventory transaction reports

Select Blood inventory transaction reports Option: ?

   IN     Supplier invoices (inventory)
   IS     Special typing charges (inventory)
   IT     Supplier transactions (inventory)

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood inventory transaction reports Option: <RET>
```

Supplier Invoices (Inventory) (IT-IN)

Based on information entered on units received into inventory, either through the Log in (regular) option or through the Disposition - Modify option, the system sorts the information on the units by invoice so that all units from a supplier with the same invoice # are listed together.

NOTES:

- Since units which are modified have the final disposition of the original unit ID# entry as "modified" the modified units are entered into inventory as "new entries." These units will have "Self" listed as the supplier, with a cost of $0.00.

- This printout differs from that of the Supplier Transaction (IT) option in both the format and the count. Units which are prepared from units already in inventory do not have any entry in the cost (not even $0.00). Therefore, these are not tallied as part of the total (or subtotal) count.

- If the default of FIRST is selected as the date received, rather than a specific date, the prompt GO TO DATE RECEIVED will **not** be given. It will assume that it should go to **last**.

- The final dispositions of the units are included when appropriate (T=Transfused, D=Discarded, M=Modified, S=Send elsewhere, R=Returned to supplier, M=Microbiology).

Example 1: Printout of transactions for January

```
Select Blood inventory transaction reports Option: IN  Supplier invoices
(inventory)
Edit Supplier charges before listing invoices?  NO// <RET>

                    SUPPLIER INVOICE LIST


    START WITH DATE/TIME RECEIVED: FIRST// 12-1-92
    GO TO DATE/TIME RECEIVED: LAST// 12-31-92
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
Blood inventory list VAMC                          MAR 17,1993  12:49   PAGE 1
Component  Invoice#    DATE RCD     Unit ID       Exp date   ABO Rh    Cost  D
-------------------------------------------------------------------------------
        SOURCE: LIFESOURCE              DATE/TIME RECEIVED: DEC 28,1992  15:48
AS-1 RED B QQQ         DEC 28,1992  TT11          JAN 31,1993  O POS  57.00
AS-1 RED B QQQ         DEC 28,1992  TT22          JAN 31,1993  O POS  57.00
                                                                      ------
SUBTOTAL                                                              114.00
SUBCOUNT                                                                   2
SUBMEAN                                                                57.00
              DATE/TIME RECEIVED: DEC  1,1992  11:53
CPDA-1 RED 00          DEC  1,1992  A99999        DEC 31,1992  O POS  57.00  T
              DATE/TIME RECEIVED: DEC  9,1992  11:49
CPDA-1 RED ARC120992   DEC  9,1992  DAL11111      JAN  8,1993  A POS  57.00  M
CPDA-1 RED ARC120992   DEC  9,1992  DAL11112      JAN  1,1993  A POS  57.00  T
CPDA-1 RED ARC120992   DEC  9,1992  DAL11113      JAN  8,1993  A POS  57.00
CPDA-1 RED ARC120992   DEC  9,1992  DAL11115      JAN  1,1993  O POS  57.00
              DATE/TIME RECEIVED: DEC 27,1992  17:51
CPDA-1 RED 12345       DEC 27,1992  N12345        JAN 31,1993  A POS  57.00  M
CPDA-1 RED 123         DEC 27,1992  F12321        FEB  1,1993  A POS  57.00  M
              DATE/TIME RECEIVED: DEC 31,1992  12:37
CPDA-1 RED R45         DEC 31,1992  Y66666        FEB  4,1993  A POS  57.00
CPDA-1 RED 89          DEC 31,1992  Y77777        FEB  4,1993  A POS  57.00
                                                                      ------
SUBTOTAL                                                              513.00
SUBCOUNT                                                                   9
SUBMEAN                                                                57.00
                                                                      ------
SUBTOTAL                                                              627.00
SUBCOUNT                                                                  11
SUBMEAN                                                                57.00
        SOURCE: SELF                DATE/TIME RECEIVED: DEC 27,1992  17:39
AUTOLOGOUS 00          DEC 27,1992  AD11111       JUL 21,1992  A POS   0.00
                                                                      ------
SUBTOTAL                                                                0.00
SUBCOUNT                                                                   1
              DATE/TIME RECEIVED: DEC  6,1992  10:57
CPDA-1 WHO 00          DEC  6,1992  A88888        JAN 10,1993  A POS         S
                                                                      ------
SUBTOTAL                                                                0.00
SUBCOUNT                                                                   0
              DATE/TIME RECEIVED: DEC 27,1992  17:43
RED BLOOD  00          DEC 27,1992  54321         DEC 28,1995  A POS  57.00  D
              DATE/TIME RECEIVED: DEC 27,1992  17:52
RED BLOOD  00          DEC 27,1992  N12345        DEC 28,1995  A POS  57.00  D
              DATE/TIME RECEIVED: DEC 28,1992  07:23
RED BLOOD  00          DEC 28,1992  F12321        DEC 29,1995  A POS  57.00  D
                                                                      ------
SUBTOTAL                                                              171.00
SUBCOUNT                                                                   3
SUBMEAN                                                                57.00
              DATE/TIME RECEIVED: DEC  9,1992  14:13
RED BLOOD  00          DEC  9,1992  DAL11111      DEC 10,1992  A POS  57.00
                                                                      ------
SUBTOTAL                                                               57.00
SUBCOUNT                                                                   1
SUBMEAN                                                                57.00
                                                                      ------
```

```
Blood inventory list VAMC                          MAR 17,1993  12:49   PAGE 2
Component  Invoice#    DATE RCD     Unit ID       Exp date   ABO Rh    Cost  D
-------------------------------------------------------------------------------
SUBTOTAL                                                                228.00
SUBCOUNT                                                                     5
SUBMEAN                                                                  45.60
        SOURCE: THE BEST BLOOD CEN      DATE/TIME RECEIVED: DEC  9,1992  11:49
FRESH FROZ ARC120992   DEC  9,1992  DAL11117      DEC  9,1992  A POS  24.00
FRESH FROZ ARC120992   DEC  9,1992  DAL11118      DEC  9,1992  A POS  24.00
                                                                        ------
SUBTOTAL                                                                 48.00
SUBCOUNT                                                                     2
SUBMEAN                                                                  24.00
                                                                        ------
SUBTOTAL                                                                 48.00
SUBCOUNT                                                                     2
SUBMEAN                                                                  24.00
                                                                        ------
TOTAL                                                                   903.00
COUNT                                                                       18
MEAN                                                                     50.85
```

Example 2: Review of units logged in on January 28, 1993

```
Select Blood inventory transaction reports Option: IN  Supplier invoices
(inventory)
Edit Supplier charges before listing invoices?  NO// <RET>

                    SUPPLIER INVOICE LIST


    START WITH DATE/TIME RECEIVED: FIRST// 1-28-93
    GO TO DATE/TIME RECEIVED: LAST// 1-28-93
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


Blood inventory list VAMC                          MAR 16,1993  15:53    PAGE 1
Component  Invoice#    DATE RCD     Unit ID       Exp date   ABO Rh    Cost  D
-------------------------------------------------------------------------------
        SOURCE: LIFESOURCE
              DATE/TIME RECEIVED: JAN 28,1993  13:12
CPDA-1 RED 04          JAN 28,1993  G44444        FEB 18,1993  A POS  57.00
CPDA-1 RED 04          JAN 28,1993  G55555        FEB 18,1993  B POS  57.00
CPDA-1 RED 04          JAN 28,1993  G66666        FEB 18,1993  B POS  57.00
CPDA-1 RED 04          JAN 28,1993  045224        FEB 28,1993  A POS  57.00
CPDA-1 RED 04          JAN 28,1993  H05336        FEB 28,1993  A POS  57.00
CPDA-1 RED 04          JAN 28,1993  H05224        FEB 28,1993  A POS  57.00  D
                                                                      ------
SUBTOTAL                                                             342.00
SUBCOUNT                                                                  6
SUBMEAN                                                               57.00
              DATE/TIME RECEIVED: JAN 28,1993  13:12
FRESH FROZ 04          JAN 28,1993  F11111        JAN  3,1994  A POS  31.00
FRESH FROZ 04          JAN 28,1993  G22222        JAN  1,1994  A POS  31.00
                                                                      ------
SUBTOTAL                                                              62.00
SUBCOUNT                                                                  2
SUBMEAN                                                               31.00
              DATE/TIME RECEIVED: JAN 28,1993  08:20
PLATELETS, 345678      JAN 28,1993  C44444        JAN 31,1993  O NEG  33.00
PLATELETS, 345678      JAN 28,1993  C22222        JAN 31,1993  O NEG  33.00
PLATELETS, 345678      JAN 28,1993  C33333        JAN 31,1993  O NEG  33.00
PLATELETS, 345678      JAN 28,1993  C55555        JAN 31,1993  O NEG  33.00
                                                                      ------
SUBTOTAL                                                             132.00
SUBCOUNT                                                                  4
SUBMEAN                                                               33.00
                                                                      ------
SUBTOTAL                                                             536.00
SUBCOUNT                                                                 12
SUBMEAN                                                               44.66
```

```
Blood inventory list VAMC                          MAR 16,1993  15:53    PAGE 2
Component  Invoice#    DATE RCD     Unit ID       Exp date   ABO Rh   Cost  D
-------------------------------------------------------------------------------

        SOURCE: SELF
              DATE/TIME RECEIVED: JAN 28,1993  08:27
CPD RED BL 00          JAN 28,1993  E11111        JAN 29,1993  A POS  28.00
                                                                      ------
SUBTOTAL                                                               28.00
SUBCOUNT                                                                   1
SUBMEAN                                                                28.00
              DATE/TIME RECEIVED: JAN 28,1993  08:20
CPD WHOLE  345678      JAN 28,1993  E11111        FEB  3,1993  A POS  56.00  M
CPD WHOLE  345678      JAN 28,1993  E11112        FEB  3,1993  B POS  56.00
                                                                      ------
SUBTOTAL                                                              112.00
SUBCOUNT                                                                   2
SUBMEAN                                                                56.00
              DATE/TIME RECEIVED: JAN 28,1993  08:27
LIQUID PLA 00          JAN 28,1993  E11111        FEB  3,1993  A POS  28.00
                                                                      ------
SUBTOTAL                                                               28.00
SUBCOUNT                                                                   1
SUBMEAN                                                                28.00
              DATE/TIME RECEIVED: JAN 28,1993  13:56
PEDIATRIC  00          JAN 28,1993  H05336PA      JAN 28,1993  A POS
              DATE/TIME RECEIVED: JAN 28,1993  14:01
PEDIATRIC  00          JAN 28,1993  H05336PB      JAN 28,1993  A POS
PEDIATRIC  00          JAN 28,1993  H05336PC      JAN 28,1993  A POS
              DATE/TIME RECEIVED: JAN 28,1993  14:02
PEDIATRIC  00          JAN 28,1993  H05336PD      JAN 28,1993  A POS
              DATE/TIME RECEIVED: JAN 28,1993  14:03
PEDIATRIC  00          JAN 28,1993  H05336PE      JAN 28,1993  A POS
              DATE/TIME RECEIVED: JAN 28,1993  14:04
PEDIATRIC  00          JAN 28,1993  H05336PF      JAN 28,1993  A POS
              DATE/TIME RECEIVED: JAN 28,1993  14:06
PEDIATRIC  00          JAN 28,1993  H05336PG      JAN 28,1993  A POS
                                                                      ------
SUBTOTAL                                                                0.00
SUBCOUNT                                                                   0
              DATE/TIME RECEIVED: JAN 28,1993  12:28
POOLED PLA 00          JAN 28,1993  P22222        JAN 28,1993  O POS  66.00
                                                                      ------
SUBTOTAL                                                               66.00
SUBCOUNT                                                                   1
SUBMEAN                                                                66.00
                                                                      ------
SUBTOTAL                                                              234.00
SUBCOUNT                                                                   5
SUBMEAN                                                                46.80
                                                                      ------
TOTAL                                                                 770.00
COUNT                                                                     17
MEAN                                                                   46.50
```

Special Typing Charges (IT-IS)

Based on information entered through the Log-in (special) option in the Inventory Menu, the system tallies all special charges for a specified time period.

Example:

```
Select Reports Option: IT  Blood inventory transaction reports

Select Blood inventory transaction reports Option: IS  Special typing charges
(inventory)

                          TYPING CHARGE LIST


Edit Supplier typing charges before listing ?  NO// <RET>
Start with Date TODAY// 1-28-93  (JAN 28,1993)
Go    to   Date TODAY// 1-28-93  (JAN 28,1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


Inventory list                                        MAR 16,1993  15:55    PAGE 1
Donor ID      Component          Source      Invoice# Date/time rec'd      Cost
Log-in tech    ABO Rh            Expiration date         Vol(ml)          Typing
 RBC ANTIGEN ABSENT
-------------------------------------------------------------------------------

56H67890      CPDA-1 RED BLOOD C ALBANY AR          05 JAN 28,1993  12:30  56.75
HEMBRY,SUE       O POS           FEB 18,1993                 250            12.00

-------------------------------------------------------------------------------

24567H        CPDA-1 RED BLOOD C ALBANY AR          08 JAN 28,1993  13:30  56.75
HEMBRY,SUE       A POS           FEB 19,1993                 250             2.00

-------------------------------------------------------------------------------

89345H        CPDA-1 RED BLOOD C ALBANY AR          08 JAN 28,1993  14:30  56.75
HEMBRY,SUE       A POS           FEB 19,1993                 250            12.00

===============================================================================
```

Supplier Transactions (Inventory) (IT-IT)

Based on information entered on units received into inventory, either through the Log-in (regular) option or through the Disposition Modify option, the system sorts the information on units by component, then by date received, then by ABO, and then by Rh type, to provide a transaction summary for a specified time period.

This printout differs from that of the Supplier Invoices (IN) option in both the format and the count. Since the count is based on the unit ID, units which are prepared from units already in inventory are tallied as part of the total. In fact, pooled units are tallied as the # of units which were put into the pool.

Since units which are modified have the final disposition of the original unit ID# as "modified," the modified units are entered into inventory as "new entries." These units will have "Self" listed as the supplier with an invoice number of "unknown" and a cost of $0.00.

NOTES:

- The final dispositions of the units are included when appropriate (T=Transfused, D=Discarded, MO=Modified, S=Send elsewhere, R=Returned to supplier, M=Microbiology).
- Because of space restrictions, the component (and the final disposition, if appropriate) will be shown in an abbreviated version.

Example:

```
Select Reports Option: IT  Blood inventory transaction reports

Select Blood inventory transaction reports Option: IT  Supplier transactions
(inventory)


          BLOOD PRODUCTS: ITEMIZED TRANSACTIONS LIST
Edit supplier charges before listing invoices?  NO// <RET>
Start with Date TODAY// 7-1-92  (JUL 01, 1992)
Go    to   Date TODAY// 7-31-92  (JUL 31, 1992)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 16, 1993  16:12   VAMC                                                    Pg: 1
BLOOD BANK INVOICES (from JUL  1, 1992 to JUL 31, 1992)
COMPONENT     DATE        INVOICE# COUNT  UNIT NO    TYPE   EXP DATE      AMOUNT D
-----------------------------------------------------------------------------------

Supplier: EDISON REGIONAL BC

PRBC      JUL 12, 1992  12            1) 99Z11111   A P AUG 16, 1992      57.00
                        123           2) 99H11111   A P AUG 16, 1992      57.00
                                                                         --------
                                                    PRBC      cost       114.00

Supplier: LIFESOURCE

PRBC      JUL  6, 1992  12            1) ZA11112    A P AUG 10, 1992      57.00 MO
                        04060         2) ZA11111    A P AUG 10, 1992      57.00 MO
          JUL 10, 1992  12            3) 06RR22     A P AUG 14, 1992      57.00
                        23            4) 06RR33     A P AUG 14, 1992      57.00
                                      5) 06RR44     A P AUG 14, 1992      57.00
                        33            6) 654321     A P AUG 14, 1992      57.00
                        123           7) 12345      A P AUG 14, 1992      57.00 MO
                                      8) 54321      A P AUG 14, 1992      57.00 MO
                                      9) 654321     A P AUG 14, 1992      57.00
                        345          10) 06RR11     A P AUG 14, 1992      57.00
                        456          11) 123456     A P AUG 14, 1992      57.00 M
          JUL 12, 1992  34           12) QQ22222    A P AUG 16, 1992      57.00
          JUL 31, 1992  111          13) FS073102   A P AUG 20, 1992      57.00
                        768          14) FS11189    A P AUG 29, 1992      57.00
                        899          15) FS11112    A P SEP  4, 1992      57.00
                        999          16) FS11111    A P SEP  4, 1992      57.00
                                                                         --------
                                                    PRBC      cost       912.00

P1/5      JUL  2, 1992  789           1) F99999     A P JUL  7, 1992      33.00 MO
          JUL  6, 1992  070692        2) LS11111    A P JUL 11, 1992      33.00 MO
                                      3) LS11112    A P JUL 11, 1992      33.00 MO
                                      4) LS11113    A P JUL 11, 1992      33.00 MO
                                      5) LS11114    A P JUL 11, 1992      33.00
                                      6) LS11115    A P JUL 11, 1992      33.00
          JUL  7, 1992  345           7) K11111     A P JUL 12, 1992      33.00 MO
                                      8) K11112     A P JUL 12, 1992      33.00 MO
                                      9) K11113     A P JUL 12, 1992      33.00 MO
                                     10) K11114     A P JUL 12, 1992      33.00 MO
                                     11) K11115     A P JUL 12, 1992      33.00 MO
          JUL  9, 1992  567          12) JU11111    A P JUL 14, 1992      33.00
                                     13) JU11112    A P JUL 14, 1992      33.00
                                     14) JU11113    A P JUL 14, 1992      33.00 MO
                                     15) JU11114    A P JUL 14, 1992      33.00
                                     16) JU11115    A P JUL 14, 1992      33.00 MO
          JUL 13, 1992  11           17) PL11111    A P JUL 18, 1992      33.00 MO
                                     18) PL11112    A P JUL 18, 1992      33.00 MO
                                     19) PL11113    A P JUL 18, 1992      33.00
                                     20) PL11114    A P JUL 18, 1992      33.00 MO
                                     21) PL11115    A P JUL 18, 1992      33.00 MO
          JUL 17, 1992  345          22) JK11112    A P JUL 22, 1992      33.00 MO
                                     23) JK11113    A P JUL 22, 1992      33.00 MO
                                     24) JK11114    A P JUL 22, 1992      33.00
                                     25) JK11115    A P JUL 22, 1992      33.00
```

```
MAR 16, 1993  16:12   VAMC                                                    Pg: 2
BLOOD BANK INVOICES (from JUL  1, 1992 to JUL 31, 1992)
COMPONENT     DATE       INVOICE# COUNT  UNIT NO    TYPE   EXP DATE     AMOUNT D
-----------------------------------------------------------------------------------

Supplier: LIFESOURCE

P1/5
          JUL 30, 1992  567          27) PT11111    A P AUG  4, 1992     33.00 MO
                                     28) PT11112    A P AUG  4, 1992     33.00 MO
                                     29) PT11113    A P AUG  4, 1992     33.00 MO
                                     30) PT11114    A P AUG  4, 1992     33.00 MO
                                     31) PT11115    A P AUG  4, 1992     33.00 MO
                                                                        --------
                                                    P1/5       cost     1023.00

AS-1      JUL 13, 1992  RRR           1) PP11       O P AUG 17, 1992     57.00
                                      2) PP33       O P AUG 17, 1992     57.00
                                                                        --------
                                                    AS-1       cost      114.00

Supplier: NORTHERN ILLINOIS BB

P1/3      JUL  9, 1992  567           1) JU22221    A P JUL 12, 1992     33.00
                                      2) JU22222    A P JUL 12, 1992     33.00
                                      3) JU22223    A P JUL 12, 1992     33.00
                                      4) JU22224    A P JUL 12, 1992     33.00
                                      5) JU22225    A P JUL 12, 1992     33.00
                                                                        --------
                                                    P1/3       cost      165.00

Supplier: SELF

R1/D      JUL  7, 1992  00            1) W11113A    A P JUL  8, 1992
                                      2) W11113B    A P JUL  8, 1992
                                      3) W11113C    A P JUL  8, 1992
                                                                        --------
                                                    R1/D       cost        0.00

WC        JUL  6, 1992  00            1) ZA11111    A P JUL  7, 1992     57.00 MO
                                      2) ZA11112    A P JUL  7, 1992     57.00 MO
                                                                        --------
                                                    WC         cost      114.00

PLTS      JUL  2, 1992  00            1) PO11111    A P JUL  2, 1992        66 D
          JUL  6, 1992  00            2) PZ11111    A P JUL  6, 1992        66 MO
          JUL  7, 1992  00            3) KP11112    A P JUL  7, 1992        66 MO
                                      4) PK11111    A P JUL  7, 1992        66 T
          JUL 13, 1992  00            5) PL1        A P JUL 13, 1992       165
          JUL 17, 1992  00            6) PL33333    A P JUL 17, 1992        66
          JUL 30, 1992  00            7) PY11111    A P JUL 30, 1992        99
                                                                        --------
                                                    PLTS       cost      594.00

WC/I      JUL  6, 1992  00            1) ZA11111    A P JUL  7, 1992     57.00
                                      2) ZA11112    A P JUL  7, 1992     57.00
                                                                        --------
                                                    WC/I       cost      114.00
```

```
MAR 16, 1993  16:13   VAMC                                                Pg: 3
BLOOD BANK INVOICES (from JUL  1, 1992 to JUL 31, 1992)
COMPONENT     DATE      INVOICE# COUNT  UNIT NO    TYPE   EXP DATE     AMOUNT D
-------------------------------------------------------------------------------

Supplier: SELF

PP/P      JUL  7, 1992  00          1) KP11112    A P JUL  7, 1992        66 T
                                                                       --------
                                                  PP/P      cost        66.00

                                                                       --------
Total unit count (all components): 70             Total     cost      3183.00
AS-1 = AS-1 RED BLOOD CELLS
P1/3 = PLATELETS, 20-24 C, 3 DAY EXP.
P1/5 = PLATELETS, 20-24 C, 5 DAY EXP.
PLTS = POOLED PLATELETS
PP/P = POOLED PLATELETS, PLASMA REMOVED
PRBC = CPDA-1 RED BLOOD CELLS
R1/D = CPDA-1 RED BLOOD CELLS, DIVIDED UNIT
WC   = RED BLOOD CELLS, WASHED
WC/I = RED BLOOD CELLS, WASHED, IRRADIATED
```

Patient Accession List (PL)

Printing a listing of all specimens received on a daily basis provides a quick reference as to whether a specimen was received and, more specifically, what tests were ordered on the specimen.

> **NOTE:** The initials of the tech, which are included, are based on the last set of initials captured in the ACCESSION file (#68). These are updated whenever additional data is verified or additional units are cross matched.

```
Select Reports Option: PL  Patient accession list

                    BLOOD BANK ACCESSION LIST
Accession list date:  MAR 06, 1993  OK ? YES// N  (NO)

Select DATE: T-1  (MAR 05, 1993)
Start with Acc #: FIRST // <RET>
Go    to   Acc #: LAST // <RET>
LIST BY PATIENT ? NO// Y  (YES)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!

MAR 16, 1993  16:15   VAMC                                          Pg: 1
LABORATORY SERVICE
BLOOD BANK ACCESSIONS for MAR  5, 1993  BY PATIENT
# =Not VA patient                    % =Incomplete
Count  ID   Patient              ACC# Specimen date        Test            Tech
-------------------------------------------------------------------------------
 1)  4773  BOLE,DC
           785-20-4773  A POS       4 03/05/93 14:10    TYPE & HOLD          SH
                                    6 03/05/93 15:53    TRANSFUSION REQUEST  SH
 2)  1171  DEARMOND,MIAMI
           216-18-1171             10 03/05/93 16:10   %COOMBS, DIRECT/INDI
 3)  0456P DOE,JOE
           402-03-0456P  A POS      5 03/05/93 15:23    ABO/RH TYPING        SH
 4)  8444  FARMER,OMAHA
           234-67-8444              8 03/05/93 16:09    COOMBS, DIRECT/INDI  SH
 5)  4531  GARRETT,PORTLAND
           535-10-4531  O POS       9 03/05/93 16:09    COOMBS, DIRECT/INDI  SH
 6)  1234  HENDRY,JOHN
           234-07-1234              7 03/05/93 16:07    COOMBS, DIRECT/INDI  SH
 7)  2369  TALL,WILLIAM
           741-85-2369  A POS       1 03/05/93 11:13   %COOMBS, DIRECT/INDI  FS
                                    2 03/05/93 11:13    TRANSFUSION REQUEST  FS
```

> **NOTE:** Both the accession date and the accession number reflect the date the specimen was accessioned, regardless of the collection date/time. To determine the collection date/time for specimens entered after some delay (e.g., computer downtime), it is necessary to use the Show List of Accessions for a Patient (PA) option in the Inquiries Menu.

Transfusion Reaction Count (TC)

This option evaluates those transfusion reactions which are associated with units, i.e., the data comes from the BLOOD INVENTORY file #65. It provides tallies of reactions by type and component for a specified disposition date range. However, unlike the Transfusion Reactions Report [LRBLIPTR], it does not list the specific units involved.

No attempt is made to determine how many specific patients were involved, i.e., duplicates for the same patient are not eliminated, since this would require an interpretation of the specific case.

> **NOTE:** These tallies are also included in the Blood Bank Administrative Report (R-WK-AD).

Example:

```
Select Reports Option: TC  Transfusion reaction count
Start with Date TODAY// 1-1-93  (JAN 01, 1993)
Go    to   Date TODAY// <RET> MAR 16, 1993
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 16, 1993  16:19   VAMC                                                Pg: 1
TRANSFUSION REACTION COUNTS FROM JAN  1, 1993 TO MAR 16, 1993
REACTION                        COUNT     COMPONENT SUBCOUNT
-----------------------------------------------------------------------------

FEBRILE NON-HEMOLYTIC             2
                                          PRBC          1
                                          ALP           1

ALLERGIC NONHEMOLYTIC             1
                                          PRBC          1

ALP  = AUTOLOGOUS LIQUID PLASMA
PRBC = CPDA-1 RED BLOOD CELLS
```

Transfusion Reaction Report (TR)

This option lists patients experiencing transfusion reactions for a specified period of time. The print template for the report is based on spacing of 132 across, rather than the usual 80 for 8 1/2 by 11 inch page. Therefore the content has been abbreviated in the following example.

Example:

```
Select Reports Option: TR  Transfusion reactions report
START WITH DISPOSITION DATE: FIRST// 1/1/93
GO TO DISPOSITION DATE: LAST//  <RET>
Select Print Device:  [Enter Print Device Here]
```

```
TRANSFUSION REACTION REPORT                          AUG 23,1994  16:58    PAGE 1
PATIENT                      DONOR ID #  ABO  Rh   COMPONENT              EXPIRATION DATE
DISPOSITION DATE   RXN.
-----------------------------------------------------------------------------------------
WASHINGTON,GEORGE 592888888  WA33333     A    POS  CPDA-1 RED BLOOD CEL  APR  4,1993
MAR 17,1993  16:19 YES
                                     DELAYED HEMOLYTIC
ANDY,DUSTY 089485948       L78977      A    POS  CPDA-1 RED BLOOD CEL  JUL 23,1993
JUN 18,1993  10:11 YES ALLERGIC NONHEMOLYTIC
BEAR,YOGI 004958671          LS12222     O    NEG  CPDA-1 RED BLOOD CEL  JAN 19,1994
JAN 12,1994  12:15 YES ALLERGIC NONHEMOLYTIC
BEAR,YOGI 004958671          LS12223     O    NEG  CPDA-1 RED BLOOD CEL  JAN 19,1994
JAN 12,1994  12:25 YES
```

Phenotyped Units Available (UP)

When attempting to find blood for a patient with irregular antibodies, units in inventory which might be acceptable, based on their phenotyping, can be located in either the US option in the Patient Menu or in this option. Unlike the Select Units for Patient (P-RS-US) option in the Patient Menu, this option has no point of reference for ABO, Rh, or for which antibody(ies) are present. In addition, this option excludes only expired units, not those which are currently assigned/xmatched on another patient.

Example:

```
Select Reports Option:  UP Phenotyped units available

Phenotyped units
Select ABO group: A
Select Rh type: POS
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!

MAR 16, 1993  16:21   VAMC                                                  Pg: 1
LABORATORY SERVICE                    A POS  Phenotyped units
Count Unit ID       Exp date          Antigen(s) present  | Antigen(s) absent
-------------------------------------------------------------------------------

CPDA-1 RED BLOOD CELLS:
  1) DU11112        MAR 16, 1993
Assigned:WASHINGTON,GEORGE                                  |            C K E
-------------------------------------------------------------------------------
  2) DU11113        MAR 16, 1993                            |            C K E
-------------------------------------------------------------------------------
  3) WA11111        APR  4, 1993                            |            C K E
-------------------------------------------------------------------------------
  4) WA22222        APR  4, 1993                        C   |
-------------------------------------------------------------------------------
  5) WA33333        APR  4, 1993
Assigned:WASHINGTON,GEORGE                                  |            C K E
-------------------------------------------------------------------------------
```

NOTE: If more than one red cell component is present in stock, or more than one ABO/Rh would be acceptable, this may be repeated as often as necessary to obtain a complete listing.

Blood Utilization & Summary Reports (UR)

```
Select Blood bank Option: R  Reports

Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: ?

   AA     Crossmatch/Transfusions by Specialty/Physician
   AR     Autologous disposition report
   CT     Crossmatch:Transfusion report
   IS     Unit issue book entries
   IT     Inappropriate transfusion requests report
   PT     Prolonged transfusion times
   RS     Transfused RBC for treating specialty
   TH     Patient transfusions & hematology results
   TR     Transfusion data report
   TS     Transfusions by treating specialty/physician
   TX     Transfusion follow-up tests

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood utilization & summary reports Option: <RET>
```

Crossmatch/Transfusions by Specialty/Physician (UR-AA)

In order to meet the requirements of the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO), data is needed to determine ordering patterns by treating specialty/physician. This option generates such a report, either in detailed or in summary format.

This report uses the data that is captured for the crossmatch in the specimen multiple, i.e., field 65.02,.03. This is captured during specimen accessing in the P-SL [LRBLPLOGIN] option and put in the LAB ORDER ENTRY file (#69), field 7 and in field 68.02,6.5 PRACTITIONER. It is **not** based on the REQUESTING PERSON entered with the component request since at that present time, the individual component request information is **not** stored. This component request information was intended for short term use only.

The transfusion data can also be evaluated by treating specialty using the R-UR-TS [LRBLITS] option. That report uses the treating specialty and MD associated with the transfusion that is captured at the time the transfusion data is entered.

CALCULATIONS

1. Data is included for ALL red cell components for which the entry in the BLOOD PRODUCT file (field 66,.27) is one of the following: WHOLE BLOOD, RBC, FROZEN RBC, DEGLYC RBC, LEUCODEPLETED RBC, and WASHED RBC.

2. All donation types are included. However, the detailed summary, will indicate autologous units with an "*."

3. As noted on the detailed summary heading, shown in Example 2, crossmatches for which the crossmatch result = CD, CF, or I are not included in the crossmatch-transfusion ratio even though these crossmatches are included on the listing.

4. For those physicians/treating specialty in which the # transfused = 0, C/T ratio is given as NA since the computer cannot divide by 0.

Some things to remember include:

- Data can be retrieved retrospectively for any designated date range for which data is still available in the BLOOD INVENTORY file #65.

- Prior to generation of the report, care should be taken to make sure that all of the transfusion data has been entered for the date range selected. If the transfusion data has not been entered, the data will be skewed, reflecting fewer transfusions.

- If no RELEASE REASON is entered through the I-UR option, this information will be included in the detailed summary.

Example 1: Summary report by treating specialty/physician

```
Select Blood utilization & summary reports Option: AA  Crossmatch/Transfusions
by Tx Specialty/Physician

     Crossmatch:Transfusion Report by Treating Specialty and Physician

Start with Date TODAY// 11-1-91      11-1-92  (NOV 01, 1991)
Go    to   Date TODAY// 11-1-92  (NOV 01, 1992)

Print only summary of crossmatches and transfusions ? YES// <RET>  (YES)

Print summary by physician only ? YES// N  (NO)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
DEC  4, 1992  15:35   St. Elsewhere VAMC                                Pg: 1
LABORATORY SERVICE
CROSSMATCH:TRANSFUSIONS (from: NOV  1, 1992 to NOV  1, 1992)
-----------------------------------------------------------------------------
This report includes the following administrative categories:
WHOLE BLOOD, RBC, FROZEN RBC, DEGLYC RBC, LEUCODEPLETED RBC, and WASHED RBC.

CARDIOLOGY                    Units Xm'd:   8     Tx'd:   2    C/T: 4.000
  BROWN,SUSAN                 Units Xm'd:   6     Tx'd:   0    C/T: NA
  PERRY,BENJAMIN              Units Xm'd:   2     Tx'd:   2    C/T: 1.000

CARDIOPULMONARY               Units Xm'd:   4     Tx'd:   0    C/T: NA
  FRANK,LARRY E.              Units Xm'd:   4     Tx'd:   0    C/T: NA

GASTROINTESTINAL              Units Xm'd:   2     Tx'd:   2    C/T: 1.000
  JENKINS,LINDA               Units Xm'd:   2     Tx'd:   2    C/T: 1.000

GENERAL SURGERY               Units Xm'd:   2     Tx'd:   0    C/T: NA
  SMITH,SUNIL                 Units Xm'd:   2     Tx'd:   0    C/T: NA

INTERMEDIATE CARE             Units Xm'd:   2     Tx'd:   2    C/T: 1.000
  SONERU,MARY    MD           Units Xm'd:   2     Tx'd:   2    C/T: 1.000

ORTHOPEDIC                    Units Xm'd:   3     Tx'd:   3    C/T: 1.000
  SHIFFMAN,KEVIN D.           Units Xm'd:   3     Tx'd:   3    C/T: 1.000

PERIPHERAL VASCULAR           Units Xm'd:   2     Tx'd:   0    C/T: NA
  HODGKINS,DAVID     MD       Units Xm'd:   2     Tx'd:   0    C/T: NA

ALL TREATING SPECIALTIES      Total Xm'd:  23     Tx'd:   9    C/T: 2.556
```

Example 2: Detailed report by treating specialty/physician

```
Select Blood utilization & summary reports Option: AA Crossmatch/Transfusions
by Tx Specialty/Physician

     Crossmatch:Transfusion Report by Treating Specialty and Physician

Start with Date TODAY// 11-1-92   (NOV 01, 1992)
Go    to   Date TODAY// 11-1-92  (NOV 01, 1992)

Print only summary of crossmatches and transfusions ? YES// N  (NO)

Select Print Device:  [Enter Print Device Here]


DEC  4, 1992  15:36   ST. Elsewhere VAMC                              Pg: 1
LABORATORY SERVICE
CROSSMATCH:TRANSFUSIONS (from: NOV  1, 1992 to NOV  1, 1992)
PATIENT              * = AUTOLOGOUS  SSN
BLOOD SAMPLE DATE   UNIT ID        XM
-----------------------------------------------------------------------------
This report includes the following administrative categories:
WHOLE BLOOD, RBC, FROZEN RBC, DEGLYC RBC, LEUCODEPLETED RBC, and WASHED RBC.

The following abbreviations are used to indicate crossmatch results:
C=COMPATIBLE
CD=COMPATIBLE, DON'T TRANSFUSE
CF=COMPATIBLE, FURTHER STUDY NEEDED
I=INCOMPATIBLE, UNSAFE TO TRANSFUSE
IG=INCOMPATIBLE, GIVE WITH BLOOD BANK DIRECTOR APPROVAL
CD, CF, and I are not included in crossmatch-transfusion calculations.
-----------------------------------------------------------------------------
                    TREATING SPECIALTY: CARDIOLOGY

                              PHYSICIAN: BROWN,SUSAN
JOHNSON,CHARLES,L                400-24-9222
11/01/92 09:23      1357198        C  Returned from surgery
11/01/92 09:23      1357199        C  Returned from surgery
11/01/92 09:23      1357204        C  Returned from surgery
11/01/92 09:23      1357205        C  Returned from surgery
11/01/92 09:23      1357207        C  Returned from surgery
11/01/92 09:23      1733511        C  Returned from surgery

BROWN,SUSAN                  Units Xm'd:   6     Tx'd:   0    C/T: NA

                              PHYSICIAN: PERRY,BENJAMIN
JAMES,KENNETH                    324-30-7877
11/01/92 10:39      V31012         C  TRANSFUSED
11/01/92 10:39      V31000         C  TRANSFUSED

PERRY,BENJAMIN               Units Xm'd:   2     Tx'd:   2    C/T: 1.000


CARDIOLOGY                   Units Xm'd:   8     Tx'd:   2    C/T: 4.000
```

```
DEC  4, 1992  15:36   St. Elsewhere VAMC                                Pg: 2
LABORATORY SERVICE
CROSSMATCH:TRANSFUSIONS (from: NOV  1, 1992 to NOV  1, 1992)
PATIENT                * = AUTOLOGOUS  SSN
BLOOD SAMPLE DATE   UNIT ID        XM
-----------------------------------------------------------------------------
                    TREATING SPECIALTY: CARDIOPULMONARY

                             PHYSICIAN: FRANK,LARRY
GREEN,WILLIAM R                353-03-0993
11/01/92 21:58      V31006         C  Returned from surgery
11/01/92 21:58      V31039         C  Returned from surgery
11/01/92 21:58      V31046         C  Returned from surgery
11/01/92 21:58      V31061         C  Returned from surgery

FRANK,LARRY E.                  Units Xm'd:   4     Tx'd:   0    C/T: NA


CARDIOPULMONARY                 Units Xm'd:   4     Tx'd:   0    C/T: NA

ETC.
```

Autologous Disposition Report (UR-AR)

This option allows review of autologous units according to type of disposition. In addition to the patient identification and the unit information, the number of days in inventory is calculated. By printing both types of reports, it is easy to evaluate the number of units available and the number of units transfused to determine the rate of over ordering. If the listing of transfused patients is also compared to the transfusion record for those patients, it is also possible to calculate the rate of under-utilization, i.e., those patients who also required homologous (allogeneic) units.

Example 1: Autologous units which have been transfused

```
Select Blood utilization & summary reports Option: AR  Autologous disposition
report

          LIST OF AUTOLOGOUS UNIT DISPOSITIONS BY DATE UNIT RECEIVED

Select (T)ransfusions or (A)ll other dispositions: T
Start with Date TODAY// 5-1-93  (MAY 01, 1993)
Go    to   Date TODAY// 5-31-93  (MAY 31, 1993)
Select Print Device:  [Enter Print Device Here]


JUL 23, 1993  12:59 HINES, IL                                        Pg: 1
Autologous Transfusions (Units received from MAY  1, 1993 to MAY 31, 1993)
Component   Treating Specialty                Unit ID     Days in inventory
-----------------------------------------------------------------------------

GREAT,EDWARD D. 111-22-3333
   AWB      SURG ICU                          V32043             1

HOLFORTY,GEOFFREY D. 222-33-4444
   AWB      ORTHOPEDIC                        V32040            12

LIONS,JOSSEY 333-44-5555
   AWB      SURG ICU                          V32036             4

CATOR,GENE 555-66-7777
   ADRC     MICU                              V26678             1


   ADRC = AUTOLOGOUS DEGLYCERLIZED REJ. RED CELLS (  1 units)
   AWB  = AUTOLOGOUS WHOLE BLOOD                  (  3 units)
```

Example 2: Autologous units drawn and not transfused

```
Select Blood utilization & summary reports Option: AR Autologous disposition
report

          LIST OF AUTOLOGOUS UNIT DISPOSITIONS BY DATE UNIT RECEIVED

Select (T)ransfusions or (A)ll other dispositions: A
Start with Date TODAY// 5-1-93  (MAY 01, 1993)
Go    to   Date TODAY// 5-31-93  (MAY 31, 1993)
Select Print Device:  [Enter Print Device Here]

JUL 23, 1993  13:00 HINES, IL                                        Pg: 1
Autologous  (Units received from MAY  1, 1993 to MAY 31, 1993)
Component   Disposition                Unit ID          Days in inventory
-----------------------------------------------------------------------------

ALBANY,JOHN . 111-22-1234
   AWB      DISCARD                   V32176                26
   AWB      MODIFY                    V32189                27

BASIC,JOE 123-12-1234
   AWB      DISCARD                   V32050                27
   AWB      DISCARD                   V32181                27

FRIOS,CHRIS 234-12-1123
   AWB      DISCARD                   V32042                30
   AWB      DISCARD                   V32178                26

PARTENT,CHARLY A. 345-22-0001
   AWB      DISCARD                   V32233                27
   AWB      DISCARD                   V32276                34

MERCADOS,WALTER . 321-13-0002
   AWB      DISCARD                   V32185                28
   AWB      DISCARD                   V32245                29

TESTER,SAMMY R. 231-01-0101
   ADRC     DISCARD                   V30669                 1
   ADRC     DISCARD                   V30702                 1

   ADRC = AUTOLOGOUS DEGLYCERLIZED REJ. RED CELLS (  2 units)
   AWB  = AUTOLOGOUS WHOLE BLOOD                  ( 10 units)
```

Crossmatch:Transfusion Report (UR-CT)

To facilitate the collection of statistics necessary for calculating the crossmatch workload and the Crossmatch Transfusion (C:T ratio) and for review of ordering practices by the Transfusion Committee, this option generates a report which includes all of the patients crossmatched for a specified period of time. It includes:

- a listing of each specimen on which crossmatches were done
- the unit crossmatched and the crossmatch result
- the final outcome of the crossmatch, i.e., whether the unit was transfused or released, and if released, the reason for the release
- a count of the number of patients crossmatched
- a tally of the number of specimens crossmatched
- a tally of the total crossmatches
- a tally of the number of units transfused
- a calculation of the C:T ratio
- a breakdown by crossmatch result of the number for each result

Since the REASON FOR RELEASE, entered in the Units Release to Stock (Cancel) by Patient (I-UR) option in the Inventory Menu, is a free text field, the number for each reason cannot be tallied. However, the format of the report is very conducive to tallying this information manually. If no release reason was entered, the comment "No release reason given" would have to be stuffed. If the unit was reselected for crossmatch on the same specimen, the original release reason would have been killed off.

This report sorts based on the entry for field 65.01,.09 Date/Time Crossmatched, which is automatically stuffed when data is entered for units crossmatched, based on the Date/time unit assigned. It is not based on the specimen date included on the report or the date transfused.

If a unit is modified/discarded after it was crossmatched for a patient, the comment "MODIFY while on xmatch" or "DISCARD while on xmatch" will be placed in the Reason For Release field.

Units created from units which are modified are placed on the report, so that the disposition can be included; however, the calculation of the numbers of units crossmatched and transfused is adjusted appropriately.

> **NOTE:** The report generated by the [LRBLAA] (R-UR-AA) option sorts this data by treating specialty/physician.

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: CT  Crossmatch:Transfusion
report

                    Crossmatch:Transfusion Report

Start with Date TODAY// 3-1-93  (MAR 01, 1993)
Go    to   Date TODAY// <RET>MAR 17, 1993
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 17, 1993  16:21   VAMC                                                Pg: 1
BLOOD BANK
CROSSMATCH:TRANSFUSIONS (from: MAR  1, 1993 to MAR 17, 1993)
Specimen date  Unit ID      Comp XM   Release Reason              Location
-------------------------------------------------------------------------------
  1)  BOLE,DC                          785-20-4773
03/05/93 14:10 Q11112       PRBC IG    On x-match, not counted    CCC
03/05/93 14:10 WA22222      PRBC IG
-------------------------------------------------------------------------------
  2)  WASHINGTON,GEORGE                592-88-8888
03/05/93 14:02 DU11113      PRBC C     DIDN'T USE
03/05/93 14:02 DU11112      PRBC C      On x-match, not counted
03/05/93 14:02 WA11111      PRBC C     DIDN'T USE
03/11/93 14:05 WA33333      PRBC C     TRANSFUSED
03/11/93 14:05 WW12345      PRBC C      On x-match, not counted    BLOOD BANK
-------------------------------------------------------------------------------
Number of specimens crossmatched:     3
Total units         crossmatched:     4
Total units           transfused:     1
Crossmatch/transfusion     ratio:     4.00
Number of units COMPATIBLE(C):3
Number of units INCOMPATIBLE, GIVE WITH BB DIRECTOR APPROVAL(IG):1
```

Unit Issue Book Entries (UR-IS)

In order to obtain a printout of all issues/relocations to be used as a semipermanent record, as well as for preparation of utilization reports, etc., the system enters all relocations in a temporary file. The system will print all entries in this file within the dates specified, including a count for each blood product for each location.

Because of space limitations, the abbreviation for the component (i.e., the "product") is used rather than the name. These can be modified by making any desired changes in the abbreviation field for entries in the BLOOD PRODUCT file (#66), using the Edit Blood Product file (EF-BP) option in the Supervisor's Menu.

NOTE: Once a hard copy has been printed, the entries in the temporary file "issue book" should be deleted, in order to minimize the amount of file space being used. This does not, however, delete any information for the units, merely the ability to retrieve the information through this option. You can delete the entries by answering "YES" to the prompt "Delete issue book entries over 31 days ? NO//"

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: IS  Unit issue book entries

                    UNIT issue book

Delete issue book entries over 31 days ? NO// <RET>  (NO)

               1. Print issue book entries by date
               2. Print issue book entries by patient
Select 1 or 2: 1
Start with Date TODAY// <RET> MAR 17, 1993
Go    to   Date TODAY// <RET> MAR 17, 1993
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 17, 1993  15:42   VAMC                                                Pg: 1
TRANSFUSION SERVICE   Unit issue book
Mo/Da TIME  Unit ID  Prod   Insp By  Issued to  Patient  Location  Patient SSN
-------------------------------------------------------------------------------
03/17 15:37 WA33333  PRBC S  SH  LK  WASHINGTON,GEORGE   SURGERY   592-88-8888
03/17 15:37 WW12345  PRBC S  SH  LK  WASHINGTON,GEORGE   SURGERY   592-88-8888
03/17 15:40 Q45678   PREF S  SH  KP  GARRETT,PORTLAND    MICU      535-10-4531
03/17 15:41 Q11112   PRBC S  SH  HJ  BOLE,DC             CCC       785-20-4773
```

```
MAR 17, 1993  15:42   VAMC                                                    Pg: 2
TRANSFUSION SERVICE   Unit issue book
Unit counts by location from MAR 17, 1993 to MAR 17, 1993
-------------------------------------------------------------------------------
 1.)  CCC                                  1
        PRBC            1
 2.)  MICU                                 1
        PREF            1
 3.)  SURGERY                              2
        PRBC            2
-----------------------------------------
Totals                                     4
        PRBC            3 (CPDA-1 RED BLOOD CELLS)
        PREF            1 (PLATELETS, 1-6 C, 20-30ML)
```

Inappropriate Transfusion (UR-IT)

In order to facilitate the performance of active blood usage review, as required by the Joint Commission for the Accreditation of Hospitals Organization (JCAHO), the system automatically audits each transfusion request as the request is entered into the system, either through the Blood Component Requests (P-RS-CR) option or the Specimen Log-in (P-SL) option in the Patient Menu.

For requests which are not PreOp, the computer will review the tests designated in the BLOOD PRODUCT file (#66) for that specific component to determine whether the most recent laboratory values for the tests specified are within the criteria specified. If there are multiple tests to check, the system will evaluate the request as appropriate if **any** of the criteria are met. If none of the audit criteria are determined to be satisfied, the system will display the lab value(s) which does not meet the audit criteria and will display the prompt "Request Still OK? NO//." At this point, the system initiates a record for this particular request which has been deemed potentially inappropriate and places the information into a temporary file. This record will include the patient information, the component request information, whether or not the request was approved and, if approved, the justification and the person approving the request.

Example: The tests to check for CPDA-1 Red Blood Cells are:
Hemoglobin 10.0 gm/dl
Hematocrit 30%

If the patient's most recent hemoglobin was 11.5 gm/dl with a 33% hematocrit, the request would require additional justification. If the patient's most recent hemoglobin was 10.3 gm/dl with a 29.5% hematocrit, the request would not require additional justification.

For requests which are PreOp, the system will check to see if the Surgery Module is being used. If the facility is using the Surgery Module, the system will display the operations for which the patient has been scheduled and will allow entry of PreOp requests for that specific procedure. If the facility is not yet using the Surgery Module, the system will check to see if File #81 (Current Procedural Terminology) is available. If it is not available, the system cannot audit PreOp requests. If it is available, the system will display a prompt to enter the surgical procedure. It will then display the entries for the Maximum Surgical Blood Order Schedule (MSBOS) for that specific procedure and then check each component request, entered via the Maximum Surgical Blood Order Edit (S-EF-MS) option in the Supervisor's Menu. If the number of units requested for any given component exceeds the MSBOS for that component for that surgical procedure, the system will display the prompt "Number exceeds maximum surgical blood order number for this component for this procedure. Request still OK? NO//." At this point, the system initiates a record for this particular request, which has been deemed potentially inappropriate, and places the information into a temporary file. This record will include the patient information, the component request information, whether or not the request was approved, and, if approved, the justification and the person approving the request.

The system then generates a report of the inappropriate transfusion requests, which have been entered into the temporary file, within the specified time period. These requests can then be reviewed by the appropriate persons and corrective action taken when indicated.

Once the report has been generated for a specific time period, the temporary file can be deleted using the Remove Inappropriate Transfusion Requests (S-SR-RI) option in the Supervisor's Menu.

Example:

```
Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: IT  Inappropriate
transfusion requests report

                    Inappropriate transfusion requests report

   (A)ll components or (S)ingle component: A
Start with Date TODAY// 3-5-93  (MAR 05, 1993)
Go    to   Date TODAY// 3-5-93  (MAR 05, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

NOTE: While this report includes the most recent lab values in DHCP at the time the component request was entered, these may not reflect the patient's current clinical condition if they are not proximate to the entry of request. Some interpretation/discretion is needed when reviewing the report.

```
MAR 5, 1993  15:48   VAMC                                          Pg: 1
BLOOD BANK
                     Inappropriate transfusion requests report
-------------------------------------------------------------------------

                     ACD-A WHOLE BLOOD

                     AS-1 RED BLOOD CELLS

                     AUTOLOGOUS RED BLOOD CELLS

                     AUTOLOGOUS WHOLE BLOOD

                     CPDA-1 RED BLOOD CELLS

MAR  5, 1993  14:10 BOLE,DC  SSN:785-20-4773
Pre-op:No
Date wanted: MAR  5, 1993  14:10  #Units:1  Requestor:
Request entered by: HEMBRY,SHARON
  HGB:
  HCT:

MAR  5, 1993 DOE,JOE  SSN:402-03-0456P
Pre-op:No
Date wanted: MAR  5, 1993  14:49  #Units:2  Requestor:DR SMITH
Request entered by: HEMBRY,SHARON
Pt. actively bleeding
Approved by: Dr. Jones
03/05  HGB:11.5 g/dL  BLOOD
03/05  HCT:33 %   BLOOD

MAR  5, 1993 DOE,JOE  SSN:402-03-0456P
Pre-op:No
Date wanted: MAR  5, 1993  14:49  #Units:2  Requestor:DR SMITH
Request entered by: HEMBRY,SHARON
03/05  HGB:11.5 g/dL  BLOOD
03/05  HCT:33 %   BLOOD

MAR  5, 1993  15:53 BOLE,DC  SSN:785-20-4773
Pre-op:No
Date wanted: MAR  5, 1993  15:53  #Units:2  Requestor:
Request entered by: HEMBRY,SHARON
03/05  HGB:12 g/dL  BLOOD
03/05  HCT:36 %   BLOOD

                     PLATELETS, 1-6 C, 20-30ML

                     POOLED PLATELETS

                     RED BLOOD CELLS, WASHED

MAR  5, 1993  14:04 WASHINGTON,GEORGE  SSN:592-88-8888
Pre-op:No
Date wanted: MAR  5, 1993  20:00  #Units:2  Requestor:DR. SMITH
Request entered by: HEMBRY,SHARON
ACTIVE GI BLEED
Approved by: DR LONG
```

```
MAR 5, 1993  15:48   VAMC                                                Pg: 2
BLOOD BANK
                     Inappropriate transfusion requests report
-------------------------------------------------------------------------------

                     RED BLOOD CELLS, WASHED
MAR  5, 1993  14:04 WASHINGTON,GEORGE 592-88-8888
  HGB:
  HCT:

MAR  5, 1993  14:04 WASHINGTON,GEORGE  SSN:592-88-8888
Pre-op:No
Date wanted: MAR  5, 1993  20:00  #Units:2  Requestor:DR. SMITH
Request entered by: HEMBRY,SHARON
03/05  HGB:14 g/dL  BLOOD
03/05  HCT:42 %   BLOOD

MAR  5, 1993  14:04 WASHINGTON,GEORGE  SSN:592-88-8888
Pre-op:No
Date wanted: MAR  5, 1993  15:42  #Units:2  Requestor:DR JONES
Request entered by: HEMBRY,SHARON
03/05  HGB:14 g/dL  BLOOD
03/05  HCT:42 %   BLOOD
```

Prolonged Transfusion Times (UR-PT)

As a quality assurance monitor for the infusion time of the various blood components, the system compares the entry in the Date/Time Transfusion Completed field with that in the Date/Time Relocation for the most recent relocation. For those in which the difference (in minutes) between those two times exceeds the entry in the Maximum Infusion Time field specified, the transfusion episode is included on the report. Since it may be desirable to permit different infusion times for the various blood components, the evaluation is component specific, based on the entries in the BLOOD PRODUCT file (#66).

Once printed, the report can be evaluated. In some cases, the calculation for the infusion time may be so excessive that data entry errors are apparent. These can then be corrected as appropriate. A mechanism can then be developed for followup for those determined to be accurate. The report is sorted by Location, and by patient within the location, in order to make the identification of problems or trends easier.

Example:

```
Select Blood utilization & summary reports Option: PT Prolonged transfusion
times Prolonged transfusion times

Start with Date TODAY// 3-1-93  (MAR 1, 1993)
Go    to   Date TODAY// 3-17-93  (MAR 17, 1993)

Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 17, 1993  15:49   VAMC                                          Pg: 1
LABORATORY SERVICE
         PROLONGED TRANSFUSION TIMES FROM MAR 1, 1992 TO MAR 17, 1993
Unit ID      Blood Component            Relocated   Transfused DspBy Minutes
-----------------------------------------------------------------------------

LOCATION: CCU

Patient: ANDY,DUSTY                    SSN: 089-48-5948
A11112       CPDA-1 RED BLOOD CELLS      03/05 17:10 03/06 17:52 REG   1482

LOCATION: SICU

Patient: WASHINGTON,GEORGE             SSN: 592-88-8888
C11112       CPDA-1 RED BLOOD CELLS      03/08 20:37 03/09 03:00 SH     274
```

NOTES:

- When determining what time to enter in the Maximum Infusion Time field, the maximum time allowed from issue/relocation to the beginning of the transfusion should also be included.

- In the case of the unit for DUSTY,ANDY, the review would indicate that the Blood Bank SF 518 needs to be reviewed to check for a data entry error.

Transfused RBC for Treating Specialty (UR-RS)

This option allows the review of all red cell components by treating specialty. The listing of transfused patients can be compared to the patients undergoing surgical procedures for that treating specialty for a given time period. Using this comparison it is possible to calculate the information needed to establish the appropriate Maximum Surgical Blood Order Schedule or to perform periodic audits for Transfusion Committee review.

Example:

```
Select Blood utilization & summary reports Option: RS  Transfused RBC for
treating specialty

Units of RED BLOOD CELLS transfused for a treating specialty
Select FACILITY TREATING SPECIALTY NAME: ?
 ANSWER WITH FACILITY TREATING SPECIALTY NAME
 DO YOU WANT THE ENTIRE 48-ENTRY FACILITY TREATING SPECIALTY LIST? Y  (YES)
CHOOSE FROM:
   AMBULATORY CARE      AMBULATORY CARE      AMBC
   BLIND REHAB      BLIND REHAB      BLIND
   CARDIOLOGY      CARDIOLOGY      CARD
   CARDIOPULMONARY      THORACIC SURGERY, INC CARDIAC      THORC
   CCU      MEDICAL ICU/CCU      CCU
   DERMATOLOGY      DERMATOLOGY      DERM
   DIABETES      ENDOCRINOLOGY      DIAB
   DIALYSIS      GENERAL(ACUTE MEDICINE)      DIALY
   ENDOCRINE      ENDOCRINOLOGY      ENDOC
   ENT      OTORHINOLARYNGOLOGY      ENT
   EXTENDED CARE      NHCU      ECC
   EYE      OPHTHALMOLOGY      EYE
   GASTROINTESTINAL      GASTROENTEROLOGY      GI
   GENERAL SURGERY      GENERAL SURGERY      SURG
   GENERAL(ACUTE MEDICINE)      GENERAL(ACUTE MEDICINE)      GEN
   GERIATRICS      GERONTOLOGY      GERI
   HEMATOLOGY/ONCOLOGY      HEMATOLOGY/ONCOLOGY      HEMAT
   INFECTIOUS DISEASE      PULMONARY, NON-TB      INF D
   INTERMEDIATE CARE      INTERMEDIATE MEDICINE      INT C
   INTERMEDIATE CARE/METABOLIC      INTERMEDIATE MEDICINE      METAB
   INTERMEDIATE CARE/TB      INTERMEDIATE MEDICINE      TB
   MICU      MEDICAL ICU/CCU      MICU
   NEUROLOGY      NEUROLOGY      NEURO
   NEUROSURGERY      NEUROSURGERY      NSURG
   ORAL SURGERY      ORAL SURGERY      OSURG
   ORTHOPEDIC      ORTHOPEDIC      ORTHO
   PALLITIVE CARE      INTERMEDIATE MEDICINE      PALLI
   PERIPHERAL VASCULAR      PERIPHERAL VASCULAR      PV
   PLASTIC SURGERY      PLASTIC SURG, INC HEAD/NECK      PSURG
   PODIATRY      PODIATRY      POD
   PSYCHIATRY      ACUTE PSYCHIATRY (<45 DAYS)      PYSCH
   PULMONARY      PULMONARY, NON-TB      PULM
   RADIATION THERAPY      INTERMEDIATE MEDICINE      RAD T
   REHAB MEDICINE      REHABILITATION MEDICINE      REHAB
   RENAL      GENERAL(ACUTE MEDICINE)      RENAL
   RHEUMATOLOGY      GENERAL(ACUTE MEDICINE)      RHEUM
```

```
   RICU       MEDICAL ICU/CCU      RICU
   SICU       SURGICAL ICU      SICU
   SPINAL CORD INJURY      SPINAL CORD INJURY      SCI
   SUBSTANCE ABUSE      SUBSTANCE ABUSE      S/ABU
   SURG ICU      SURGICAL ICU      SICU
   TELEMETRY      CARDIOLOGY      TELE
   TRANSPLANT      GENERAL SURGERY      TRANS
   UROLOGY      UROLOGY      URO

Select FACILITY TREATING SPECIALTY NAME: ORTHOPEDIC       ORTHOPEDIC
Select FACILITY TREATING SPECIALTY NAME: <RET>
Start with Date TODAY// 5-1-93  (MAY 01, 1993)
Go    to   Date TODAY// 5-31-93  (MAY 31, 1993)
Select Print Device:  [Enter Print Device Here]

JUL 24, 1993  13:56    BLOOD BANK HINES, IL                        Pg:1
Treating Specialty: ORTHOPEDIC
Units RBC transfused from MAY  1, 1993 to MAY 31, 1993
Patient                            SSN                    # Units
-----------------------------------------------------------------------
WASHINGTON,GEORGE M                329-20-3620                4
NAILS,RUSTY D                      345-54-0334                4

TOTAL PATIENTS: 2                TOTAL UNITS: 8
AVERAGE UNITS/PATIENT:  4.00
```

Patient Transfusions & Hematology Results (UR-TH)

In order to facilitate the performance of patient specific audits for blood/blood component transfusions, the system will allow the selection of one or more patients transfused within a specified time period, for generation of a report which includes the actual laboratory values for distinct laboratory tests, as well as all blood/blood components transfused during this period.

The tests displayed in this report are those selected through the Tests for Inclusion in Transfusion Report (EP-TH) option in the Supervisor's Menu. These may or may not be the same tests as those displayed on patient look-up in the Specimen Log in (SL) option in the Patient Menu, since these are specified through a different option.

NOTES:

- All information prints in reverse chronological order for the time period specified.

- If the report is to be printed as 80 margin, five tests will fit across a single line. If the report is to be printed as 132 margin, eight tests will fit across on a single line.

- Multiple lists of patients cannot be queued to print. Once the patient names are selected, that grouping will replace the previous list of patient names.

- The admission and discharge information is included at the end of the report to assist in the interpretation of the data printed. If any of the diagnoses have been entered at the time of printing, that information is included.

- If the time period specified is after the admission date, the patient's last admission will be included.

- Once a patient's name is entered, the system enters the patient into the appropriate print queue. If the report is then not printed, for ANY reason, that user cannot enter any additional patients until the queue is deleted.

  This message is displayed:
  "Cannot use this option until your last report is completed. If the report was queued and never printed it must be removed from the list of queued reports (see your LIM). Also have your blood bank supervisor delete your patient list for transfusion & hematology data."

  If the report was queued to a device, that job will need to be killed. If all of the necessary data was not entered for the report, only the list will need to be deleted. This is accomplished through the Delete a User's Patient List option in the Supervisor's Menu.

Example:

```
Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: TH  Patient transfusions &
hematology results

              Print transfusions & hematology data for a patient
Choice: 1
Select Patient Name: W8888 WASHINGTON,GEORGE  03-01-00   592888888 SC VETERAN
Choice: 2
Select Patient Name: <RET>
Start with Date TODAY// <RET> MAR 19, 1993
Go    to   Date TODAY// 3-1-93  (MAR 01, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  15:11   VAMC                                          Pg: 1
TRANSFUSION/HEMATOLOGY RESULTS
WASHINGTON,GEORGE              592888888     DOB: MAR  1, 1900
Location:   1B
Mo/Da/Yr TIME  Blood component             HGB     HCT
-------------------------------------------------------------------------
03/17/93 16:19 CPDA-1 RED BLOOD CELLS
03/08/93 11:03                             14      42
03/05/93 15:03                             14      42
03/02/93 15:32 CPDA-1 RED BLOOD CELLS
Adm:11/22/84                        1B
            Specialty:11/22/84     ALLERGY
```

Transfusion Data Report (UR-TR)

In order to provide a semipermanent report which can be used as a reference, the system generates a printed report of all units transfused within the time period specified. This can then be used for preparing utilization reports, identifying patients for further auditing, and reviewing transfusion activity for specific patients, etc.

The information is sorted in alphabetical order by patient and in chronological order for the specified disposition dates. Information for the unit relocation also appears for the specific relocation that ultimately results in the unit's transfusion.

In the case of pooled products, the number of units in the pool will appear in parentheses following the name of the component. The same principle can also be applied to divided products.

Because the computer must search ALL of the units in inventory to find those with the appropriate disposition dates, the report should be queued for a time when the system will not be adversely affected (i.e., slowed down).

NOTE: If the transfusions and hematology results are also printed, the laboratory values will be for ± 48 hours of the transfusion date. If there is more than one transfusion episode, it will select the latter.

Example:

```
Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: TR  Transfusion data report
                                   Transfusion data report
Start with Date TODAY// 7-1-93  (JUL 01, 1993)
Go    to   Date TODAY// 7-31-93  (JUL 31, 1993)

Also print transfusions with hematology results ? NO// <RET>  (NO)
Select Print Device:  [Enter Print Device Here]
```

```
DEC 14, 1993  08:33   DALLAS ISC-DEVELOPMENT ACCOUNT                    Pg: 1
TRANSFUSION DATA REPORT FROM JUL  1, 1993 TO JUL 31, 1993
Unit ID  Comp  (#) (ml) Relocated   CK By      Location     Transfused     RXN
-------------------------------------------------------------------------------

Patient: NAILS,RUSTY                      SSN: 089-48-5948
A11111   PRBC  250      06/29/93 13:14  S  REG     7W    07/01/9318:00     YES

  Transfusion reaction type: FEBRILE NON-HEMOLYTIC
A11112   PRBC  250      06/29/93 13:14  S  REG     7W    07/01/93 22:00    YES

  Transfusion reaction type: FEBRILE NON-HEMOLYTIC
PK11111  PLTS  (2) 110  07/07/93 05:00  S  REG     7W    07/07/93 07:41     NO
KP11112  PP/P  (1)  40  07/07/93 06:30  S  REG     7W    07/07/93 08:27     NO

-------------------------------------------------------------------------------
  PRBC  =CPDA-1 RED BLOOD CELLS
  PLTS  =POOLED PLATELETS
  PP/P  =POOLED PLATELETS, PLASMA REMOVED
```

Transfusion by Treating Specialty/Physician (UR-TS)

In order to assist in attempts to improve resource management and collection of meaningful statistical information, the system generates a report of the transfusion statistics by treating specialty/physician for a specific time period. In addition to the number of units of each component for each treating specialty, the report includes the number of discrete patients receiving red cell and non-red cell components.

The data included in this report is obtained using data entry in the Blood Transfusion Results P-DT [LRBLPT] option. Transparent to the user in [LRBLPT], the software pulls the doctor treating specialty (TS) from the MAS files and enters it in File #65. The physician comes from the current entry in the PATIENT file (#2), field .104. This field is automatically updated when a change is made in the PATIENT MOVEMENT file (#405), field .08 PRIMARY CARE PHYSICIAN. The .19 field in File #405, ATTENDING PHYSICIAN is not used at the present time because this is not a mandatory field and could be null. The treating specialty comes from the current entry in File #2, field .103 that reflects the currently assigned TS. This field is automatically updated when a change is made in the PATIENT MOVEMENT file (#405). In the event that the patients no longer an inpatient, the user is asked for the TS. While the system retrieves the treating specialty and physician assigned to the patient at the time the transfusion data is entered, the person entering the data is given the opportunity to make any changes appropriate. If transfusion data is not entered in a timely manner, this report will probably be less accurate.

The ordering pattern data can also be evaluated by treating specialty using the Crossmatch/Transfusions by Specialty/Physician R-UR-AA [LRBLAA] option. That report uses the data that is captured for the crossmatch in the specimen multiple, i.e., field 65.02,.03. This is captured during specimen accessing in the Specimen Log-in P-SL [LRBLPLOGIN] option and put in the LAB ORDER ENTRY file #69, field 7 and in field 68.02,6.5 PRACTITIONER. It is **not** based on the REQUESTING PERSON entered with the component request since at that present time, the individual component request information is **not** stored. This component request information was intended for short term use only.

For units that have been modified at some time after being placed in inventory, the system recalculates its cost, as appropriate, at the time of the modification. For example, if ten units of platelets whose original cost was $22.00/unit are pooled, the pool cost becomes $220. Conversely, if a unit of red blood cells whose original cost is $40.00 is divided into two aliquots, the divided unit cost becomes $20 each.

NOTE: This report can also be used to determine the number of patients receiving certain types of components for the period specified.

Example:

```
Select Blood bank Option: R  Reports

Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: TS  Transfusions by
treating specialty/physician

          Transfusion by treating specialty/physician


Start with TREATING SPECIALTY: FIRST// ?
 ANSWER WITH FACILITY TREATING SPECIALTY NAME, OR ABBREVIATION
 DO YOU WANT THE ENTIRE 21-ENTRY FACILITY TREATING SPECIALTY LIST? N  (NO)
Start with TREATING SPECIALTY: FIRST// <RET>
Go    to   TREATING SPECIALTY: LAST// <RET>

Within TREATING SPECIALTY  Start with BLOOD COMPONENT: FIRST// ?
 ANSWER WITH BLOOD PRODUCT NAME, OR PRODUCT CODE, OR SYNONYM
 DO YOU WANT THE ENTIRE 97-ENTRY BLOOD PRODUCT LIST? N  (NO)

Within TREATING SPECIALTY  Start with BLOOD COMPONENT: FIRST// <RET>
Within TREATING SPECIALTY  Go    to   BLOOD COMPONENT: LAST// <RET>


Start with Date TODAY// 1-1-92  (JAN 01, 1992)
Go    to   Date TODAY// 12-31-92  (DEC 31, 1992)
Select Print Device: [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 18, 1993  10:05   VAMC                                                    Pg: 1
Transfusions by Treating Specialty/Physician (JAN  1, 1992 - DEC 31, 1992)
Patient transfused   Date      Physician                 Cost     Unit ID   Count
-------------------------------------------------------------------------------

                    TREATING SPECIALTY: ALLERGY
Component: AUTOLOGOUS LIQUID PLASMA:
           ------------------------
DUSTY,RUSTY          11/20/92 HENSBURG,DONALD            0.00  RA99999      1
Component: CPDA-1 RED BLOOD CELLS:
           ----------------------
DUSTY,RUSTY          06/29/92 HENSBURG,DONALD           57.00  B11111       1
                     12/01/92 HENSBURG,DONALD           57.00  A99999       2
                                                     ---------
                                                       114.00
Component: POOLED PLATELETS:
           ----------------
DUSTY,RUSTY          07/07/92 SCHLEGUBER,JAMES H        66.00  PK11111      1
                                                     ---------
                                                        66.00
Component: POOLED PLATELETS, PLASMA REMOVED:
           --------------------------------
DUSTY,RUSTY          07/07/92 SCHLEGUBER,JAMES H        66.00  KP11112      1
                                                     ---------
                                                        66.00

ALLERGY patients given RBC components: 1
ALLERGY patients given non-RBC components: 1
ALLERGY cost of all components:    246.00


                    TREATING SPECIALTY: MEDICINE
Component: CPDA-1 RED BLOOD CELLS:
           ----------------------
ADAMS,HOUSTON        06/10/92 WELBY,HARRY               57.00  A11113       1
DUSTY,RUSTY          07/01/92 WELBY,MARCUS              57.00  A11112       2
                     10/20/92 WELBY,MARCUS              57.00  RA11111      3
JONES,HECTOR         04/10/92 MELMOTH,ROBERT            57.00  D11111       4
                     04/10/92 MELMOTH,ROBERT            57.00  K88888       5
                     04/10/92 MELMOTH,ROBERT            57.00  K99999       6
                     04/11/92 MELMOTH,ROBERT            57.00  D21212       7
                     04/16/92 MELMOTH,ROBERT            57.00  W12345       8
                                                     ---------
                                                       456.00
Component: POOLED PLATELETS:
           ----------------
ANDRUS,DWIGHT        02/28/92 SCHLEGUBER,JAMES H       132.00  POOL1        1
                                                     ---------
                                                       132.00

MEDICINE patients given RBC components: 3
MEDICINE patients given non-RBC components: 1
MEDICINE cost of all components:    588.00
```

```
MAR 18, 1993  10:05   VAMC                                                    Pg: 2
Transfusions by Treating Specialty/Physician (JAN  1, 1992 - DEC 31, 1992)
Treating specialty              # units  % total units     Cost
-------------------------------------------------------------------------------

AUTOLOGOUS LIQUID PLASMA:
------------------------
ALLERGY                              1      100.0            0.00
                                 ------                  ---------
                                     1                       0.00
-------------------------------------------------------------------------------

CPDA-1 RED BLOOD CELLS:
----------------------
ALLERGY                              2      18.2           114.00
MEDICINE                             8      72.7           456.00
                                 ------                  ---------
                                    10                     670.00
-------------------------------------------------------------------------------

POOLED PLATELETS:
----------------
ALLERGY                              1      50.0            66.00
MEDICINE                             1      50.0           132.00
                                 ------                  ---------
                                     2                     198.00
-------------------------------------------------------------------------------

POOLED PLATELETS, PLASMA REMOVED:
--------------------------------
ALLERGY                              1      100.0           66.00
                                 ------                  ---------
                                     1                      66.00
-------------------------------------------------------------------------------
Total cost of all components:    891.00
```

MAR 18, 1993 10:06 VAMC Pg: 3
Transfusions by Treating Specialty/Physician (JAN 1, 1992 - DEC 31, 1992)

Administrative Category	Component Units	Specialty Units	Physician Units	Component Cost	Specialty Cost	Physician Cost
RBC	11			627.00		
ALLERGY		2			114.00	
HENSBURG,DONALD			2			114.00
HEMATOLOGY/ONCOLOGY		1			57.00	
HENSBURG,DONALD			1			57.00
MEDICINE		8			456.00	
MELMOTH,ROBERT			5			285.00
WELBY,HARRY			1			57.00
WELBY,MARCUS			2			114.00
FFP	1			0.00		
ALLERGY		1			0.00	
HENSBURG,DONALD			1			0.00
RANDOM PLAT	3			264.00		
ALLERGY		2			132.00	
SCHLEGUBER,JAMES H			2			132.00
MEDICINE		1			132.00	
SCHLEGUBER,JAMES H			1			132.00
Totals	14	14	14	834.00	834.00	834.00

Transfusion Follow-up Tests (UR-TX)

To allow identification of patients with potential transfusion transmitted diseases, mainly hepatitis, this option identifies a group of patients who meet certain site configurable criteria.

In the Tests for Transfusion Follow-up (S-EP-TX) option in the Supervisor's Menu, tests present in the LABORATORY TEST file (#60) can be selected. In addition to selecting the tests to be screened, that option allows one to specify the specimen type and the > or < value to be identified for each test.

This option initiates a search of the LAB DATA file (#63) for the time period specified and identifies the patients whose results meet the criteria. The system then checks to determine whether those patients identified have been transfused within the last six (6) months. If so, the patient is included on the printed report.

The report generated includes the test results for all of the tests on a given list if any one of the tests meets the screening criteria. It sorts the data by patient, and includes an abbreviated transfusion history for each patient. The transfusion information is condensed into a format using the # units and the component abbreviations, totaled by month.

If the results of HIV testing are entered into the system, this option will also aid in the followup. However, its usefulness will not be as great as that for monitoring potential cases of post-transfusion hepatitis since the incubation period for HIV is greater than six months.

Once the report is generated, it can be reviewed by the Blood Bank Medical Director to determine which sets of test results should be investigated further. A mechanism can then be implemented to consult the patient's physician and determine whether the patient should be presumed to have post transfusion hepatitis or if the patient's test results are a result of the patient's underlying disease.

Generating the report on a regular basis during nonpeak periods will lessen the impact of the search on the system and will make followup much easier.

Example:

```
Select Reports Option: UR  Blood utilization & summary reports

Select Blood utilization & summary reports Option: TX  Transfusion follow-up
tests

Search for possible transfusion related disorders
Start with Date TODAY// MAR 19, 1993
Go    to   Date TODAY// -360  (MAR 24, 1992)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  16:20   VAMC                                          Pg: 1
BLOOD BANK  SEARCH FOR TRANSFUSION RELATED DISORDERS
                        FROM MAR 24, 1992 TO MAR 19, 1993
-----------------------------------------------------------------------
ADAM,HARRY SSN:333-44-5566 Loc: HEART TRANSPLANT
12/92  PRBC:1
                        T. BIL ALK PHO   ALT   AST   G-GTP
03/06/93 16:19             2.6      76    30
Adm:01/22/93               HEART TRANSPLANT
           Specialty:12/20/92     CARDIAC
-----------------------------------------------------------------------
AVANTE,RAOL SSN:113-34-5678 Loc: SPINAL CORD INJ
05/92  PRBC:2
                        T. BIL ALK PHO   ALT   AST   G-GTP
03/19/93 16:19                    140
Adm:01/02/93                SPINAL CORD INJ
           Specialty:01/02/93     NEUROLOGY
-----------------------------------------------------------------------
BROWN,MARTIN SSN:998-87-6666 Loc: 15WR RICU
12/93  PRBC:2
                        T. BIL ALK PHO   ALT   AST   G-GTP
03/07/93 13:15             1.5     187   104  canc
03/04/93 07:29             3.2            52  canc

Adm:10/22/92                      15WR RICU
           Specialty:11/22/92     MEDICINE
-----------------------------------------------------------------------
-----------------------------------------------------------------------
PRBC = CPDA-1 RED BLOOD CELLS
```

NOTES:

- The > and < values for the tests entered using the Tests for Transfusion Followup (S-EP-TX) in order to generate the above report were as follows:

AST	>45
T.BILI	>1.5
G-GTP	>69
ALK.PHOS	>130
ALT	>50

- In the above example, Martin Brown is the only patient who would have been followed up on. The test results for the other two patients are not consistent with post transfusion hepatitis.

Print Blood Bank Validation (VD)

This option prints the validation documentation that is stored in the new BLOOD BANK VALIDATION file (#66.2).

```
Select Reports Option: VD  Print blood bank validation
START WITH NAME: FIRST// LRBLA
GO TO NAME: LAST// LRBLA
Select Print Device:  [Enter Print Device Here]

BLOOD BANK VALIDATION LIST                    JUL 25,1994  15:36     PAGE 1
-------------------------------------------------------------------------------


NAME: LRBLA
  MENU NAME: Blood Bank Administrative Data
  MENU ABBREVIATION: AD                 FUNCTIONAL AREA: REPORTS
  OPTION DESCRIPTION: FORM/REPORT GENERATION
  LIMITED ACCESS: NO
```

Blood Bank Workload Reports (WK)

```
Select Blood bank Option: R  Reports

Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: ?

   AD      Blood Bank Administrative Data
   CR      Component preparation report
   CT      Test counts by treating specialty
   IR      Inventory ABO/Rh re-check counts
   TC      Test counts by location

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood bank workload reports Option: <RET>
```

Blood Bank Administrative Data (WK-AD)

Although a variety of report options exist which can generate much of the statistics included in this report, this report consolidates data from the BLOOD INVENTORY file (#65) and BLOOD DONOR file (#65.5) into a single report. The format selected is compatible with the data requested on the American Association of Blood Banks (AABB) questionnaire.

Some of this is also incorporated into the various Workload reports available in V. 5.2. however, the data will be further summarized in those reports.

Calculations:

1. Prepared: Includes data from both File #65.5
   Includes data from File #65 if units are modified (i.e., Supplier = Self **and** unit ID and component do not exist in File #65.5

2. Received: Includes units from File #65 received from outside suppliers

3. Transfused: Includes units for which the disposition = TRANSFUSED

4. Shipped: Includes units for which the disposition = RETURN TO SUPPLIER
   or SEND ELSEWHERE, excluding outdated units (disposition date >expiration date)

5. Outdated: Includes units for which the disposition date exceeds the expiration date

6. Discarded: Includes units for which the disposition = DISCARD **and** the disposition comment does **not** contain the word OUT or OUTDATED

7. Platelet concentrates: If transfused as a pool, the number of units is based on the entry in the Pooled/Divided Units field

Data is broken into three major groupings as follows:

1. Data on Blood Inventory, totals

2. Data on Blood Inventory, sorted by donation type

3. Data on Blood Donors, sorted by donation type

For Blood Inventory, units are assumed to homologous **unless** there is an "A" or "D" in Autologous/Directed Component field (#66,.25). For Blood Donors, donations are sorted based on the entry in Donation Type field (#65.54,1.1).

This report can be generated for any data range for which data is still available in the files. It is not linked to the implementation/activation of Blood Bank worksheet in V. 5.2.

```
Select Blood bank workload reports Option: AD  Blood bank administrative data
Start with Date TODAY// 10-1-92        10-1-92  (OCT 01, 1992)
Go    to   Date TODAY// <RET> 10-31-92  (OCT 31, 1992)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

DEC 4, 1992 15:37 St. Elsewhere VAMC Pg: 1
Blood Bank Administrative Data from: OCT 1, 1992 to OCT 31, 1992

TOTAL UNITS	SOURCE		INVENTORY DISPOSITION			
COMPONENT	Prepared	Received	Transfused	Shipped	Outdated	Discarded
WHOLE BLOOD	31	0	6	0	9	0
RBC	202	217	409	16	31	3
FROZEN RBC	6	0	0	0	0	0
DEGLYC RBC	0	0	0	0	0	0
LEUCODEPLETED RBC	0	0	0	0	0	0
WASHED RBC	3	0	3	0	0	0
FFP	163	0	103	0	16	12
CRYO	0	0	2	0	0	0
RANDOM PLAT	0	226	122	11	76	0
APHERESIS PLAT	0	8	5	0	0	0
GRANULOCYTES	0	0	0	0	0	0

DEC 4, 1992 15:37 St. Elsewhere VAMC Pg: 2
Blood Bank Administrative Data from: OCT 1, 1992 to OCT 31, 1992

HOMOLOGOUS UNITS	SOURCE		INVENTORY DISPOSITION			
COMPONENT	Prepared	Received	Transfused	Shipped	Outdated	Discarded
WHOLE BLOOD	0	0	0	0	0	0
RBC	198	217	402	16	31	3
FROZEN RBC	0	0	0	0	0	0
DEGLYC RBC	0	0	0	0	0	0
LEUCODEPLETED RBC	0	0	0	0	0	0
WASHED RBC	3	0	3	0	0	0
FFP	162	0	103	0	11	8
CRYO	0	0	2	0	0	0
RANDOM PLAT	0	226	122	11	76	0
APHERESIS PLAT	0	8	5	0	0	0
GRANULOCYTES	0	0	0	0	0	0

DEC 4, 1992 15:40 St. Elsewhere VAMC Pg: 3
Blood Bank Administrative Data from: OCT 1, 1992 to OCT 31, 1992

AUTOLOGOUS UNITS	SOURCE		INVENTORY DISPOSITION			
COMPONENT	Prepared	Received	Transfused	Shipped	Outdated	Discarded
WHOLE BLOOD	31	0	6	0	9	0
RBC	3	0	5	0	0	0
FROZEN RBC	6	0	0	0	0	0
DEGLYC RBC	0	0	0	0	0	0
LEUCODEPLETED RBC	0	0	0	0	0	0
WASHED RBC	0	0	0	0	0	0
FFP	0	0	0	0	5	4
CRYO	0	0	0	0	0	0
RANDOM PLAT	0	0	0	0	0	0
APHERESIS PLAT	0	0	0	0	0	0
GRANULOCYTES	0	0	0	0	0	0

DEC 4, 1992 15:40 St. Elsewhere VAMC Pg: 4
Blood Bank Administrative Data from: OCT 1, 1992 to OCT 31, 1992

DIRECTED UNITS	SOURCE		INVENTORY DISPOSITION			
COMPONENT	Prepared	Received	Transfused	Shipped	Outdated	Discarded
WHOLE BLOOD	0	0	0	0	0	0
RBC	1	0	2	0	0	0
FROZEN RBC	0	0	0	0	0	0
DEGLYC RBC	0	0	0	0	0	0
LEUCODEPLETED RBC	0	0	0	0	0	0
WASHED RBC	0	0	0	0	0	0
FFP	1	0	0	0	0	0
CRYO	0	0	0	0	0	0
RANDOM PLAT	0	0	0	0	0	0
APHERESIS PLAT	0	0	0	0	0	0
GRANULOCYTES	0	0	0	0	0	0

DEC 4, 1992 15:40 St. Elsewhere VAMC Pg: 5
Blood Bank Administrative Data from: OCT 1, 1992 to OCT 31, 1992

BLOOD DONOR DATA	Total
No donation	47
Temporary deferrals	47
Permanent deferrals	0

DONATIONS	Homologous	Directed	Autologous	Therapeutic	Total
WHOLE BLOOD	170	1	31	7	209
COLLECTION DISCARDED	6	0	0	7	13
POSITIVE TESTS					
SYPHILIS SEROLOGY	0	0	1	0	1
HBsAg	1	0	0	0	1
HIV ANTIBODY	0	0	0	0	0
ANTIBODY SCREEN	1	0	0	0	1
HBcAb	1	0	8	0	9
ALT	0	0	0	0	0
HTLV-I ANTIBODY	0	0	0	0	0
HCV ANTIBODY	1	0	2	0	3
MULTIPLE POSITIVE TESTS	1	0	1	0	2

DONATIONS	Homologous	Directed	Autologous	Therapeutic	Total
PLASMAPHERESIS	0	0	0	0	0
COLLECTION DISCARDED	0	0	0	0	0
POSITIVE TESTS					
SYPHILIS SEROLOGY	0	0	0	0	0
HBsAg	0	0	0	0	0
HIV ANTIBODY	0	0	0	0	0
ANTIBODY SCREEN	0	0	0	0	0
HBcAb	0	0	0	0	0
ALT	0	0	0	0	0
HTLV-I ANTIBODY	0	0	0	0	0
HCV ANTIBODY	0	0	0	0	0
MULTIPLE POSITIVE TESTS	0	0	0	0	0

DONATIONS	Homologous	Directed	Autologous	Therapeutic	Total
CYTAPHERESIS	0	0	0	0	0
COLLECTION DISCARDED	0	0	0	0	0
POSITIVE TESTS					
SYPHILIS SEROLOGY	0	0	0	0	0
HBsAg	0	0	0	0	0
HIV ANTIBODY	0	0	0	0	0
ANTIBODY SCREEN	0	0	0	0	0
HBcAb	0	0	0	0	0
ALT	0	0	0	0	0
HTLV-I ANTIBODY	0	0	0	0	0
HCV ANTIBODY	0	0	0	0	0
MULTIPLE POSITIVE TESTS	0	0	0	0	0

```
DEC  4, 1992  15:41   St. Elsewhere VAMC                                Pg: 6
Blood Bank Administrative Data from: OCT  1, 1992 to OCT 31, 1992
-------------------------------------------------------------------------------

COUNT  TEMPORARY DEFERRAL REASON
  19   HGB <12.5 g/dl female,<13.5 g/dl male
   8   NOT FREE OF INFECTIOUS DISEASE
   6   OTHER TEMPORARY DEFERRAL
   5   SYSTOLIC BP<90 or >180 or DIASTOLIC BP <50 or >100 mm Hg
   4   MEDICATIONS/DRUG THERAPY
   2   MEDICAL HISTORY DEFERRAL
   1   PULSE<50 or>100 /min, or pathological irregularity
   1   ALCOHOL HABITUATION OR INTOXICATION
   1   SURGERY WITHIN 6 WEEKS - 6 MONTHS

PERMANENT DEFERRALS:
--------------------
```

Component Preparation Report (WK-CR)

In order to provide a hard copy printout of the component preparation for the donor module, the system generates a printed report of all donor units. The report contains the following information:

Unit ID	The unit number.
Donation type	A for Autologous, D for Directed, H for Homologous or T for Therapeutic.
Type of Bag	1 for single, 2 for double, etc.
Anticoagulant	Type of anticoagulant used in the unit
Collection time	Date/time collection completed - Date/time collection started, in minutes.
Processing time	Date/time processed-Date/time collection complete, in minutes.
Collection disposition	DISC for DISCARD, QUAR for QUARANTINE, PREP for PREPARE COMPONENTS.
Tech	Initials of person entering data on component preparation.
Blood component	Type of unit it is (e.g., Packed Red Blood cells, Platelets, etc.,)
Volume	What the volume of the unit is.
Storage time	Date/time stored - Date/time collection completed.

This report can serve several purposes, including: 1) for review by the supervisor to evaluate the collection times, the length of time between donation and component preparation, etc., and 2) for preparation of workload reports. The report indicates a tally for the number of each donation type and a tally for each blood component prepared during the time period specified.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: CR  Component preparation report
                    Blood donor component preparation report
Start with Date TODAY// 1-31-93  (JAN 31, 1993)
Go    to   Date TODAY// 1-1-93  (JAN 01, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

MAR 18, 1993 10:19 VAMC Pg: 1
LABORATORY SERVICE
BLOOD COMPONENT PREPARATION FROM JAN 1, 1993 TO JAN 31, 1993

Unit ID	Type	Bag	Anti Coag	Coll Min	Proc Min	Coll Disp	Tech	Blood component	Vol (ml)	Storage Minutes
DONATION DATE: JAN 21, 1993										
A33333	H	1	CPDA-1	16	135	PREP	SH	CPDA-1 RED BLOOD	250	135
R99998	H	2	CPDA-1	45	19	PREP	SH	CPDA-1 RED BLOOD	250	19
								FRESH FROZEN PLA	225	19
R99999	H	1	CPDA-1	14	102	DISC	SH	CPDA-1 RED BLOOD	250	102
DONATION DATE: JAN 25, 1993										
A22222	A	2	CPDA-1	20	100	PREP	SH	CPDA-1 RED BLOOD	250	100
								FRESH FROZEN PLA	225	100
A22223	A	2	CPDA-1	34	100	PREP	SH	CPDA-1 RED BLOOD	250	110
A55555	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	250	110
								FRESH FROZEN PLA	225	110
V11234	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	220	110
DONATION DATE: JAN 26, 1993										
V12345	H	2	CPDA-1	10	98	PREP	SH	CPDA-1 RED BLOOD	250	100
DONATION DATE: JAN 27, 1993										
X11111	H	1	CPDA-1	7	30	PREP	TB	CPDA-1 RED BLOOD	250	35
X11112	H	1	CPDA-1	14	30	PREP	TB	FRESH FROZEN PLA	225	40
X11114	H	1	CPDA-1	11	36	PREP	TB	CPDA-1 RED BLOOD	250	46

AUTOLOGOUS DONATION TYPE COUNT: 2
HOMOLOGOUS DONATION TYPE COUNT: 9

CPDA-1 RED BLOOD CELLS COUNT: 7
FRESH FROZEN PLASMA, CPDA-1 COUNT: 4

Test Counts by Treating Specialty (WK-CT)

This option lists tests and counts by treating specialty for the time specified. It is based on the treating specialty captured during the accession process.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: CT  Test counts by treating specialty
Select ACCESSION AREA: BB  BLOOD BANK

          BLOOD BANK ACCESSION COUNTS BY TREATING SPECIALTY
Start with Date TODAY// MAR 19, 1993
Go    to   Date TODAY// T-30  (FEB 19,1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  15:37   VAMC                                          Pg: 1
LABORATORY SERVICE BLOOD BANK COUNTS(FEB 19, 1993-MAR 19, 1993)
Specialty                 # Accessions                          Test count
-----------------------------------------------------------------------------
CARDIOLOGY                        2
                                          ABO/RH TYPING                   1
                                          TRANSFUSION REQUEST             1
                                                                   ---------
                          Sub-total for CARDIOLOGY:                       2
-----------------------------------------------------------------------------
INTERNAL MEDICINE                 3
                                          TRANSFUSION REQUEST             3
                                                                   ---------
                          Sub-total for INTERNAL MEDICINE:                3
-----------------------------------------------------------------------------
MEDICINE                         15
                                          ABO/RH TYPING                   1
                                          COOMBS, DIRECT/INDIRECT         1
                                          TRANSFUSION REQUEST            12
                                          TYPE & HOLD                     1
                                                                   ---------
                          Sub-total for MEDICINE:                        15
-----------------------------------------------------------------------------
PULMONARY                         8
                                          ABO/RH TYPING                   1
                                          COOMBS, DIRECT/INDIRECT         4
                                          TRANSFUSION REQUEST             4
                                                                   ---------
                          Sub-total for PULMONARY:                        9
-----------------------------------------------------------------------------
                                -----
Total Accessions:                28      Total tests:                   29
```

MAR 18, 1993 10:19 VAMC Pg: 1
LABORATORY SERVICE

BLOOD COMPONENT PREPARATION FROM JAN 1, 1993 TO JAN 31, 1993

Unit ID	Type	Bag	Anti Coag	Coll Min	Proc Min	Coll Disp	Tech	Blood component	Vol (ml)	Storage Minutes
DONATION DATE: JAN 21, 1993										
A33333	H	1	CPDA-1	16	135	PREP	SH	CPDA-1 RED BLOOD	250	135
R99998	H	2	CPDA-1	45	19	PREP	SH	CPDA-1 RED BLOOD	250	19
								FRESH FROZEN PLA	225	19
R99999	H	1	CPDA-1	14	102	DISC	SH	CPDA-1 RED BLOOD	250	102
DONATION DATE: JAN 25, 1993										
A22222	A	2	CPDA-1	20	100	PREP	SH	CPDA-1 RED BLOOD	250	100
								FRESH FROZEN PLA	225	100
A22223	A	2	CPDA-1	34	100	PREP	SH	CPDA-1 RED BLOOD	250	110
A55555	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	250	110
								FRESH FROZEN PLA	225	110
V11234	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	220	110
DONATION DATE: JAN 26, 1993										
V12345	H	2	CPDA-1	10	98	PREP	SH	CPDA-1 RED BLOOD	250	100
DONATION DATE: JAN 27, 1993										
X11111	H	1	CPDA-1	7	30	PREP	TB	CPDA-1 RED BLOOD	250	35
X11112	H	1	CPDA-1	14	30	PREP	TB	FRESH FROZEN PLA	225	40
X11114	H	1	CPDA-1	11	36	PREP	TB	CPDA-1 RED BLOOD	250	46

AUTOLOGOUS DONATION TYPE COUNT: 2
HOMOLOGOUS DONATION TYPE COUNT: 9

CPDA-1 RED BLOOD CELLS COUNT: 7
FRESH FROZEN PLASMA, CPDA-1 COUNT: 4

Test Counts by Treating Specialty (WK-CT)

This option lists tests and counts by treating specialty for the time specified. It is based on the treating specialty captured during the accession process.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: CT  Test counts by treating specialty
Select ACCESSION AREA: BB  BLOOD BANK

          BLOOD BANK ACCESSION COUNTS BY TREATING SPECIALTY
Start with Date TODAY// MAR 19, 1993
Go    to   Date TODAY// T-30  (FEB 19,1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  15:37   VAMC                                          Pg: 1
LABORATORY SERVICE BLOOD BANK COUNTS(FEB 19, 1993-MAR 19, 1993)
Specialty                # Accessions                          Test count
-----------------------------------------------------------------------------
CARDIOLOGY                        2
                                          ABO/RH TYPING                  1
                                          TRANSFUSION REQUEST            1
                                                                  ---------
                         Sub-total for CARDIOLOGY:                       2
-----------------------------------------------------------------------------
INTERNAL MEDICINE                 3
                                          TRANSFUSION REQUEST            3
                                                                  ---------
                         Sub-total for INTERNAL MEDICINE:                3
-----------------------------------------------------------------------------
MEDICINE                         15
                                          ABO/RH TYPING                  1
                                          COOMBS, DIRECT/INDIRECT        1
                                          TRANSFUSION REQUEST           12
                                          TYPE & HOLD                    1
                                                                  ---------
                         Sub-total for MEDICINE:                        15
-----------------------------------------------------------------------------
PULMONARY                         8
                                          ABO/RH TYPING                  1
                                          COOMBS, DIRECT/INDIRECT        4
                                          TRANSFUSION REQUEST            4
                                                                  ---------
                         Sub-total for PULMONARY:                        9
-----------------------------------------------------------------------------
                                -----
Total Accessions:                28      Total tests:                   29
```

MAR 18, 1993 10:19 VAMC Pg: 1
LABORATORY SERVICE
BLOOD COMPONENT PREPARATION FROM JAN 1, 1993 TO JAN 31, 1993

Unit ID	Type	Bag	Anti Coag	Coll Min	Proc Min	Coll Disp	Tech	Blood component	Vol (ml)	Storage Minutes
DONATION DATE: JAN 21, 1993										
A33333	H	1	CPDA-1	16	135	PREP	SH	CPDA-1 RED BLOOD	250	135
R99998	H	2	CPDA-1	45	19	PREP	SH	CPDA-1 RED BLOOD	250	19
								FRESH FROZEN PLA	225	19
R99999	H	1	CPDA-1	14	102	DISC	SH	CPDA-1 RED BLOOD	250	102
DONATION DATE: JAN 25, 1993										
A22222	A	2	CPDA-1	20	100	PREP	SH	CPDA-1 RED BLOOD	250	100
								FRESH FROZEN PLA	225	100
A22223	A	2	CPDA-1	34	100	PREP	SH	CPDA-1 RED BLOOD	250	110
A55555	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	250	110
								FRESH FROZEN PLA	225	110
V11234	H	2	CPDA-1	10	100	PREP	SH	CPDA-1 RED BLOOD	220	110
DONATION DATE: JAN 26, 1993										
V12345	H	2	CPDA-1	10	98	PREP	SH	CPDA-1 RED BLOOD	250	100
DONATION DATE: JAN 27, 1993										
X11111	H	1	CPDA-1	7	30	PREP	TB	CPDA-1 RED BLOOD	250	35
X11112	H	1	CPDA-1	14	30	PREP	TB	FRESH FROZEN PLA	225	40
X11114	H	1	CPDA-1	11	36	PREP	TB	CPDA-1 RED BLOOD	250	46

AUTOLOGOUS DONATION TYPE COUNT: 2
HOMOLOGOUS DONATION TYPE COUNT: 9

CPDA-1 RED BLOOD CELLS COUNT: 7
FRESH FROZEN PLASMA, CPDA-1 COUNT: 4

Test Counts by Treating Specialty (WK-CT)

This option lists tests and counts by treating specialty for the time specified. It is based on the treating specialty captured during the accession process.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: CT  Test counts by treating specialty
Select ACCESSION AREA: BB  BLOOD BANK

          BLOOD BANK ACCESSION COUNTS BY TREATING SPECIALTY
Start with Date TODAY// MAR 19, 1993
Go    to   Date TODAY// T-30  (FEB 19,1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  15:37   VAMC                                          Pg: 1
LABORATORY SERVICE BLOOD BANK COUNTS(FEB 19, 1993-MAR 19, 1993)
Specialty                # Accessions                          Test count
-----------------------------------------------------------------------------
CARDIOLOGY                        2
                                          ABO/RH TYPING                  1
                                          TRANSFUSION REQUEST            1
                                                                  ---------
                         Sub-total for CARDIOLOGY:                       2
-----------------------------------------------------------------------------
INTERNAL MEDICINE                 3
                                          TRANSFUSION REQUEST            3
                                                                  ---------
                         Sub-total for INTERNAL MEDICINE:                3
-----------------------------------------------------------------------------
MEDICINE                         15
                                          ABO/RH TYPING                  1
                                          COOMBS, DIRECT/INDIRECT        1
                                          TRANSFUSION REQUEST           12
                                          TYPE & HOLD                    1
                                                                  ---------
                         Sub-total for MEDICINE:                        15
-----------------------------------------------------------------------------
PULMONARY                         8
                                          ABO/RH TYPING                  1
                                          COOMBS, DIRECT/INDIRECT        4
                                          TRANSFUSION REQUEST            4
                                                                  ---------
                         Sub-total for PULMONARY:                        9
-----------------------------------------------------------------------------
                                -----
Total Accessions:                28      Total tests:                   29
```

MAR 19, 1993 15:37 VAMC Pg: 2

LABORATORY SERVICE BLOOD BANK COUNTS(FEB 19, 1993-MAR 19, 1993)

Test	Specialty	Test count	Cum count
ABO/RH TYPING			
	CARDIOLOGY	1	1
	MEDICINE	1	2
	PULMONARY	1	3
COOMBS, DIRECT/INDIRECT			
	MEDICINE	1	1
	PULMONARY	4	5
TRANSFUSION REQUEST			
	CARDIOLOGY	1	1
	INTERNAL MEDICINE	3	4
	MEDICINE	12	16
	PULMONARY	4	20
TYPE & HOLD			
	MEDICINE	1	1

Inventory ABO/RH Re-check Counts (WK-IR)

Since the actual number of ABO/Rh confirmations performed is difficult to obtain without actually counting from the worksheets, the system searches the Date/Time Received field in the BLOOD INVENTORY file (#65) for the time period specified. For units received within that time period, the ABO Interpretation and RH Interpretation fields are checked for data. If data exists, other than ND, the unit is tallied as having been rechecked **unless** the data has been transferred from the donor module.

For those cases in which the recheck information is routinely transferred from the donor module, but for which testing has actually been done once the unit was released to inventory, the editing of the transferred data will enable the system to differentiate that unit from those which were not tested and include it in the tally.

> **NOTE:** Once workload is activated using the software in V. 5.2, this workload is captured as it is entered, making a search of File #65 on a routine basis obsolete.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: IR  Inventory ABO/Rh re-check
counts

                    ABO/Rh recheck counts
Start with Date TODAY// <RET> MAR 18, 1993
Go    to   Date TODAY// 3-1-93  (MAR  1, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 18, 1993  10:22   VAMC                                          Pg: 1
BLOOD BANK ABO/Rh counts from: MAR 1, 1993 to MAR 18, 1993
----------------------------------------------------------------------
ABO re-check count:    22
Rh  re-check count:    22
```

Test Counts by Location (WK-TC)

In order to assist in the preparation of utilization reports, including AMIS, the system generates a report of the number of each test requested from a given location for a specific time period. The tests counted are those which are accessioned through the Specimen Log in (SL) option in the Patient Menu.

Example:

```
Select Reports Option: WK  Blood bank workload reports

Select Blood bank workload reports Option: TC  Test counts by location
Select ACCESSION AREA: BB  BLOOD BANK

                    BLOOD BANK ACCESSION COUNTS
Start with Date TODAY// MAR 19, 1993
Go    to   Date TODAY// -30  (FEB 19, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 19, 1993  15:39   VAMC                                          Pg: 1
LABORATORY SERVICE BLOOD BANK COUNTS (FEB 19, 1993-MAR 19, 1993)
INCLUSIVE DATES WITH DATA: FEB 19, 1993 TO MAR 19, 1993
Location                  # Accessions                          Test count
-----------------------------------------------------------------------------
1A                                2
                                          TRANSFUSION REQUEST              1
                                          TYPE & HOLD                      1
                                          WKLD CROSSMATCH                  1
1B                                8
                                          COOMBS, DIRECT/INDIRECT          4
                                          TRANSFUSION REQUEST              4
                                          ABO/RH TYPING                    1
                                          WKLD CROSSMATCH                  2
CARD                              1
                                          ABO/RH TYPING                    1
CARDIAC                           1
                                          TRANSFUSION REQUEST              1
                                          WKLD CROSSMATCH                  1
ER                                5
                                          TRANSFUSION REQUEST              5
                                          WKLD CROSSMATCH                  3
MICU                              3
                                          COOMBS, DIRECT/INDIRECT          1
                                          TRANSFUSION REQUEST              2
NO ABRV                           8
                                          TRANSFUSION REQUEST              7
                                          ABO/RH TYPING                    1
                                          WKLD CROSSMATCH                  2
                                -----                                   ----
Total Accessions:                28       Total tests:                    38
```

MAR 19, 1993 15:39 VAMC Pg: 2
LABORATORY SERVICE BLOOD BANK COUNTS (FEB 19, 1993-MAR 19, 1993)
INCLUSIVE DATES WITH DATA: FEB 19, 1992 TO MAR 19, 1993

Test	Location	Test count	Cum count
COOMBS, DIRECT/INDIRECT			
	1B	4	4
	MICU	1	5
TRANSFUSION REQUEST			
	1A	1	1
	1B	4	5
	CARDIAC	1	6
	ER	5	11
	MICU	2	13
	NO ABRV	7	20
ABO/RH TYPING			
	1A	1	1
	CARD	1	2
	NO ABRV	1	3
TYPE & HOLD			
	1A	1	1
WKLD CROSSMATCH			
	1A	1	1
	1B	2	3
	CARDIAC	1	4
	ER	3	7
	NO ABRV	2	9

NOTE: Specimens/tests accessioned through a regular Multipurpose Accessioning option in the laboratory CORE package which do not have a BB subscript in File #60 will not be counted.

Supervisor Menu Options

Supervisor Menu

```
S       Supervisor [LRBLS]  Locked: LRBLSUPER
      DO     Delete entire order or individual tests [LRCENDEL]
      ED     Blood donor edit options [LRBLSD]
            DC     Donor collection/deferral edit [LRBLDA]
            DD     Permanent deferral/special comments [LRBLDEF]  Locked:
                    LRBLSUPER
            DE     Blood donor group/type edit [LRBLDEDIT]  Locked:
                    LRBLSUPER
            DH     Edit donor history questions [LRBLSEH]
            DL     Enter/edit donor letters [LRBLDLT]
            DP     Edit donor consent [LRBLDCX]
      EF     Edit blood bank files [LRBLEF]
            AA     Edit Corresponding Antigen/Antibody [LRBLSNO]  Locked:
                    LRBLSUPER
            BD     Edit blood bank descriptions file [LRBLSEF]
            BP     Edit blood product file [LRBLSEB]
            BU     Edit blood bank utility file [LRBLSEU]
            CR     Blood component request edit [LRBLSRQ]
            LL     Edit lab letter file [LRBLSLL]
            MS     Maximum surgical blood order edit [LRBLSMS]
            SP     Edit blood bank site parameters [LRBLSSP]
      EI     Blood bank inventory edit options [LRBLSI]
            DI     Edit unit disposition fields [LRBLSED]
            FR     Free autologous/directed donor units [LRBLSEE]
            LI     Edit unit log-in [LRBLSEL]
            PI     Edit unit - patient fields [LRBLSEC]
            PP     Edit pooled blood product [LRBLJM]
      EP     Blood bank patient edit options [LRBLSP]
            LD     Tests for display on patient look-up [LRBLST]
            PE     Patient ABO/Rh edit [LRBLPEDIT]  Locked: LRBLSUPER
            PP     Edit previous transfusion record [LRBLSPP]  Locked:
                    LRBLSUPER
            TH     Tests for inclusion in transfusion report [LRBLSET]
            TR     Unknown unit transfusion reaction [LRBLPTXR]  Locked:
                    LRBLSUPER
            TX     Tests for transfusion follow-up [LRBLTX]
      FD     Outline for one or more files [LRUFILE]
      II     Blood bank inventory integrity report [LRBLII]
      LL     Edit number of lines in a label [LRBLSF]
      SR     Summary and deletion reports [LRBLSSR]
            AD     Print data change audits [LRBLAD]
            AP     Antibodies by patient [LRBLPAB]
            AR     Patient antibody report (long-list) [LRBLPRA]
            CD     Cumulative donations and awards [LRBLDCU]
            DA     Acknowledge donor award by deletion [LRBLDAWARD]
            PL     Delete a user's patient list [LRBLSDPL]
            PU     Print  units with final disposition [LRBLRUF]
            PX     Print ex-donors [LRBLDEX]
            RA     Remove data change audits [LRBLAR]  Locked: LRBLSUPER
            RI     Remove inappropriate transfusion requests [LRBLSRI]
            RU     Remove units with final disposition [LRBLSER]
            RX     Remove ex-donors [LRBLDK]
```

```
SW      Blood bank workload [LRBLSW]
      DW     Display coding change workload for an accession [LRUWL]
VD      Blood bank validation documentation
```

Supervisor Menu Data Flow Chart

Action	Option
Daily	
1. Review the data audit trail of changes/errors	Print Data Change Audits (SR-AD)
2. Delete the audit trail report printed & reviewed	Remove Data Changes Audits (SR-RA)
3. Delete individual order #s	Delete Order or Individual Tests (DO)
Periodically (as necessary)	
4. Edit erroneous data entries	Edit Unit Disposition fields (EI-DI) Patient ABO/Rh Edit (EP-PE) Patient Previous Transfusion Record (EP-PP) Edit Unit Patient fields (EI-PI) Edit Unit Log-in (EI-LI) Edit Pooled Blood Product (EI-PP) Blood Donor Group/Type Edit (ED-DE) Donor Collection/Deferral Edit (ED-DC)
5. Enter transfusion reaction data unrelated to specific unit	Unknown Unit Transfusion Reaction (EP-TR)
6. Print/review the inventory data integrity	Inventory Integrity Check (II)
7. Release restriction on autologous units	Free Unit from Autologous/Directed Donor (EI-FR)
8. Edit files	Edit BLOOD BANK DESCRIPTIONS file (EF-BD) Edit BLOOD PRODUCT file (EF-BP) Edit Corresponding Antigen/Antibody (EF-AA) Edit DONOR UTILITY file (EF-DU) Edit LAB LETTER file (EF-LL)
9. Enter permanent deferral information	Permanent Deferral/Special Comments (ED-DD)
10. Edit donor form	Edit Donor History Questions (ED-DH) Edit Donor Consent (ED-DP)
11. Edit template for printing labels	Edit Number of Lines in a Label (LL)

12. Edit tests displayed during specimen log-in	Tests for Display on Patient Look-up (EP-LD)
13. Edit tests included in the Transfusion & hem report	Tests for Inclusion in Transfusion Report (EP-TH) Tests for Transfusion Follow-up (EP-TX)
Monthly	
14. Print updated hard copy reference of transfusion problems	Patient Antibody Report (long list) (SR-AR)
15. Print hard copy of units before deleting from the system (for 2 or 3 mo. prior)	Print Units with Final Disposition (SR-PU)
16. Remove units from the system	Remove Units with Final Disposition (SR-RU)
17. Calculate cumulative donations & print listing of those to receive awards	Cumulative Donations and Awards (SR-CD)
18. Delete the names of those receiving awards	Acknowledge Award by Deletion (SR-DA)
Annually	
19. Print listing of ex-donors	Print Ex-Donors (SR-PX)
20. Remove ex-donors	Remove Ex-Donors (SR-RX)
With Each New Version of Software	
21. Revalidate program	Blood bank validation documentation (VD)

Delete Entire Order or Individual Test (DO)

In those instances where specimens are actually discarded (e.g., duplicate specimens, those labeled erroneously, etc.,), it is desirable to cancel the entire order. This will minimize the confusion when either laboratory or nonlaboratory staff are obtaining information via the Order/Test Status (OR) option in the Inquiries and Ward Menus. In the event that only tests are deleted or accessions removed, the system still has a record of the "order." Use of this option will show the order as being canceled and will include the comments/reasons for doing so.

Example:

```
Select Supervisor Option: DO  Delete entire order or individual tests
ENTER ORDER NUMBER: 226
Order  Test          Urgency   Status                            Accession
  Lab Order # 226                            Provider: LARGO,IMA
  BLOOD
  TRANSFUSION REQUEST
                     ROUTINE  Collected          03/18/93 13:30  BB 0318 1
CRANE,NOVA                     381-92-1340
Remove entire order? NO// Y  (YES).
For tests:
     TRANSFUSION REQUEST
WARD COMMENTS ON SPECIMEN:
  1>order deleted by: HEMBRY,SHARON
EDIT Option: Add lines
  2>sample drawn from the wrong patient
  3><RET>
EDIT Option: <RET>
ENTER ORDER NUMBER: <RET>
```

Blood Donor Edit Options (ED)

```
Select Supervisor Option: ED  Blood donor edit options

Select Blood donor edit options Option: ?

   DC     Donor collection/deferral edit
   DD     Permanent deferral/special comments
   DE     Blood donor group/type edit
   DH     Edit donor history questions
   DL     Enter/edit donor letters
   DP     Edit donor consent

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood donor edit options Option: <RET>
```

Donor Collection/Deferral Edit (ED-DC)

Editing any erroneous data entered through the Donor Collection/Processing (DC) or Old Donor Records (DO) options in the Donor Menu is accomplished through this option.

The Donation or Deferral Date **cannot** be edited as it is used to derive an internal file number. If data for this field was entered incorrectly, the entire Donation or Deferral Date must be deleted and all associated data re-entered.

Example: Correction of a unit ID number entered erroneously through the Old Donor Records (D-DO) option

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: ED  Blood donor edit options

Select Blood donor edit options Option: DC  Donor collection/deferral edit

Select BLOOD DONOR NAME: HUMPHREY,HUBERT          M      01-23-65     DALLAS
Select DONATION OR DEFERRAL DATE: JAN 2,1992// <RET>
  DONATION OR DEFERRAL DATE: JAN 2,1992// <RET>
  COLLECTION SITE: VAH// <RET>
  DONATION GROUP: PK-V// <RET>
  DONATION/DEFERRAL CODE: WHOLE BLOOD// <RET>
  DONATION TYPE: HOMOLOGOUS// <RET>
  DONOR REACTION CODE: NONE// <RET>
  UNIT ID: B34567// B34568
  PHLEBOTOMIST: MEL // <RET>
  PATIENT CREDIT: <RET>
  COLLECTION DISPOSITION: ?
     CHOOSE FROM:
       0        PREPARE COMPONENT(S)
       1        QUARANTINE
       2        DISCARD COLLECTION
  COLLECTION DISPOSITION: 0  PREPARE COMPONENT(S)
  Select COLLECTION DISPOSITION COMMENT: <RET>

Select BLOOD DONOR NAME: <RET>
```

Permanent Deferral/Special Comments (ED-DD)

This option allows entry of miscellaneous comments about any specific donor, which would have a significant impact on the manner in which the potential donor is handled during screening, phlebotomy, etc. The system allows entry of a free text comment. This comment then appears in two places, immediately after the donor demographics in the Donor Registration (DR) option and at the top of the second page of the Donor history physical & consent form.

This option is also used to designate a donor as being permanently deferred. Entry of a PERMANENT DEFERRAL automatically transfers the data to any option where the donor is entered (Donor Registration (DR) and Donor Collection/ Processing (DC) options in the Donor Menu). In order to protect the confidentiality of the reason, the system **does not** display the PERMANENT DEFERRAL REASON in those options.

NOTE:

- Once a donor has been designated as a "permanent deferral," the data for any future collections which occurred because the donor's status was not known (from mobile collection sites) will need to be entered, using the Donor Collection/Deferral (S-ED-DC) option in the Supervisor's Menu. Once the donation/collection data has been entered, the Collection Disposition/Component Preparation (D-CP) option in the Donor Menu should be used to enter the collection disposition data.

- Whenever entries are made in or deleted from the permanent deferral fields, the Permanent Deferral Date Change field and the Deferral Edit By field are automatically updated. In addition, this information is included on the audit report generated through the Print Data Change Audits option in the Supervisor's Menu.

Example 1: Entry of a permanent deferral status for a donor who has a confirmed HIV antibody test result

```
Select Blood donor edit options Option: DD  Permanent deferral/special comments

Select BLOOD DONOR NAME: JONES,SUSAN          F      01-25-60      DALLAS
PERMANENT DEFERRAL: ?
     If the donor is to be permanently excluded from donation enter 'YES'
     CHOOSE FROM:
       1        YES
       0        NO
PERMANENT DEFERRAL: 1  YES
PERMANENT DEFERRAL REASON:
  1>ANTI-HIV positive by EIA & Western Blot
  2> <RET>
EDIT Option: <RET>
BLOOD DONOR COMMENTS:
  1><RET>

Select BLOOD DONOR NAME: <RET>
```

Example 2: Entry of information for a donor experiencing a severe donor reaction

```
Select Blood donor edit options Option: DD Permanent deferral/special comments

Select BLOOD DONOR NAME: JONES,SUSAN          F      01-25-60      DALLAS
PERMANENT DEFERRAL: <RET>
PERMANENT DEFERRAL REASON:
  1><RET>
BLOOD DONOR COMMENTS:
  1>Severe donor reaction 1/15/93
  2><RET>
EDIT Option: <RET>

Select BLOOD DONOR NAME: <RET>
```

Blood Donor Group/Type Edit (ED-DE)

Changing the ABO or Rh on a donor's record can only be accomplished using this option. If any error was made in entering the donor's historical data using the Old Blood Donor Records (DO) option in the Donor Menu, it will have to be changed here **before** units from a current donation can be labeled, since the system will detect the discrepancy and will not allow labeling/release to continue.

Example:

```
Select Supervisor Option: ED  Blood donor edit options

Select Blood donor edit options Option: DE  Blood donor group/type edit

Select BLOOD DONOR NAME: HUMPHREY,HUBERT          M      01-23-65      DALLAS
ABO GROUP: AB// O  O
RH TYPE: NEGATIVE// <RET>

Select BLOOD DONOR NAME: <RET>
```

NOTE: Changing the donor's record does not affect any entries made for a specific donation through the ABO/Rh Testing of Donor Units (DU-DT) option in the Donor Menu.

Edit Donor History Questions (ED-DH)

Using the Donor History Physical and Consent Form (DH) option in the Donor Menu offers the advantage of having a set of donor history questions which can be edited at the supervisor's discretion.

Example 1: Addition of two questions

> **NOTE:** The data dictionary field that contains the wording for the Donor History form has been changed from a multiple to a wordprocessing field with Version 5.2. As such, the example shows how the Line Editor will look. Other Editors will have a different appearance.

```
Select Blood donor edit options Option: DH  Edit donor history questions

DONOR HISTORY:. . .
        . . .
18>Had heart disease, chest pain or shortness of breath ?
19>Had convulsions, seizures, or fainting spells ?
20>Had a blood disease or abnormal bleeding ?
21>Been pregnant in past 6 weeks ?
22>Read the literature regarding the high risk groups for AIDS?
23>Night sweats, Enlarged lymph nodes, Unexplained weight loss ? 24>Unexplained
fever, Purple skin lesions, Persistent cough ?
25>White spots or unusual blemishes in mouth ?
26>Consent to having HTLV-III antibody testing done?
EDIT Option: Add lines
27>Have you read and understood all the donor information presented
28>to you and have all your questions been answered?
29>Have you eaten in the last four hours?
30> <RET>
EDIT Option: <RET>
```

Example 2: Changing the wording on an existing question

```
Select Blood donor edit options Option: DH  Edit donor history questions

DONOR HISTORY:. . .
       . . .
21>Been pregnant in past 6 weeks ?
22>Read the literature regarding the high risk groups for AIDS?
23>Night sweats, Enlarged lymph nodes, Unexplained weight loss ?
24>Unexplained fever, Purple skin lesions, Persistent cough ?
25>White spots or unusual blemishes in mouth ?
26>Consent to having HTLV-III antibody testing done?
27>Have you read and understood all the donor information presented
28>to you and have all your questions been answered?
29>Have you eaten in the last four hours?
EDIT Option: list line: 1// <RET> to: 29//  20

1>Are you feeling well today ?
2>Are you taking ASPIRIN or other medications ?
3>Any acute respiratory disease or trouble breathing now ?
4>Had any dental work in past 3 days ?
5>Been hospitalized in past 6 months ?
6>Had blood transfusions, injections, or tattoos in past 6 months ?
7>Exposed to anyone with jaundice or hepatitis in past 6 months ?
8>Had hepatitis immune globulin within 12 months ?
9>Had a positive test for hepatitis ?
10>Had any vaccinations/immunizations in past year ?
11>Traveled outside US in past 3 years ?
12>Ever had jaundice, liver disease, or hepatitis ?
13>Been deferred as a blood donor or had problems donating ?
14>Ever had malaria?
15>Lived in endemic area for malaria in past 3 years ?
16>Had antimalarial therapy or prophylaxis within past 3 years ?
17>Had Cancer (other than minor skin cancer) ?
18>Had heart disease, chest pain or shortness of breath ?
19>Had convulsions, seizures, or fainting spells ?
20>Had a blood disease or abnormal bleeding ?
EDIT Option: 14

14>Ever had malaria within the last three years?
 Replace ... With Had malaria within the last three years?  Replace <RET>
Edit line: <RET>

EDIT Option: <RET>
```

NOTE: In the event that a future version of the laboratory package, including File #65.4 (BLOOD DONOR UTILITY) is loaded with data, all corrections, and changes will be overlaid with the initial version.

Edit Donor Consent (ED-DP)

The form used for recording the medical history of prospective blood donors is generated with the Donor History, Physical and Consent Form (DH) option in the Donor Menu. In order to maximize the flexibility of the form and to make it site specific, the consent portion of the form can be edited with this option. See M-2, Part 5 for specific details regarding content and content changes.

Example: Addition of the consent for the performance of the HIV antibody testing

```
Select Supervisor Option: ED  Blood donor edit options

Select Blood donor edit options Option: DP  Edit donor consent
COMMENT:
  1>The medical history which I have furnished is true and accurate, to the
best
  2>of my knowledge. I hereby grant permission to the Veterans Administration
  3>Blood Bank to draw approximately 450 ml. of blood from me, to be used in
  4>such a manner as the Blood Bank may deem desirable.
EDIT Option: break line: 2
 after character(s): .......
  2>of my knowledge.
EDIT Option: Edit line 2
  2>of my knowledge.
Replace e.  With e. I consent to having the HTLV-III antibody testing
Edit line: <RET>
EDIT Option: insert after line: 2
  2>of my knowledge.  I consent to having the HTLV-III antibody testing
  3>performed and understand that I will be informed of the test results,
  4>should the test be positive, no sooner than 55 days from today.
  5> <RET>
2 lines inserted
EDIT Option:<RET>
```

NOTE: The end result of these changes is as follows:

```
The medical history which I have furnished is true and accurate, to the
best of my knowledge. I consent to having the HIV antibody testing
performed and understand that I will be informed of the test results should
the test be positive, no sooner than 55 days from today. I hereby grant
permission to the Veterans Administration Blood Bank to draw approximately
450 ml of blood from me, to be used in such a manner as the Blood Bank may
deem desirable.
```

Edit Blood Bank Files (EF)

```
Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: ?

   AA     Edit Corresponding Antigen/Antibody
   BD     Edit blood bank descriptions file
   BP     Edit blood product file
   BU     Edit blood bank utility file
   CR     Blood component request edit
   LL     Edit lab letter file
   MS     Maximum surgical blood order edit
   SP     Edit blood bank site parameters

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Edit blood bank files Option: <RET>
```

Edit Corresponding Antigen/Antibody (EF-AA)

As part of the routine operation of several options, the system performs a series of validity checks. Whenever there is an entry in the Antibodies Identified field for a specific patient, the system will check to make sure that all units selected for crossmatching (and subsequently relocated for transfusion) lack the corresponding red blood cell antigen. Since this data is based on entries in the FUNCTION FIELD file (#61.3), the Edit Corresponding Antigen/Antibody option allows editing of the Corresponding Antigen/Antibody field (.04) of this file. It will not, however, allow editing of the code numbers, etc.

In addition, the blood bank consultation reports, generated on patients with positive direct and/or indirect antiglobulin testing, use the Compatibility Factor, Comment and journal reference fields.

Example 1: Entry of data for Anti-K

```
Select Edit blood bank files Option: AA  Edit Corresponding Antigen/Antibody

Select ANTIGEN or ANTIBODY: 51810  ANTI K              51810
CORRESPONDING ANTIGEN/ANTIBODY: K// <RET>
COMPATIBILITY FACTOR: .92
COMMENT:
  1>Anti-K is antibody most often occurring after transfusion or pregnancy.
  2>Anti-K may also be found as a naturally occurring IgM antibody.
  3>The antibody can cause acute hemolytic transfusion reactions and
  4>hemolytic disease of the newborn. Anti-K has been implicated as a
  5>cause of delayed hemolytic transfusion reactions.
  6><RET>
EDIT Option: <RET>
Select TITLE OF ARTICLE: <RET>

Select ANTIGEN or ANTIBODY: <RET>

Select Edit blood bank files Option: <RET>
```

NOTE: The Compatibility Factor must be a number between 0 and 3, with three decimal digits. If the entry is for an antigen, enter the incidence (as a decimal) in the population. If an antibody, enter the frequency the corresponding antigen is absent in the population.

Example 2: Entry of Journal References

```
Select Edit blood bank files Option: AA Edit Corresponding Antigen/Antibody

Select ANTIGEN or ANTIBODY: WARM ANTI AUTOANTIBODY
CORRESPONDING ANTIGEN/ANTIBODY: <RET>
COMPATIBILITY FACTOR: 0// <RET>
COMMENT:
  1>Warm autoantibodies react at 37 degrees C. These antibodies react with the
  2>patient's own cells, as well as with any transfused donor cells.
  3>Very little autoantibody may be free in the serum as it is continuously
  4>being absorbed by red cells in vitro.
  5>Specificity of the antibody is very complex. Transfusion is definitely
  6>contraindicated in those patients except in life-threatening situations,
  7>as it will stimulate more antibody production and cell survival will be
  8>very limited.
  9>
EDIT Option: <RET>
Select TITLE OF ARTICLE: Transfusion Therapy for Autoimmune Hemolytic Anemia
  AUTHOR(S): ROSENFIELD, RE.
  MEDICAL JOURNAL: SEMIN HEMATOL
  VOLUME: 13
  STARTING PAGE: 311
  DATE: OCT 1976
  LIST ON PATIENT RECORD: YES
  Select TOPOGRAPHY RESTRICTION: <RET>
Select TITLE OF ARTICLE: ?
 ANSWER WITH JOURNAL REFERENCE:
   1              Autoimmune hemolytic anemia
   2              Transfusion Therapy for Autoimmune Hemolytic Anemia

     YOU MAY ENTER A NEW JOURNAL REFERENCE, IF YOU WISH
     ANSWER MUST BE 1-80 CHARACTERS IN LENGTH <RET>
Select TITLE OF ARTICLE: <RET>

Select ANTIGEN or ANTIBODY: <RET>
```

NOTE: By answering "YES" to the "List on Patient Record" prompt, you include the reference on the consultation report.

Edit Blood Bank Descriptions File (EF-BD)

The LAB DESCRIPTIONS file (#62.5) contains the names and expansions of the choices included in the sets for many of the options. Site-specific choices may be added, using this option. The description added will be included in all options pointing to the designated screen. For example, an addition which specifies BB TRANS as the screen will appear in all options using the Transfusion Comment field which points to this set.

Example 1: Addition of "XM incomplete at time of issue" as a comment to be displayed during the Blood Transfusion Results (DT) option in the Patient Menu

```
Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: BD  Edit blood bank descriptions file

Select BLOOD BANK DESCRIPTIONS NAME:  XM
  ARE YOU ADDING 'XM' AS A NEW LAB DESCRIPTIONS? Y  (YES)
   LAB DESCRIPTIONS EXPANSION: XM INCOMPLETE AT TIME OF ISSUE
   LAB DESCRIPTIONS SCREEN: ?
     CHOOSE FROM:
       L        LAB
       E        AP EM
       S        AP SURG
       C        AP CYTO
       M        MICRO
       G        GRAM STAIN
       F        FUNGUS
       T        TB
       P        PARASITE
       V        VIRUS
       Y        SPUTUM SCREEN
       W        SMEAR
       A        ORDER
       D        BB DISP
       R        BB TRANS
       X        BB TESTING
       Z        BB COLLECT
       I        AP GENERAL
       J        BB AUDIT
       K        GENERAL
       B        BB RELEASE
   LAB DESCRIPTIONS SCREEN: R  BB TRANS
NAME: XM// <RET>
SCREEN: BB TRANS// <RET>
EXPANSION: XM INCOMPLETE AT TIME OF ISSUE  Replace <RET>
SYNONYM: ER

Select BLOOD BANK DESCRIPTIONS NAME:<RET>
```

NOTES:
- While additional descriptions may be added to this file using this option, the appropriate level of File Manager access ("L" and "l") is necessary for deletion of any descriptions already in the file.

- The comment "XM INCOMPLETE AT TIME OF ISSUE" has now been added and will appear in all options using the TRANSFUSION COMMENT. See the Blood Transfusion Results (DT) option in the Patient Menu.

Example 2: Changing the "EXPIRED" entry to "OUTDATED"

```
Select Edit blood bank files Option: BD  Edit blood bank descriptions file

Select BLOOD BANK DESCRIPTIONS NAME: EXPIRED          EXPIRED
NAME: EXPIRED// OUTDATED
SCREEN: BB DISP// <RET>
EXPANSION: EXPIRED// OUTDATED
SYNONYM: EXPIRED

Select BLOOD BANK DESCRIPTIONS NAME: <RET>
```

NOTE: The listing shown includes the current entries in the LAB DESCRIPTIONS file (#62.5) for the D, R, X, and Z screens.

LAB DESCRIPTIONS LIST MAR 22,1993 10:26 PAGE 1

SCREEN	NAME	EXPANSION
BB COLLECT	SY	POSITIVE SYPHILIS SEROLOGY
BB COLLECT	HB	+HBsAg
BB COLLECT	HIV	POSITIVE HIV ANTIBODY
BB COLLECT	OD	OVERDRAWN (>495 ML)
BB COLLECT	SD	SHORTDRAW (<405 ML)
BB COLLECT	THER	*THERAPEUTIC PHLEBOTOMY*
BB COLLECT	CON	CONTAMINATED
BB COLLECT	TIME	TIME LIMITS FOR PREPARATION EXCEEDED
BB DISP	BAG	DISCARD REASON: BAG BROKE
BB DISP	IV	IV INFILTRATED (ENTER AMOUNT GIVEN)
BB DISP	+RPR	+RPR, +FTA, confirmed
BB DISP	+AB	+Antibody screen
BB DISP	+HBsAg	+ HBsAg confirmed
BB DISP	+HTLV-III	+HTLV-III Antibody, confirmed
BB DISP	WASTE	WASTED (ISSUED/NOT USED)
BB DISP	ALT-1.5	ALT >1.5 NORMAL
BB DISP	ALT-3	ALT >3 NORMAL
BB DISP	+HBcAb	+HBcAb, confirmed
BB DISP	OUTDATED	OUTDATED
BB TRANS	UR	URTICARIA (ALLERGIC, NON-IgA)
BB TRANS	1/4	1/4 UNIT TRANSFUSED
BB TRANS	1/2	1/2 UNIT TRANSFUSED
BB TRANS	3/4	3/4 UNIT TRANSFUSED
BB TRANS	WARM	WARMING COIL USED
BB TRANS	XM	XM INCOMPLETE AT TIME OF ISSUE
BB TESTING	COLD	STRONG COLD AGGLUTININ PRESENT
BB TESTING	OKLABEL	Error made in the invoice entry. Unit label is correct.
BB TESTING	BADLABEL	Unit label incorrect. Return to supplier.
BB TESTING	ERRORCK	Error was made in the recheck.
BB TESTING	RPT	REPEAT PENDING

Edit Blood Product File (EF-BP)

By its very nature, the BLOOD PRODUCT file (#66) is one of the most critical elements in whether the Blood Bank Module reflects the policies and procedures of each institution. This option should be used to customize the file to make it site specific. The data entered in the generic version provides basic information for many different blood components, including details of collection, preparation, storage, testing, administration/ transfusion, etc. It does not, however, presume to encompass all of the possibilities.

Here is some specific information about the prompts and what should be entered.

Select BLOOD PRODUCT NAME:	Free text name of product, 2-40 characters
BLOOD PRODUCT CODE:	<RET> for no entry Free text, 1-5 digits, based on code conforming to the uniform labeling of blood and blood products, described in BLOOD AND BLOOD COMPONENTS: USERS' GUIDE SEPTEMBER 1982. Reference: Guidelines for the Uniform Labeling of Blood Components, available from the Documents Management Branch of the FDA (DOCKET #80N-0120) or the American Blood Commission (Modified Codabar).
BLOOD PRODUCT VOLUME (ml):	Type a number between 1 and 1000, 0 decimal digits, the average volume for this component. The volume is included as part of the patient's transfusion record.
Select SYNONYM:	<RET> for no entry Free text, word processing field,
ABBREVIATION:	Free text, 1-4 characters
	<RET> for no. Yes if product can be modified (divided, frozen, pooled, made leukocyte-poor, rejuvenated, deglycerolized or irradiated).
DOD CODE:	<RET> for no entry. Free text, 2-5 characters This field reflects the product code for the purpose of shipping inventory by the Department of Defense facilities.

MODIFICATION CRITERIA:

<RET> for no entry
If the product can be made from another product present in inventory, enter:

D	DIVIDED
P	POOLED
W	WASHED
F	FROZEN
L	LEUKOCYTE POOR
R	REJUVENATED
G	DEGLYCEROLIZED
I	IRRADIATED
S	SEPARATED

This data is required to assure that all of the necessary prompts are included to collect the necessary data when this component is selected during modification of another component.

PATIENT/PRODUCT ABO:

Enter: 1 MUST MATCH
or 2 MUST BE COMPATIBLE

PATIENT/PRODUCT RH:

Enter: 1 MUST MATCH
or 2 MUST BE COMPATIBLE

PATIENT/PRODUCT REQUIREMENT:

Enter: 1 CROSSMATCH
or 2 PLASMA/PATIENT COMPATIBILITY
If the product contains large volumes of plasma which should be ABO compatible with patient's cells, but does not require a crossmatch, select 2.

DAYS LEFT:

<RET> for no entry
Type a number between .16 and 2557(4 hr to 7 yrs), two decimal digits for the new expiration date required if this product is made from another product present in inventory. This field is used to calculate the new expiration date when units are modified while in inventory.

ANTICOAGULANT:

Enter :

1	CPD
2	ACD
3	CPDA-1

COLLECTION/PREP HOURS:	<RET> for no entry Type a whole number between 1 and 144 for maximum time allowable, if any, between collection of the unit and date/time stored following procedures.
MAXIMUM STORAGE DAYS:	Type a number between .16 and 3652 (4hrs to 10 yrs).
MODIFIED BEFORE RELEASE:	Enter: 1 for "YES" if the component must be further modified before release and 2 for "NO."
CAN BE REQUESTED:	Enter: 1 for "YES" or 0 for "NO"
PATIENT SPECIMEN AGE ALLOWED:	Enter maximum number of hours (24 to 240) allowed.
RETYPE AFTER PREPARATION:	Enter : "NO" to transfer the ABO/Rh interpretation from the original unit if it is modified to this component or "YES" to require ABO/Rh confirmation testing on the new unit if it is prepared from a unit in inventory.
CONTAINS RED BLOOD CELLS:	Enter: 1 for "YES" or 0 for "NO." This field is used to determine whether a retype is required on the unit, as well as for sorting on a variety of reports.
MAX AGE FOR PEDIATRIC USE:	Type a number between 1 and 1827, 0 decimal digits. No entry allowed for products containing "PEDIATRIC" in the name field.
PEDIATRIC PRODUCT:	If this product can be made into a pediatric component, enter the name of the product or the product code of the product. The product entered must contain the word "PEDIATRIC" and must have the same anticoagulant.
SPECIFIC GRAVITY:	Enter: 1.06 WHOLE BLOOD 1.08 RED BLOOD CELLS 1.03 PLASMA This field is used to calculate the volume for a unit when a weight is entered.

MAXIMUM INFUSION TIME(MIN): Type a number between 1 and 999, 0 decimal digits.

AUTOLOGOUS/DIRECTED COMPONENT:

Enter:

1 AUTOLOGOUS
2 DIRECTED
0 NEITHER

This field determines whether the "Restricted For" prompt should appear when a unit is entered into inventory. It is also used for sorting for a variety of reports.

ADMINISTRATIVE CATEGORY: Enter:

1 WHOLE BLOOD
2 RBC
3 FROZEN RBC
4 DEGLYC RBC
5 LEUCODEPLETED RBC
6 WASHED RBC
7 FFP
8 CRYO
9 RANDOM PLAT
10 APHERESIS PLAT
11 GRANULOCYTES

This field is used for sorting the various products in File #66 for several reports. It is also used for screening the various products in File #66.6 for generic ordering.

POOLED PRODUCT: Enter 1 for "YES" and 2 for "NO"
This field is used for identifying where products are accessible in some options and for determining which fields need to contain data when the integrity checking is done.

ASK BAG LOT #: Enter 1 for "YES" and 2 for "NO"
If set to "YES," the "Bag Lot #" prompt will be included in the data entry during component modification.

DESCRIPTION: Free text, word-processing field

Select MODIFY TO:	<RET> for no entry ? to review previous entries If this component, once in inventory, can be made into other components, list those components by entering: the name of blood product, or product code or synonym or abbreviation of blood product
NOT ONLY ONE ALLOWED:	<RET> for no entry Y if more than one component can be prepared from the same unit
Select SUPPLIER:	Free text, 1-30 characters
SUPPLIER Preference number: 1//	Assigned in order of entry
SUPPLIER COST:	What the component costs
ADDRESS LINE 1: etc. CITY: STATE: ZIP CODE:	Supplier's address
PHONE:	<RET> for no entry Free text, 4-30 characters
SUPPLIER PREFIX NUMBER:	<RET> for no entry 2-digit prefix number for those suppliers of blood components (e.g., Red Cross) whose region code (first two digits) is not included in the bar code.
REGISTRATION NUMBER:	<RET> for no entry Whole number, 7-9 digits
UNIT LABEL NON-STANDARD:	<RET> for no entry Y for those suppliers using #'s which are not alphanumeric (i.e., all numeric, etc.,)
Select LOT #:	<RET> for not entry Free text, 1-30 characters for reagents, derivatives, etc.
CRITERIA FOR USE:	Free text, word processing field for criteria to be displayed upon request.

Select TESTS TO CHECK:	<RET> for no entry Name of test to be checked when this component is requested. You can also enter the abbreviation of the test name.
SPECIMEN:	Specimen type
> OR < TEST VALUE:	Value to be used for checking a component request as to whether the request is reasonable.
REQUISITION INSTRUCTIONS:	Free test, word-processing field
Select PRE-OP TESTS TO CHECK:	<RET> for no entry Name of test or the abbreviation of the name of test to be checked when this component is requested.
Select WKLD CODE:	Workload code for counting this component.

Example 1: Entry of information for CPDA-1 Red Blood Cells as a new entry in the file

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: BP Edit blood product file

Select BLOOD PRODUCT NAME: CPDA-1 RED BLOOD CELLS
  ARE YOU ADDING 'CPDA-1 RED BLOOD CELLS' AS A NEW BLOOD PRODUCT (THE 98TH)? Y
(YES)
   BLOOD PRODUCT PRODUCT CODE: ?
     ENTER 1-5 DIGITS ONLY
   BLOOD PRODUCT PRODUCT CODE: 04060
   BLOOD PRODUCT VOLUME (ml): ??
     Type a Number between 1 and 1000, 0 Decimal Digits
   BLOOD PRODUCT VOLUME (ml): 300
DESCRIPTION:
  1> <RET>
   BLOOD PRODUCT Select SYNONYM: RED BLOOD CELLS,CPDA-1
   BLOOD PRODUCT Select SYNONYM: <RET>
NAME: CPDA-1 RED BLOOD CELLS  Replace <RET>
ABBREVIATION: RA-1
CAN BE MODIFIED: ?
     CHOOSE FROM:
       1        YES
       0        NO
CAN BE MODIFIED: YES
IDENTIFIER: ?
     CHOOSE FROM:
       BB       COMPONENT/DERIVATIVE
       AB       ANTISERUM
       T        TEST PROVIDED
IDENTIFIER: BB  COMPONENT/DERIVATIVE
PRODUCT CODE: 04060 // <RET>
DOD CODE: ?
     ANSWER MUST BE 2-5 CHARACTERS IN LENGTH
DOD CODE: <RET>
MODIFICATION CRITERIA: ?
     CHOOSE FROM:
       D        DIVIDED
       P        POOLED
       W        WASHED
       F        FROZEN
       L        LEUKOCYTE POOR
       R        REJUVENATED
       G        DEGLYCEROLIZED
       I        IRRADIATED
       S        SEPARATED
MODIFICATION CRITERIA: <RET>
PATIENT/PRODUCT ABO: ?
     CHOOSE FROM:
       1        MUST MATCH
       2        MUST BE COMPATIBLE
PATIENT/PRODUCT ABO: 2  MUST BE COMPATIBLE
```

```
PATIENT/PRODUCT RH: ?
     CHOOSE FROM:
       1        MUST MATCH
       2        MUST BE COMPATIBLE
PATIENT/PRODUCT RH: 2  MUST BE COMPATIBLE
PATIENT/PRODUCT REQUIREMENT: ?
     CHOOSE FROM:
       1        CROSSMATCH
       2        PLASMA/PATIENT COMPATIBILITY
PATIENT/PRODUCT REQUIREMENT: 1  CROSSMATCH
VOLUME (ml): 300// <RET>
DAYS LEFT: ?
     Type a Number between .16 and 2557, 2 Decimal Digits
DAYS LEFT: <RET>
ANTICOAGULANT: ?
     CHOOSE FROM:
       1        CPD
       2        ACD
       3        CPDA-1
       4        ADSOL
ANTICOAGULANT: 3  CPDA-1
COLLECTION/PREP HOURS: ?
     TYPE A WHOLE NUMBER BETWEEN 1 AND 144
COLLECTION/PREP HOURS: <RET>
MAXIMUM STORAGE DAYS: ?
     TYPE A NUMBER BETWEEN .16 AND 3652 (4hr to 10 yrs)
MAXIMUM STORAGE DAYS: 35
MODIFIED BEFORE RELEASE: ?
     CHOOSE FROM:
       1        YES
       0        NO
MODIFIED BEFORE RELEASE: NO
CAN BE REQUESTED: ?
     CHOOSE FROM:
       1        YES
       0        NO
CAN BE REQUESTED: 1  YES
PATIENT SPECIMEN AGE ALLOWED: ?
     Enter maximum number of hours (24 to 240) allowed
PATIENT SPECIMEN AGE ALLOWED: 72
RETYPE AFTER PREPARATION: ?
     CHOOSE FROM:
       0        NO
       1        YES
RETYPE AFTER PREPARATION: NO
CONTAINS RED BLOOD CELLS: ?
     CHOOSE FROM:
       1        YES
       0        NO
CONTAINS RED BLOOD CELLS: YES
MAX AGE FOR PEDIATRIC USE: ?
     Type a Number between 1 and 1827, 0 Decimal Digits

No entry allowed for products containing 'PEDIATRIC' in the name field.
MAX AGE FOR PEDIATRIC USE: <RET>
```

```
PEDIATRIC PRODUCT: ?
     BLOOD PRODUCT and PEDIATRIC PRODUCT must have the same anticoagulant.
     Selects only pediatric components
 ANSWER WITH BLOOD PRODUCT NAME, OR PRODUCT CODE, OR SYNONYM
 DO YOU WANT THE ENTIRE BLOOD PRODUCT LIST? N  (NO)
PEDIATRIC PRODUCT: <RET>
SPECIFIC GRAVITY: ?
     CHOOSE FROM:
       1.06     WHOLE BLOOD
       1.08     RED BLOOD CELLS
       1.03     PLASMA
SPECIFIC GRAVITY: 1.08  RED BLOOD CELLS
MAXIMUM INFUSION TIME(MIN): ?
     Type a Number between 1 and 999, 0 Decimal Digits
MAXIMUM INFUSION TIME(MIN): 270
AUTOLOGOUS/DIRECTED COMPONENT: ?
     CHOOSE FROM:
       1        AUTOLOGOUS
       2        DIRECTED
       0        NEITHER
AUTOLOGOUS/DIRECTED COMPONENT: NEITHER
ADMINISTRATIVE CATEGORY: ?
     CHOOSE FROM:
       1        WHOLE BLOOD
       2        RBC
       3        FROZEN RBC
       4        DEGLYC RBC
       5        LEUCODEPLETED RBC
       6        WASHED RBC
       7        FFP
       8        CRYO
       9        RANDOM PLAT
       10       APHERESIS PLAT
       11       GRANULOCYTES
ADMINISTRATIVE CATEGORY: 2  RBC
POOLED PRODUCT: ?
     CHOOSE FROM:
       1        YES
       0        NO
       1        yes
       0        no
POOLED PRODUCT: 0  NO
ASK BAG LOT #: ?
     CHOOSE FROM:
       1        YES
       0        NO
       1        yes
       0        no
ASK BAG LOT #: 0  NO
DESCRIPTION:<RET>
  1>
Select SYNONYM: RED BLOOD CELLS,CPDA// <RET>
Select MODIFY TO: 04061  CPDA-1 RED BLOOD CELLS, DIVIDED UNIT   04061   R1/D
```

```
  NOT ONLY ONE ALLOWED: ?

     CHOOSE FROM:
       1        YES
       0        NO
  NOT ONLY ONE ALLOWED: <RET>
Select MODIFY TO: 04800
     1   04800  RED BLOOD CELLS, WASHED      04800      WC      1
     2   04800  REJUVENATED WASHED RED CELLS      04800      RJWC      0
CHOOSE 1-2: 1  RED BLOOD CELLS, WASHED
  NOT ONLY ONE ALLOWED: <RET>
Select MODIFY TO: RBCF  RED BLOOD CELLS, FROZEN      06200      RBCF      1
  NOT ONLY ONE ALLOWED: <RET>
Select MODIFY TO: ?
 ANSWER WITH MODIFY TO NUMBER
CHOOSE FROM:
   47              CPDA-1 RED BLOOD CELLS, DIVIDED UNIT
   53              RED BLOOD CELLS, WASHED
   54              RED BLOOD CELLS, FROZEN

     YOU MAY ENTER A NEW MODIFY TO, IF YOU WISH
     ANSWER MUST BE 2-50 CHARACTERS IN LENGTH
     Selects only blood components
 ANSWER WITH BLOOD PRODUCT NAME, OR PRODUCT CODE, OR SYNONYM
 DO YOU WANT THE ENTIRE BLOOD PRODUCT LIST? N  (NO)
Select MODIFY TO: <RET>
Select SUPPLIER: BCNI
   SUPPLIER Preference number: 1// <RET>
   SUPPLIER COST: 39
  COST: 39// <RET>
  ADDRESS LINE 1: 2222 N. MILWAUKEE AVE
  ADDRESS LINE 2:
  ADDRESS LINE 3:
  CITY: GLENVIEW
  STATE: ILLINOIS
  ZIP CODE: 60245
  PHONE: 298-0530
  SUPPLIER PREFIX NUMBER: ?
     ANSWER MUST BE 1-3 CHARACTERS IN LENGTH
  SUPPLIER PREFIX NUMBER: <RET>
  REGISTRATION NUMBER: ?
     ANSWER MUST BE 7-9 DIGITS IN LENGTH
  REGISTRATION NUMBER: <RET>
  UNIT LABEL NON-STANDARD: ?
     CHOOSE FROM:
       1        YES
       0        NO
  UNIT LABEL NON-STANDARD: 1  YES
  Select LOT #: ?
 ANSWER WITH LOT #
     YOU MAY ENTER A NEW LOT #, IF YOU WISH
     ANSWER MUST BE 1-30 CHARACTERS IN LENGTH
  Select LOT #: <RET>
Select SUPPLIER: ?
 ANSWER WITH SUPPLIER Preference number:
   1              BCNI      39
```

```
     YOU MAY ENTER A NEW SUPPLIER, IF YOU WISH
     ANSWER MUST BE 1-30 CHARACTERS IN LENGTH
Select SUPPLIER: <RET>
CRITERIA FOR USE:
  1>?

You are ready to enter a line of text.
If you have no text to enter, just press the return key.
Type 'CONTROL-I' (or TAB key) to insert tabs.
When text is output, these formatting rules will apply:
 A)  Lines containing only punctuation characters, or lines containing tabs
     will stand by themselves, i.e., no wrap-around.
 B)  Lines beginning with spaces will start on a new line.
 C)  Expressions between '|' characters will be evaluated as
     'computed-field expressions and then be printed as evaluated
     thus '|NAME|' would cause the current name to be inserted in the text.

Want to see a list of allowable formatting 'WINDOWS'? NO// <RET>  (NO)
  1>Chronic iron deficiency anemia with a hemoglobin
  2>less than 7 gm/dl
  3>Acute anemia due to hypovolemia with a hemoglobin
  4>less than 10 gm/dl
  5><RET>
EDIT Option: <RET>
Select TESTS TO CHECK: hgb
     1   HGB
     2   HGB A1C  HEMOGLOBIN A1C
     3   HGB ELECTROPHORESIS
CHOOSE 1-3: 1
   TESTS TO CHECK SPECIMEN: BLOOD
     1   BLOOD           0X000
     2   BLOOD BAND CELL          0X161
     3   BLOOD BASOPHIL          0X180
     4   BLOOD EOSINOPHIL          0X170
     5   BLOOD ERYTHROCYTE          0X120
     6   BLOOD GRANULOCYTIC CELL          0X150
TYPE '^' TO STOP, OR
CHOOSE 1-6: 1
  SPECIMEN: BLOOD// <RET>
  > OR < TEST VALUE: >10
Select TESTS TO CHECK: HCT
   TESTS TO CHECK SPECIMEN: BLOOD
     1   BLOOD           0X000
     2   BLOOD BAND CELL          0X161
     3   BLOOD BASOPHIL          0X180
     4   BLOOD EOSINOPHIL          0X170
     5   BLOOD ERYTHROCYTE          0X120
     6   BLOOD GRANULOCYTIC CELL          0X150
TYPE '^' TO STOP, OR
CHOOSE 1-6: 1
  SPECIMEN: BLOOD// <RET>
  > OR < TEST VALUE: >30
Select TESTS TO CHECK: <RET>
REQUISITION INSTRUCTIONS:
  1><RET>
```

```
Select PRE-OP TESTS TO CHECK: ?
 ANSWER WITH PRE-OP TESTS TO CHECK
     YOU MAY ENTER A NEW PRE-OP TESTS TO CHECK, IF YOU WISH
     Selects only lab tests with a "CH" subscript.
 ANSWER WITH LABORATORY TEST NAME, OR LOCATION (DATA NAME), OR
     PRINT NAME
 DO YOU WANT THE ENTIRE LABORATORY TEST LIST? N  (NO)
Select PRE-OP TESTS TO CHECK: <RET>
Select WKLD CODE: <RET>

Select BLOOD PRODUCT NAME: <RET>
```

NOTE:
It is possible to use this file to keep track of any derivatives that the Blood Bank might order or issue. For example, Factor IX concentrate (Konyne or Proplex) can be added to the file, specifying it as a component (IDENTIFIER=BB) in order to have it handled exactly like the other components. It is then possible to log in the units using the lot number and a number or letter as the unit ID number, specifying NA for the ABO/Rh and entering the remaining data in accordance with the instructions provided in the boxes.

Example 2: Addition of a second supplier for CPDA-1 Red Blood Cells

```
Select Edit blood bank files Option: BP  Edit blood product file

Select BLOOD PRODUCT NAME: 04060  CPDA-1 RED BLOOD CELLS      04060    PRBC
   1
NAME: CPDA-1 RED BLOOD CELLS  Replace <RET>
ABBREVIATION: PRBC// ^supplier
Select SUPPLIER: THE BEST BLOOD CENTER// MID-AMERICA RED CROSS
   SUPPLIER Preference number: 2// <RET>
   SUPPLIER COST: 42.00
  COST: 42.00// <RET>
  ADDRESS LINE 1: <RET>
  ADDRESS LINE 2: <RET>
  ADDRESS LINE 3: <RET>
  CITY: <RET>
  STATE: <RET>
  ZIP CODE: <RET>
  PHONE: <RET>
  SUPPLIER PREFIX NUMBER: 57
  REGISTRATION NUMBER: <RET>
  UNIT LABEL NON-STANDARD: <RET>
  Select LOT #: <RET>
Select SUPPLIER: <RET>
CRITERIA FOR USE:. . .
      . . .
  5> After Recovery from Surgery, Trauma or GI bleeding:
  6>   Must have a Hemoglobin <8 gm/dl or HCT<24 %, OR
  7>
  8> Chronic Anemia:
  9>   Must have a specific diagnosis AND symptoms related to anemia
 10>   (e.g. severe tiredness, fainting).  The following diagnoses are
 11>   usually contraindications to transfusion:
 12>      Iron deficiency, pernicious anemia, nutritional deficiency
 13>      malabsorption syndrome.
EDIT Option: <RET>
Select TESTS TO CHECK: HCT// ^

Select BLOOD PRODUCT NAME: <RET>
```

NOTES:

- You can use the up-arrow, "^," to jump from one entry to another.
- Remember that the supplier prefix is a two digit eye readable, alpha, or numeric prefix.

Edit Blood Bank Utility File (EF-BU)

The BLOOD BANK UTILITY file (#65.4) serves two purposes, one in the donor module and the other in providing choices for types of transfusion reactions. It contains the names and expansions of the choices included in the sets of many of the Donor Menu options. Site-specific choices will need to be added, using this option, if the donor module is to be used. The entries added will be included in all options pointing to the designated SCREEN that is, an addition which specifies GROUP AFFILIATION & COLLECTION SITE will appear in all options which point to this set.

Site specific choices will need to be added, using this option, to indicate the types of transfusion reactions. The entries should be done in the order you wish the display choices appear.

While additional entries may be added to this file using this option, the appropriate level of File Manager access ("L" and "l") is necessary for deletion of any entries.

Example 1: Entry of donor group

```
Select Edit blood bank files Option: BU  Edit blood bank utility file

Select BLOOD BANK UTILITY NAME: PK-V
  ARE YOU ADDING 'PK-V' AS A NEW BLOOD BANK UTILITY? Y  (YES)
   BLOOD BANK UTILITY SCREEN: ?
     CHOOSE FROM:
       G        GROUP AFFILIATION
       D        DEFERRAL CODE
       C        COLLECTION SITE
       GC       GROUP AFFILIATION & COLLECTION SITE
       R        DONOR REACTION
       T        TRANSFUSION REACTION
   BLOOD BANK UTILITY SCREEN: GC  GROUP AFFILIATION & COLLECTION SITE
   BLOOD BANK UTILITY FULL NAME: ?
     ANSWER MUST BE 1-80 CHARACTERS IN LENGTH
   BLOOD BANK UTILITY FULL NAME: PARK RIDGE VFW POST #345
NAME: PK-V// <RET>
SCREEN: GROUP AFFILIATION & COLLECTION SITE// <RET>
FULL NAME: PARK RIDGE VFW POST #345  Replace <RET>
ADDRESS LINE 1: 1234 HIGHLAND
ADDRESS LINE 2: <RET>
ADDRESS LINE 3: <RET>
CITY: PARK RIDGE
STATE: ILLINOIS
ZIP CODE: 60234
PHONE 1: 354-6789
PHONE 2: <RET>
GROUP LEADER: TOM JONES
COMMENT:
  1><RET>

Select BLOOD BANK UTILITY NAME:<RET>
```

Example 2: Suggestions for entry of Transfusion Reaction Types

NOTE: Since the Name field is what appears in the data entry options, it is preferable to enter the full name of the reaction type in the Name field and use the FULL NAME for the abbreviation which is cross referenced.

```
Select Edit blood bank files Option: BU  Edit blood bank utility file

Select BLOOD BANK UTILITY NAME: <RET>
```

NAME	SCREEN	FULL NAME
ALLERGIC-MILD	T	UR
ALLERGIC-SEVERE	T	IGA
DELAYED ANTIBODY FORMATION	T	DAB
DELAYED HEMOLYTIC	T	DH
FEBRILE NONHEMOLYTIC	T	FNH
IMMEDIATE HEMOLYTIC	T	IH
POST TRANSFUSION HEPATITIS	T	PTH
TRANSFUSION REACTION-OTHER	T	TR-OTHER
UNRELATED TO TRANSFUSION	T	UNR

Shown below are the entries in the generic version of the BLOOD BANK UTILITY file (#65.4). For purposes of this listing, only a truncated version of the full name may be included, since the full name may be 1-80 characters.

☛CAUTION: Do Not Use "DNRHX" as the name for any future entries, as this entry is necessary to control the donor history questions.

```
BLOOD DONOR UTILITY LIST              (FEB 12, 1994  12:19)   PAGE 1
SCREEN                    NAME          FULL NAME

DEFERRAL CODE             AGE         AGE<17, MINOR & NO CONSENT, OR AGE>65 &
DEFERRAL CODE             AIDS        AIDS-POSITIVE QUEST, RESPONSE
DEFERRAL CODE             ALCOHOL     ALCOHOL HABITUATION OR INTOXICATION
DEFERRAL CODE             BLOOD       ABNORMAL BLEEDING TENDENCY
DEFERRAL CODE             BP          SYSTOLIC BP <90 or >180 for DIASTOLIC BP
DEFERRAL CODE             CANCER      HISTORY OF CANCER
DEFERRAL CODE             CNS         CONVULSIONS AFTER INFANCY
DEFERRAL CODE             DONATION    DONATION INTERVAL <8 WK FOR WHOLE BLOOD
DEFERRAL CODE             DRUG        DRUG THERAPY
DEFERRAL CODE             GENERAL AP  UNACCEPTABLE GENERAL APPEARANCE
DEFERRAL CODE             HCT         HCT <38% female, <41% male
DEFERRAL CODE             HEART       ACTIVE HEART DISEASE
DEFERRAL CODE             HEPATITIS   VIRAL HEPATITIS, SINGLE DONOR TO PT WHO
DEFERRAL CODE             HGB         HGB <125 g/dl female, <13.5 g/dl male
DEFERRAL CODE             IMMUNIZ     IMMUNIZATIONS OR VACCINATIONS VARIES WIT
DEFERRAL CODE             INFECTIOUS  NOT FREE OF INFECTIOUS DISEASE
DEFERRAL CODE             KIDNEY      ACTIVE KIDNEY DISEASE
DEFERRAL CODE             LIVER       ACTIVE LIVER DISEASE
DEFERRAL CODE             LUNG        ACTIVE LUNG DISEASE
DEFERRAL CODE             MALARIA     DEFERRED 6 mo - 3 yr DEPENDING ON CIRCUMS
DEFERRAL CODE             MHX         MEDICAL HISTORY DEFERRAL
DEFERRAL CODE             NARCOTIC    NARCOTIC HABITUATION OR INTOXICATION
DEFERRAL CODE             NS          NEEDLE SCARS
DEFERRAL CODE             OP          OTHER PERMANENT DEFERRAL
DEFERRAL CODE             OT          OTHER TEMPORARY DEFERRAL
DEFERRAL CODE             PHERESIS    WB DONATION <48 HR AFTER PHERESIS
DEFERRAL CODE             PREG        PREGNANCY TO 6 WEEKS POSTPARTUM
DEFERRAL CODE             PULSE       PULSE <50 or >100/min or pathological
                                      irregularity
DEFERRAL CODE             RECEIPT     RECEIVED BLOOD PRODUCT PAST 6 MO
DEFERRAL CODE             SKIN        DONOR SKIN NOT FREE OF LESIONS
DEFERRAL CODE             SURG        SURGERY WITHIN 6 WEEKS - 6 MONTHS
DEFERRAL CODE             TB          CLINICALLY ACTIVE TUBERCULOSIS
DEFERRAL CODE             TEMP        ORAL TEMP >37.5 degrees C
DEFERRAL CODE             WEIGHT      >109 lbs can donate 450+/-45 ml <109 lb
GROUP AFFILIATION         VAH         VA HOSPITAL
 & COLLECTION
HISTORY                   DNRHX       BLOOD DONOR HISTORY QUESTIONS
DONOR REACTION            MILD        MILD REACTION
DONOR REACTION            MODERATE    MODERATE REACTION
DONOR REACTION            NONE        NO REACTION
DONOR REACTION            SEVERE      SEVERE REACTION
```

Blood Component Request Edit (EF-CR)

This option allows the editing of requests for blood components.

Example:

```
Select Edit blood bank files Option: CR  Blood component request edit

Select BLOOD COMPONENT REQUEST NAME:  REd blood cells

NAME: RED BLOOD CELLS// <RET>
CRITERIA FOR USE:
  1><RET>
Select PRODUCTS: AS-1 RED BLOOD CELLS // <RET>
```

Edit Lab Letter File (EF-LL)

The lab letter file provides a mechanism to enter various types of standardized letters and reports for specifying the appropriate screen. The file is currently used for four types of activities: 1) generation of blood bank consultation reports, 2) generation of shipping invoices, 3) generation of blood donor recruitment letters, 4) generation of homologous blood donor thank you letters, and 5) inventory workload sheet.

This option should be used to customize the letters to make them site specific, as described in each example; however, the name of the letter (65.9,.01) **cannot be altered** since it is used in the various routines.

Specific comments are included following the examples.

Example 1: Allo antibody report

```
Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: LL  Edit lab letter file

Select LAB LETTER NAME: ALLO ANTIBODY REPORT
NAME: ALLO ANTIBODY REPORT  Replace <RET>
SCREEN: CONSULT// ??
     Screens entries for pre and post donor visits, consults and letters.
     CHOOSE FROM:
       0        PRE-VISIT
       1        POST-VISIT
       2        CONSULT
       3        LETTER
SCREEN: CONSULT// <RET>
TOP MARGIN OF PAGE: ??
     Number of blank lines from top of page
      to first line of print.
TOP MARGIN OF PAGE: <RET>
BOTTOM MARGIN OF PAGE: <RET>
LEFT LETTER TEXT MARGIN: 10// <RET>
RIGHT LETTER TEXT MARGIN: 10// <RET>
DOUBLE SPACE: NO// <RET>
RIGHT JUSTIFY TEXT: YES// <RET>
ACCESSION AREA: BLOOD BANK// ?
     You can not select a accession area designated Work Area.
 ANSWER WITH ACCESSION AREA
 DO YOU WANT THE ENTIRE ACCESSION LIST? N  (NO)
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
```

```
LETTER TEXT:
  1>Patient has atypical red cell antibodies.
  2>Blood will not be available in an emergency since, unless otherwise noted,
the patient must continue to receive antigen negative blood even though the
antibody may not always be demonstrable by routine techniques.
  3>When requesting blood for this patient, please submit at least 2 full 10-15
ml red top tubes and allow a minimum of 2 hours for the Blood Bank to find
compatible blood for this patient.
  4>Under normal circumstances, this will be sufficient time to locate two
units of blood.  If the % compatible (noted below) is less than 5%, more time
may be needed.
EDIT Option: <RET>
SENDER NAME LINE 1: ?
     Answer must be 2-40 characters in length.
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: ?
     Answer must be 2-40 characters in length.
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: 4// ?
     Type a Number between 1 and 10
LINES FROM TEXT TO SENDER NAME: 4// <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>

Select LAB LETTER NAME: <RET>
```

NOTES:

- Do not change the name of the report.
- The "Sender Name Line 1:" prompt is for the name of the BB Supervisor or Medical Director who will be signing the consultation report.
- The "Sender Name Line 2:" prompt is for the title of the sender.
- The fields PARAGRAPH one through four are not used for Allo antibody consultation reports.
- The Top and Bottom Margin fields are not used for consults
- The default value for the right and left text margins is five.
- The fields SENDER NAME LINES one through five are not used for consults.

Example 2: Direct Coombs Test Report

```
Select Edit blood bank files Option: LL  Edit lab letter file

Select LAB LETTER NAME: DIRECT COOMBS TEST REPORT
NAME: DIRECT COOMBS TEST REPORT  Replace <RET>
SCREEN: CONSULT// <RET>
TOP MARGIN OF PAGE: <RET>
BOTTOM MARGIN OF PAGE: ^LETTER TEXT
LETTER TEXT:
  1>Patient has atypical red cell antibodies.  Blood will not be available in
an emergency.
  2>When requesting blood for this patient, please submit at least 2 full 10-15
ml red top tubes and allow a minimum of 2 hours for the Blood Bank to find
compatible blood for this patient.
  3>Under normal circumstances, this will be sufficient time to locate two
units of blood.
EDIT Option: <RET>
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: 4// <RET>
PARAGRAPH 1:
  1>This could mean 1 of 3 things:
  2> 1.  The sensitivity of the test is limited and the amount of antibody
attached to the red cells is insufficient to produce a serological reaction
even when a concentrated eluate is prepared.
  3> 2.  The antibody is directed against some medication which the patient is
receiving and, therefore, does not react with the reagent red cells in the
absence of the drug.
  4> 3.  Only C3 was attached to the cells; therefore, no antibody could be
recovered.
EDIT Option: <RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>

Select LAB LETTER NAME: <RET>
```

NOTES:

- The "LETTER TEXT:" is the text of the introductory paragraph to appear on the consultation report.

- The "PARAGRAPH 1:" is the text of the paragraph to be used for the Direct Coombs report if the DAT is positive and the eluate is negative, i.e., no entry in the Eluate Antibody field.

Example 3: Donor Recruitment Letters

There are two types of recruitment letters: DONATION GROUP DRIVE and RBC ANTIGEN ABSENT, DONOR. Although the basic format of the letter is identical, the letter text will be different, as shown.

Letter 1: RBC Antigen Absent, Donor

```
Select LAB LETTER NAME: RBC ANTIGEN ABSENT, DONOR
NAME: RBC ANTIGEN ABSENT, DONOR  Replace <RET>
SCREEN: PRE-VISIT// <RET>
TOP MARGIN OF PAGE: 2// <RET>
BOTTOM MARGIN OF PAGE: 4// <RET>
LEFT LETTER TEXT MARGIN: 15// <RET>
RIGHT LETTER TEXT MARGIN: 10// <RET>
DOUBLE SPACE: NO// <RET>
RIGHT JUSTIFY TEXT: NO// <RET>
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: 14// <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
LETTER TEXT:. . .
       . . .
  8>Our testing revealed that you do not have the following blood group protein
or proteins: [65.5,6.2].
  9>The frequency of finding someone else without these factors is less than 1
per 100.  This means you are a VERY special blood donor.
 10>
 11>We have recently transfused your blood; which we can keep frozen for up to
ten years, to a patient with antibodies.
 12>We would like you to come in and donate another unit as soon as it is
convenient for you.
 13>
 14>You last donation was [65.5,5]; therefore, you are eligible to donate now.
You may make an appointment by calling 216-2237.  Please bring this letter with
you when you come in.  Hope to see you soon!
 15>
 16>Sincerely,
EDIT Option: <RET>
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: 4// <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>
```

Letter 2: Donation Group Drive

```
Select LAB LETTER NAME: DONATION GROUP DRIVE
NAME: DONATION GROUP DRIVE  Replace <RET>
SCREEN: PRE-VISIT// <RET>
TOP MARGIN OF PAGE: 12// <RET>
BOTTOM MARGIN OF PAGE: 5// <RET>
LEFT LETTER TEXT MARGIN: 20// <RET>
RIGHT LETTER TEXT MARGIN: 10// <RET>
DOUBLE SPACE: NO// <RET>
RIGHT JUSTIFY TEXT: NO// <RET>
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: 19// <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
LETTER TEXT:
  1>Your church group is having a blood drive on March 11, 1989 from 10 - 2 PM
at the [65.5,2].
  2>
  3>Since you have donated at previous drives, we hoped that you would be
willing to do so again.  Please contact Eleanor Beehm at 598-5873 if you are
able to do so and have not already scheduled an appointment.
  4>
  5>
  6>I hope you can come and help make the drive a success.
  7>
  8>Sincerely,
EDIT Option: <RET>
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: 4// ^

Select LAB LETTER NAME: <RET>
```

NOTES:

- The fields included in these letters will be filled in with data from the BLOOD DONOR file (#65.5) for each specific donor to produce customized letters. The fields included in this example are the **only fields** which can be used. However, the fields may be moved within the text or excluded as the letter is made site specific.

- The Paragraph one through three fields are not used for previsit letters.

Example 4: Post-donation Thank You Letters

There are four types of post-donation thank you letters two are shown below: NO DONATION, WHOLE BLOOD, CYTAPHERESIS and PLASMAPHERISIS. Although the basic format of the letter is identical, the letter text may be altered appropriately. Selection of the correct letter will be based on the entry in the Donation Type field 65.5, for the donor for that specific DONATION DEFERRAL DATE.

Letter 1: Whole Blood

```
Select LAB LETTER NAME: WHOLE BLOOD
NAME: WHOLE BLOOD// <RET>
SCREEN: POST-VISIT// <RET>
TOP MARGIN OF PAGE: 2// <RET>
BOTTOM MARGIN OF PAGE: 4// <RET>
LEFT LETTER TEXT MARGIN: 15// <RET>
RIGHT LETTER TEXT MARGIN: 10// <RET>
DOUBLE SPACE: NO// <RET>
RIGHT JUSTIFY TEXT: NO// <RET>
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: 14// <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
LETTER TEXT:. . .
      . . .
  4>As the demand for blood is continuous, and no substitute currently exists,
we sincerely urge you to continue your support of the Blood Donor Center, and
to assist us in recruiting your friends to also become regular donors.
  5>Blood is one of the few things in life that you can give to others at no
cost to yourself.
  6>
  7>Your blood type is [65.5,.05] [65.5,.06].  Unless you are otherwise
notified, all test results for unexpected antibodies,
  8>hepatitis B virus, HIV (AIDS) virus antibody and syphilis have been found
to be negative.
  9>
 10>Remember, you have a special gift that someone else needs---blood, the gift
of life.  Thank you for sharing your gift.
 11>
 12>Sincerely,
EDIT Option: <RET>
SENDER NAME LINE 1: NAME
SENDER NAME LINE 2: Blood Bank Supervisor
LINES FROM TEXT TO SENDER NAME: 4// <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>
```

Letter 2: No Donation

```
Select LAB LETTER NAME: NO DONATION
NAME: NO DONATION// <RET>
SCREEN: POST-VISIT// <RET>
TOP MARGIN OF PAGE: 2// ^LETTER TEXT
LETTER TEXT:
  1>We greatly appreciate the effort which you made to donate on [65.5,5]
  2>at the [65.54,.02].
  3>
  4>Donors are deferred for one of two reasons, either to (1) protect the
potential blood donor or (2) to protect the intended recipient.
  5>Despite the fact that we could not allow you to donate blood at this time,
we urge you to continue your support of the blood donor program.
  6>If you were temporarily deferred, please call the Blood Donor Center at
216-2237 to make an appointment should you have a change in your medical
history or medications.
  7>
  8>Thank you again,
EDIT Option: <RET>
SENDER NAME LINE 1: NAME
SENDER NAME LINE 2: Blood Bank Recruiter
LINES FROM TEXT TO SENDER NAME: 4// <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>

Select LAB LETTER NAME:<RET>
```

NOTES:

- The fields included in these letters will be filled in with data from the BLOOD DONOR file (#65.5) for each specific donor to produce customized letters. The fields included in this example are the **only fields** which can be used. However, the fields may be moved within the text or excluded as the letter is made site specific.
- The Paragraph one through three fields are not used for previsit letters.

Example 5: Entry of Text for Shipping Invoice

> **NOTE:** In order for this letter to be used as the text in the I-SH option, the name **must** be exact.

```
Select Edit blood bank files Option: LL  Edit lab letter file

Select LAB LETTER NAME: SHIPPING INVOICE
NAME: SHIPPING INVOICE// <RET>
SCREEN: LETTER// <RET>
TOP MARGIN OF PAGE: <RET>
BOTTOM MARGIN OF PAGE: <RET>
LEFT LETTER TEXT MARGIN: 10// <RET>
RIGHT LETTER TEXT MARGIN: 10// <RET>
DOUBLE SPACE: <RET>
RIGHT JUSTIFY TEXT: <RET>
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
LETTER TEXT:
  1>I certify that the blood products listed have been properly maintained
  2>in accordance with the Code of Federal Regulations while in storage at
  3>this institution.  Each unit is nonreactive for anti-HIV 1/2, HBsAg,
  4>anti-HCV(2.0),HBcAB, anti-HTLV 1, and RPR by FDA required tests.  ALT
levels are within established limits.  Components were inspected when packed
  5>for shipment and found to be satisfactory in color and appearance.
  6>
  7>_____                    _____
  8>Signature                 Date//time packed
  9>
 10>
 11>Temperature upon receipt:      _________ degrees C
 12>Container and contents:        __ Satisfactory    __ Unsatisfactory
 13>
 14>
 15>Received date/time: _____          Signature: _____
EDIT Option:
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>

Select LAB LETTER NAME: <RET>
```

Example 6: Inventory Workload Sheet

```
Select Edit blood bank files Option: LL  Edit lab letter file

Select LAB LETTER NAME: INVENTORY WORKSHEET
NAME: INVENTORY WORKSHEET// <RET>
SCREEN: LETTER// <RET>
TOP MARGIN OF PAGE: <RET>
BOTTOM MARGIN OF PAGE: <RET>
LEFT LETTER TEXT MARGIN: 5// <RET>
RIGHT LETTER TEXT MARGIN: 5// <RET>
DOUBLE SPACE: <RET>
RIGHT JUSTIFY TEXT: <RET>
ACCESSION AREA: BLOOD BANK// <RET>
SENDER LINES LEFT MARGIN: <RET>
SENDER LINE 1: <RET>
SENDER LINE 2: <RET>
SENDER LINE 3: <RET>
SENDER LINE 4: <RET>
SENDER LINE 5: <RET>
LETTER TEXT:
  1>Refer to procedure, "Grading and Interpreting Reactions", for tube testing
interpretation.  See "Microtiter Plate Testing" for plate interpretation.

EDIT Option: <RET>
SENDER NAME LINE 1: <RET>
SENDER NAME LINE 2: <RET>
LINES FROM TEXT TO SENDER NAME: <RET>
PARAGRAPH 1:
  1><RET>
PARAGRAPH 2:
  1><RET>
PARAGRAPH 3:
  1><RET>
PARAGRAPH 4:
  1><RET>

Select LAB LETTER NAME: <RET>
```

Maximum Surgical Blood Order Edit (EF-MS)

In order to facilitate the performance of active blood usage review, as required by the Joint Commission for the Accreditation of Hospitals Organization (JCAHO), the system automatically audits each transfusion request **as** the request is entered into the system.

For requests that are PreOp, the system will check to see if the Surgery Module is being used. If the facility is using the Surgery Module, the system will display the operations for which the patient has been scheduled and allow entry of PreOp requests for that specific procedure. If the facility is not using the Surgery Module, the system will check to see if CPT file (#81) CURRENT PROCEDURAL TERMINOLOGY (CPT) is available. If it is not available, the system cannot audit PreOp requests. If it is available, the system will display a prompt to enter the surgical procedure. It will then display the entries in File #81 for the Maximum Surgical Blood Order Schedule (MSBOS) for that specific surgical procedure. The entries displayed are based on the information entered via this option; therefore, it is possible to customize the PreOp transfusion request auditing capabilities to make it totally site specific.

HINTS:

1. In order for this option to be functional, Files #81 and OPERATIONS (MSBOS) file (#66.5) must be present in the system. File #66.5 represents a subset of File #81. It contains the actual Maximum Surgical Blood Order Schedule (MSBOS) entries, i.e., the components to be checked.

2. If there are no entries for blood orders entered for a specific procedure, the system will allow component requests to be entered for that procedure and will display the information that no auditing can be done for that procedure.

3. If multiple components are entered for a specific procedure, each component can have its own audit criteria.

4. If a certain component, such as platelets or cryoprecipitate, should always be subjected to further evaluation, enter that component and set the number of units at 0. By doing this, all PreOp component requests for this component will require additional justification and will appear on the inappropriate requests report when generated.

5. The Transfused RBC for Treating Specialty [LRBLJUT] option in the Reports Menu might be very useful in trying to evaluate recent transfusion data. Although there is no direct link to patients who have undergone specific procedures, that option provides a listing of transfusions for specific patients that can then be compared to surgery date.

Example: Edit File

```
Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: MS  Maximum surgical blood order edit

Select OPERATION: ?
 ANSWER WITH CPT CODE, OR CPT CATEGORY
 DO YOU WANT THE ENTIRE CPT LIST? N  (NO)
Select OPERATION: 44140          PARTIAL REMOVAL OF COLON COLECTOMY, PARTIAL;
WITH ANASTOMOSIS

Selection OK ? YES// <RET>  (YES)
Select BLOOD COMPONENT REQUEST:  ?
     YOU MAY ENTER A NEW BLOOD COMPONENT REQUEST, IF YOU WISH
     Selects only blood products
 ANSWER WITH BLOOD PRODUCT NAME, OR PRODUCT CODE, OR SYNONYM
 DO YOU WANT THE ENTIRE BLOOD PRODUCT LIST? N  (NO)
Select BLOOD COMPONENT REQUEST: 04060 CPDA-1 RED BLOOD CELLS
  NUMBER OF UNITS: ?
     Type a Number between 0 and 50, 0 Decimal Digits
  NUMBER OF UNITS: 2
Select BLOOD COMPONENT REQUEST: 18201  FRESH FROZEN PLASMA, CPDA-1 18201 FA1 1
  NUMBER OF UNITS: 0
Select BLOOD COMPONENT REQUEST: <RET>

Select OPERATION: <RET>

Select Edit blood bank files Option: <RET>
```

NOTES:

- File #81 contains entries that are not surgical procedures. Rather than going through the entire file of over 7000 entries, consult a reference manual for the codes/names of surgical procedures.

- Any entry in the BLOOD PRODUCT file (#66) is a valid response to the "Select BLOOD COMPONENT REQUEST" prompt. If the facility is using several different red blood cell components, such as AS-1 RBCs & CPDA-1 RBCs, select the one most commonly entered as the component requested for the one being audited. Remember that all the components entered here will be displayed during the entry of the component request through either the Blood Component Request (P-RS-CR) option or the Specimen Log in (P-SL) option in the Patient Menu. Having multiple red blood cell components might prove very confusing.

- The number of units entered should be the maximum number of units appropriate for the specific component. This entry should be based either on audit criteria which are developed in conjunction with the medical staff **or** based on a previously approved Maximum Surgical Blood Order Schedule.

Edit Blood Bank Site Parameters (EF-SP)

This option allows editing of the LABORATORY SITE file (#69.9) which allows the site to customize some functionality. In the case of Blood Bank, this feature is used primarily for determining the content of specific edit templates for which there is some variability in the data which an individual facility might which to enter.

Specific details for each of the parameters is detailed below.

BLOOD DONOR UNIT ID PREFIX:	Type a Number between 1 and 3 This field is used in the donor module if the facility has an eye readable prefix before the bar coded characters. It is analogous to the PREFIX ID in File #66 for those units entered into inventory from an outside supplier. **Example**: Donor ID:ABC12345 Eye readable prefix: ABC # of characters=3
Select BLOOD BANK INSTITUTION:	Answer with the name of the institution where the Blood Bank is located.
INVENTORY MAJOR SECTION:	Answer with the Accession Area to which the Inventory workload should be assigned, e.g., BLOOD BANK.
INVENTORY SUBSECTION:	Answer with the Accession Area to which the Inventory workload should be assigned, e.g., BLOOD BANK.
DONOR MAJOR SECTION:	Answer with the Accession Area to which the Donor workload should be assigned, e.g., BLOOD BANK.
DONOR SUBSECTION:	Answer with the Accession Area to which the Donor workload should be assigned, e.g., BLOOD BANK.

Select BLOOD BANK DEFAULT OPTION: Choose from:

1 DONOR
2 INVENTORY
3 PATIENT
4 INQUIRIES
5 REPORTS
6 SUPERVISOR
7 TEST WORKLISTS
8 WARD

For Version 5.2, site parameters only exist for Donor and Patient options.

For DONOR:

FIRST DEFAULT: YES//

<RET> to move the ABO/Rh test results to the BLOOD INVENTORY file (#65) when the donor units are released to stock.
"NO" to have the units released from the BLOOD DONOR file to the BLOOD INVENTORY file (#66) handled in the same manner as those obtained from an outside source. (i.e., require ABO/Rh rechecks, and therefore be included on the inventory testing worksheet.

SECOND DEFAULT:

<RET> if institution is not a DoD facility
"YES" to ask RANK. This will allow selection of the correct input templates in the donor module.

THIRD DEFAULT: YES//

"YES" to include the "BAG LOT #" in the input template for the donor collection information
"NO" to exclude the "BAG LOT #" from the input template for the donor collection information

FOURTH DEFAULT:

"YES" to include the SSN prompt in the various edit templates used in the Donor Menu options

For PATIENT:

FIRST DEFAULT:

"YES" to include the Direct Antiglobulin testing prompts in the LRBLSCREEN edit template used in the Enter Test Data [LRBLPET] option

Example:

```
Select Supervisor Option: EF  Edit blood bank files

Select Edit blood bank files Option: SP  Edit blood bank site parameters

BLOOD DONOR UNIT ID PREFIX: 2// ?
     Type a Number between 1 and 3
     Ex. Donor ID:ABC12345 Eye readable prefix: ABC # of characters=3
BLOOD DONOR UNIT ID PREFIX: 2// <RET>
Select BLOOD BANK INSTITUTION: DALLAS, TX// ?
 ANSWER WITH BLOOD BANK INSTITUTION
CHOOSE FROM:
   DALLAS, TX
   REGION 7

     YOU MAY ENTER A NEW BLOOD BANK INSTITUTION, IF YOU WISH
 ANSWER WITH INSTITUTION NAME, OR STATION NUMBER
 DO YOU WANT THE ENTIRE 236-ENTRY INSTITUTION LIST? N  (NO)
Select BLOOD BANK INSTITUTION: DALLAS, TX// REGION 7                7000
         ...OK? YES// <RET>  (YES)

  BLOOD BANK INSTITUTION: REGION 7// <RET>
  INVENTORY MAJOR SECTION: BLOOD BANK// <RET>
  INVENTORY SUBSECTION: BLOOD BANK// <RET>
  DONOR MAJOR SECTION: <RET>
  DONOR SUBSECTION: <RET>
Select BLOOD BANK INSTITUTION: <RET>

Select BLOOD BANK OPTION: ?
 ANSWER WITH BLOOD BANK DEFAULTS NUMBER, OR BLOOD BANK OPTION
CHOOSE FROM:
   1                DONOR
   2                INVENTORY
   3                PATIENT
   4                INQUIRIES
   5                REPORTS
   6                SUPERVISOR
   7                TEST WORKLISTS
   8                WARD

Select BLOOD BANK OPTION: DONOR
FIRST DEFAULT: YES// ?
     CHOOSE FROM:
       1        YES
       0        NO
FIRST DEFAULT: YES// <RET>
SECOND DEFAULT: ?
     CHOOSE FROM:
       1        YES
       0        NO
SECOND DEFAULT: <RET>
THIRD DEFAULT: YES// ?
     CHOOSE FROM:
       1        YES
       0        NO
THIRD DEFAULT: YES// <RET>
```

```
BLOOD DONOR UNIT ID PREFIX: 2// <RET>
Select BLOOD BANK INSTITUTION: DALLAS, TX// 1
  BLOOD BANK INSTITUTION: DALLAS, TX// 1
  INVENTORY MAJOR SECTION: BLOOD BANK// 1
  INVENTORY SUBSECTION: BLOOD BANK// 1
  DONOR MAJOR SECTION: 1
  DONOR SUBSECTION: 1
Select BLOOD BANK INSTITUTION: <RET>

Select BLOOD BANK OPTION: <RET>

Select Edit blood bank files Option: <RET>
```

Blood Bank Inventory Edit Options (EI)

```
Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: ?

   DI     Edit unit disposition fields
   FR     Free autologous/directed donor units
   LI     Edit unit log-in
   PI     Edit unit - patient fields
   PP     Edit pooled blood product

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood bank inventory edit options Option: <RET>
```

Edit Unit Disposition Fields (EI-DI)

In the event that errors are detected in previously entered disposition data, the data may be edited as shown on the next page. All changes are automatically recorded, including both "old data" and "new data" and the appropriate patient records, if any, are updated.

Editing of information related to a pooled product should be done using the Edit Pooled Product (E-EI-PP) option to ensure appropriate data entry and updating of cross references.

NOTES:

- In this option, it is **not** possible to enter "^FIELD NAME" to skip other fields or to exit the option The message "SORRY, "^" NOT ALLOWED" will be displayed and the prompt will be repeated.

- If there is no disposition entered for the unit selected, a message to that effect will be displayed and the prompt will be repeated. This option cannot be used to enter data initially.

Example 1: Entry of a type of Transfusion Reaction for a specific unit since the workup was not completed at the time of the initial data entry

```
Select Blood bank Option:  S  Supervisor

Select Supervisor Option:  EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: DI  Edit unit disposition
fields

Select BLOOD INVENTORY UNIT ID: 5216032       APOS  CPDA-1 RED BLOOD CELLS
 CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
DELETION (not editing) of MODIFY disposition will result in deletion
of ALL entries in the MODIFIED TO/FROM field.
DISPOSITION: TRANSFUSE// <RET>
DISPOSITION DATE: MAY 15,1993@18:00// <RET>
POOLED/DIVIDED UNITS: (2)
SHIP TO: <RET>
Select DISPOSITION COMMENT: <RET>
Select DATE RE-ENTERED: <RET>
PATIENT TRANSFUSED: WASHINGTON,GEORGE. 592888888  Replace <RET>
PHYSICIAN: WELBY,HARY M   MD// <RET>
PROVIDER NUMBER: 6// <RET>
TREATING SPECIALTY: INTERMEDIATE CARE// <RET>
TREATING SPECIALTY NUMBER: 29// <RET>
TRANSFUSION REACTION: YES// <RET>
TRANSFUSION REACTION TYPE:  ?
     Selects transfusion reaction type
 ANSWER WITH BLOOD BANK UTILITY NAME, OR FULL NAME
 DO YOU WANT THE ENTIRE BLOOD BANK UTILITY LIST? Y  (YES)
CHOOSE FROM:
   ALLERGIC-MILD      UR
   ALLERGIC-SEVERE      IGA
   DELAYED ANTIBODY FORMATION      DAB
   DELAYED HEMOLYTIC      DH
   FEBRILE NONHEMOLYTIC      FNH
   IMMEDIATE HEMOLYTIC      IH
   POST TRANSFUSION HEPATITIS      PTH
   TRANSFUSION REACTION-OTHER      TR-OTHER
   UNRELATED TO TRANSFUSION      UNR

TRANSFUSION REACTION TYPE: FEBRILE NONHEMOLYTIC
Select TRANSFUSION COMMENT: TRANSFUSE ONLY SPUN/FILTERED RBCS.
Select TRANSFUSION COMMENT:<RET>
Select MODIFIED TO/FROM: <RET>

Select BLOOD INVENTORY UNIT ID: <RET>
```

Free Unit from Autologous/Directed Donor (EI-FR)

Since the initial data entry for autologous and directed donors through the Donor Registration (DR) and Donor Collection/Processing (DC) options in the Donor Menu includes the Restricted For field, units of autologous or directed blood cannot be selected for any other patient.

For those units which are otherwise acceptable for homologous transfusion once they are no longer needed for the patient, the restriction can be removed.

Example 1: Release of autologous unit S98765 for homologous transfusion (all test results were negative)

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: FR  Free autologous/directed
donor units

Select BLOOD INVENTORY UNIT ID: S98765       BPOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   B POS CPDA-1 RED BLOOD CELLS
donation donor: SEEGER,JOE 567-56-7778 OK TO DELETE ? YES// <RET>  (YES)

Select Blood bank inventory edit options Option: <RET>
```

Example 2: Attempted release of autologous unit J98765 for homologous transfusion (HBsAg is positive)

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: FR  Free autologous/directed
donor units


Select BLOOD INVENTORY UNIT ID: J98765       APOS  CPDA-1 RED BLOOD CELLS
CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
       One or more screening tests from donation are positive.
       DELETION NOT ALLOWED !


Select BLOOD INVENTORY UNIT ID: <RET>
```

Edit Unit Log-In (EI-LI)

If errors are detected in previously entered log in data, they may be edited as shown below. All changes are automatically recorded, including both "old data" and "new data" and all options in which this information would be present are automatically updated.

Example: Changing the component from CPD Whole Blood to CPDA-1 Whole Blood

```
Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: LI  Edit unit log-in

Select BLOOD INVENTORY UNIT ID: E11112       BPOS  CPD WHOLE BLOOD       CPD
WHOLE BLOOD     POS   B POS CPD WHOLE BLOOD
UNIT ID: E11112// <RET>
SOURCE: ARC// <RET>
INVOICE#: 345678// <RET>
COMPONENT: CPD WHOLE BLOOD// 00160  CPDA-1 WHOLE BLOOD    00160      WA1   1
DATE/TIME RECEIVED: JAN 28,1993@08:20// <RET>
EXPIRATION DATE/TIME: FEB 3,1993// <RET>
ABO GROUP: B// <RET>
RH TYPE: POSITIVE// <RET>
COST: 56// <RET>
VOLUME (ml): 500// <RET>
TYPING CHARGE: <RET>
RETURN CREDIT: <RET>

Select BLOOD INVENTORY UNIT ID: <RET>

Select Blood bank inventory edit options Option: <RET>
```

Edit Unit Patient Fields (EI-PI)

Information regarding patient pretransfusion testing and unit relocation may need to be entered after the fact for a variety of reasons, including:

1. computer downtime, resulting in a delay in data input for a time exceeding the entry in the Patient Specimen Maximum Age field of the BLOOD PRODUCT file (#66);

2. delay in data input, so that the technologist who performed the testing is no longer available to enter his/her test results. This option allows entry of the name of the tech who performed the testing, unlike the regular Enter Crossmatch Results (RS-XM) option in the Patient Menu, which assumes that the person who signed onto the system and entered the data is the person who performed the testing;

3. delay in data input, with the result that the technologist who issued the unit of blood is no longer available to enter the relocation information. This option allows entry of the name of the tech who issued the unit;

4. deletion of PATIENT ASSIGNED/XMATCHED for units selected, but for which no crossmatch results are available.

Example:

```
Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: PI  Edit unit - patient fields

Select BLOOD INVENTORY UNIT ID: WA22222       APOS  CPDA-1 RED BLOOD CELLS
 CPDA-1 RED BLOOD CELLS     POS   A POS CPDA-1 RED BLOOD CELLS
Select PATIENT XMATCHED/ASSIGNED: 87// <RET>
  PATIENT XMATCHED/ASSIGNED: BOLE 4773// <RET>
  DATE/TIME UNIT ASSIGNED: T-2@2000  (MAR 23, 1993@20:00)
  Select BLOOD SAMPLE DATE/TIME: T-2@14:10:19          // <RET>
    BLOOD SAMPLE DATE/TIME: MAR 23,1993@14:10:19// <RET>
    TREATING SPECIALTY: ALLERGY// <RET>
    PHYSICIAN: HARTFIEL,JACQUELINE// <RET>
    XMATCH RESULT: INCOMPATIBLE, GIVE WITH BB DIRECTOR APPROVAL
         // <RET>
    DATE/TIME CROSSMATCHED: MAR 5,1993@15:55// <RET>
    XMATCH TECH: EMBRY,SUSAN   // <RET>
    TREATING SPECIALTY NUMBER: 3// <RET>
    PROVIDER NUMBER: 2// <RET>
Select PATIENT XMATCHED/ASSIGNED: <RET>
Select DATE/TIME UNIT RELOCATION: T-2@2000   MAR 23, 1993@20:00
  DATE/TIME UNIT RELOCATION: MAR 23,1993@20:00// <RET>
  INSPECTION: S  SATISFACTORY
  TECH INSPECTING: DW
  LOCATION: SURGERY
  ISSUED TO/REC'D FROM: MISS A SMITH
```

```
  FOR PATIENT: B4773
  VA PATIENT NUMBER: ?
 ANSWER WITH PATIENT NAME, OR SOCIAL SECURITY NUMBER, OR WARD LOCATION, OR
     ROOM-BED
  VA PATIENT NUMBER: B4773  BOLE,DC    07-11-25    785204773     NON-VETERAN
 (OTHER)
RESTRICTED FOR: <RET>
POS/INCOMPLETE SCREENING TESTS: <RET>
DONATION TYPE: <RET>

Select BLOOD INVENTORY UNIT ID:<RET>
```

Edit Pooled Blood Product (EI-PP)

Information regarding the contents of a pooled product can be edited using this option, i.e., units can be added to or deleted from the pool. The appropriate data and cross references are automatically updated for all of the units using this option.

> **NOTE:** Editing of the pooled products can be done at any time. It does not need to have a final disposition for the product.

Example:

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: EI  Blood bank inventory edit options

Select Blood bank inventory edit options Option: PP  Edit pooled blood product

                          To use BAR CODE READER
               Pass reader wand over a GROUP-TYPE (ABO/Rh) label
                         => 620 (bar code) A POS

Select POOLED UNIT: P22222                O POS  POOLED PLATELETS    POOLED
PLATELETS     POS   O POS POOLED PLATELETS
     Units in pool:
       LF22223           PLATELETS,20-24 C, 5 DAY EXP.
       LF22222           PLATELETS,20-24 C, 5 DAY EXP.

            A)  ADD UNIT TO POOL
            R)  REMOVE UNIT FROM POOL
            D)  DELETE THE  POOL
    CHOOSE: REMOVE UNIT FROM POOL

  1)   LF22223           PLATELETS,20-24 C, 5 DAY EXP.
  2)   LF22222           PLATELETS,20-24 C, 5 DAY EXP.

Select UNIT TO REMOVE (1-2): 1  LF22223
Ok to remove LF22223 from pool ? NO// Y  (YES)

Select POOLED UNIT: P22222                O POS  POOLED PLATELETS    POOLED
PLATELETS     POS   O POS POOLED PLATELETS
     Units in pool:
       LF22222           PLATELETS,20-24 C, 5 DAY EXP.

            A)  ADD UNIT TO POOL
            R)  REMOVE UNIT FROM POOL
            D)  DELETE THE  POOL
    CHOOSE: ADD UNIT TO POOL

Select UNIT TO ADD: LF22223            O POS  PLATELETS,20-24 C, 5 DAY EXP.
     PLATELETS,20-24 C, 5 DAY EXP.  POS   O POS PLATELETS,20-24 C, 5 DAY EXP.

Ok to add LF22223 to pool ? NO// Y  (YES)
```

```
Select POOLED UNIT: P22222          O POS  POOLED PLATELETS    POOLED PLATELETS
POS   O POS POOLED PLATELETS
     Units in pool:
       LF22222            PLATELETS,20-24 C, 5 DAY EXP.
       LF22223            PLATELETS,20-24 C, 5 DAY EXP.

            A)  ADD UNIT TO POOL
            R)  REMOVE UNIT FROM POOL
            D)  DELETE THE  POOL
    CHOOSE: DELETE THE POOL

Ok to delete the P22222 pool ? NO// Y  (YES)

Select POOLED UNIT: <RET>
```

Blood Bank Patient Edit Options (EP)

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: ?

   LD     Tests for display on patient look-up
   PE     Patient ABO/Rh edit
   PP     Edit previous transfusion record
   TH     Tests for inclusion in transfusion report
   TR     Unknown unit transfusion reaction
   TX     Tests for transfusion follow-up

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Blood bank patient edit options Option:<RET>
```

Tests for Display on Patient Look-Up (EP-LD)

In options Specimen Log in (SL) and Blood Component Requests (RS-CR) in the Patient Menu, the most recent laboratory values for tests designated through this option are automatically displayed following the patient demographic information.

NOTES:

- All tests selected must have entries as individual tests, not as panels, in LABORATORY TEST file (#60) with a subscript of CH.
- The tests displayed as described above are **not** the same as the TESTS TO CHECK which are checked for the specific component in the Component Request (RS-CR) option or in the corresponding portion of the Specimen Log in (SL) option in the Patient Menu. These tests are controlled by entries in the BLOOD PRODUCT file (#66) for each specific component.
- For each of the tests included, the most recent results, if any, will be displayed for the two options mentioned. Thus, each additional test will decrease the response time.

Example: Addition of platelet count as the fifth test

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: LD  Tests for display on patient
look-up


     Edit TESTS TO BE DISPLAYED ON PATIENT LOOK-UP


Select TEST TO DISPLAY: ?
 ANSWER WITH TEST TO DISPLAY NUMBER
CHOOSE FROM:
   1                HGB      BLOOD
   2                HCT      BLOOD
   3                PT       PLASMA
   4                PTT      PLASMA

     YOU MAY ENTER A NEW TEST TO DISPLAY, IF YOU WISH
     Selects only single chem, hem, tox, ser, etc. tests
 ANSWER WITH LABORATORY TEST NAME
 DO YOU WANT THE ENTIRE LABORATORY TEST LIST? N   (NO)
Select TEST TO DISPLAY: PLT
     1   PLT
     2   PLT (ESTM)
     3   PLT AGG  PLATELET AGGREGATION
CHOOSE 1-3: 1
```

```
   TEST TO DISPLAY SPECIMEN: BLOOD
     1   BLOOD          0X000
     2   BLOOD BAND CELL          0X161
     3   BLOOD BASOPHIL          0X180
     4   BLOOD EOSINOPHIL          0X170
     5   BLOOD ERYTHROCYTE          0X120
     6   BLOOD GRANULOCYTIC CELL          0X150
TYPE '^' TO STOP, OR
CHOOSE 1-6: 1
TEST TO DISPLAY: PLT // <RET>
SPECIMEN: BLOOD// <RET>

Select TEST TO DISPLAY: <RET>

Select Blood bank patient edit options Option: <RET>
```

Patient ABO/Rh Edit (EP-PE)

The patient's historical ABO/Rh, which are incorporated into the patient's demographic information as part of the permanent record, can **only** be edited with this option. Because of the critical nature of clerical errors, this option is locked, so that the additional security key is also required to edit this information.

Example:

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: PE  Patient ABO/Rh edit

                         Edit blood bank patient ABO/Rh
Select Patient Name: BLOOD,JANE T      10-18-21     771251129    NSC VETERAN

BLOOD,JANE T ID: 771-25-1129 Physician: HENBERG,DONALD

ABO group: O  Rh type: POS
AGE: 71  DATE OF BIRTH: OCT 18, 1921
PATIENT LOCATION: EMERGENCY ROOM// <RET>
Antibody present: ANTI K


ABO GROUP: O// A

RH TYPE: POS// <RET>

                         Edit blood bank patient ABO/Rh
Select Patient Name: <RET>

Select Blood bank patient edit options Option: <RET>
```

NOTE: Although these fields are required, erroneous records can be deleted **if** the patient has no current or previous blood bank data in the LAB DATA file (#63). If a specimen and results were inadvertently entered for a patient with no previous history on whom you don't know the correct ABO/Rh, the record can be deleted as follows:

1) Delete the current test results.
2) Delete any blood component requests entered.
3) Remove the accession.
4) Delete the ABO/Rh using this option.

Edit Previous Transfusion Record (EP-PP)

The information entered into the patient's permanent transfusion record through the Previous Records (P-PR) option in the Patient Menu can be edited using this option. This option **cannot** be used to edit information entered on units in the inventory file using the Blood Transfusion Result (P-DT) option in the Patient Menu.

Example: Changing a Donor Unit ID Number

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: PP  Edit previous transfusion
record

          Edit transfusions entered via Previous records option
Select Patient Name: P0019  PROCESSING,SIMON       08-12-23     300010019
NON-VETERAN (OTHER)
PROCESSING,SIMON ID: 300-01-0019
ABO group: B  Rh type: NEG
AGE: 69  DATE OF BIRTH: AUG 12, 1923
PATIENT LOCATION: ORTHOPEDICS// <RET>
Antibody present: ANTI K


  1) AUG  6, 1987        G22222 O POS CPDA-1 RED BLOOD CELLS
  2) AUG  6, 1987        g11111 O POS CPDA-1 RED BLOOD CELLS
Select from (1-2): 1
  TRANSFUSION DATE/TIME: AUG 6,1987// ?
     Examples of Valid Dates:
       JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
       T   (for TODAY),  T+1 (for TOMORROW),  T+2,  T+7,  etc.
       T-1 (for YESTERDAY),  T-3W (for 3 WEEKS AGO), etc.
     If the year is omitted, the computer uses the CURRENT YEAR.
     If the date is omitted, the current date is assumed.
     Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.
     You may enter a time, such as NOON, MIDNIGHT or NOW.
  TRANSFUSION DATE/TIME: AUG 6,1987// T   NO EDITING!!
  TRANSFUSION DATE/TIME: AUG 6,1987// <RET>
  ENTERING PERSON: EMBRY,SHARON // <RET>
  COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
  COMPONENT ID: G22222// <RET>
  ABO: O// <RET>
  RH: POSITIVE// <RET>
  UNITS POOLED: <RET>
  TRANSFUSION REACTION: NO// <RET>
  Select TRANSFUSION COMMENT: <RET>
BLOOD BANK COMMENTS:
  1> <RET>

          Edit transfusions entered via Previous records option
Select Patient Name: <RET>
```

Tests for Inclusion in Transfusion Report (EP-TH)

In the Patient Transfusions and Hematology Results (UR-TH) option in the Reports Menu, the laboratory values for tests designated through this option are included for the time period specified.

NOTES:

- All tests selected must have entries as individual tests, not as panels, in File #60, with a subscript of CH.
- If the report is printed on an 8 1/2 by 11 inch page with a margin of 80, the maximum number of tests is five. Whereas, if the report is printed on a page with a margin of 132, a total of 11 tests may be included.
- If you wish to change the order in which the tests are displayed, the old entry will have to be deleted and re-entered, as that is the only time the order (PRINT NUMBER) can be specified.

Example: Addition of Factor VIII Activity and Fibrinogen

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: TH  Tests for inclusion in
transfusion report

     Edit TESTS TO BE PRINTED ON TRANSFUSION REPORT


Select TEST TO PRINT: ?
 ANSWER WITH TEST TO PRINT NUMBER
CHOOSE FROM:
   1                HGB     BLOOD
   2                HCT     BLOOD

     YOU MAY ENTER A NEW TEST TO PRINT, IF YOU WISH
 ANSWER WITH LABORATORY TEST NAME
 DO YOU WANT THE ENTIRE LABORATORY TEST LIST? N   (NO)
Select TEST TO PRINT: FACTOR VIII
     1   FACTOR VIII ACTIVITY
     2   FACTOR VIII ANTIGEN
     3   FACTOR VIII MULTIMER
CHOOSE 1-3: 1
   TEST TO PRINT NUMBER: 3// <RET>
   TEST TO PRINT SPECIMEN: PLASMA
     1   PLASMA          0X400
     2   PLASMA CELL          05320
     3   PLASMABLAST          05310
     4   PLASMACYTIC TISSUE          05300
CHOOSE 1-4: 1 <RET>
TEST TO PRINT: FACTOR VIII ACTIVITY// <RET>
```

```
SPECIMEN: PLASMA// <RET>

Select TEST TO PRINT: FIBRINOGEN
   TEST TO PRINT NUMBER: 4// <RET>
   TEST TO PRINT SPECIMEN: PLASMA
     1   PLASMA          0X400
     2   PLASMA CELL          05320
     3   PLASMABLAST          05310
     4   PLASMACYTIC TISSUE          05300
CHOOSE 1-4: 1 <RET>
TEST TO PRINT: FIBRINOGEN// <RET>
SPECIMEN: PLASMA// <RET>

Select TEST TO PRINT: <RET>
```

Unknown Unit Transfusion Reaction (EP-TR)

Data entry for transfusion reactions for which there is no unit associated is done using the this option. This allows entry of the reaction type, as defined in BLOOD BANK UTILITY file (#65.4), and a free text Transfusion Reaction Comment as well as the Transfusion Reaction Date. Use the Edit Blood Bank Utility file [LRBLSEU] option in the Supervisor's Menu to enter the various types of reactions into File #65.4, specifying T as the screen.

Data entry and display of transfusion reactions are handled according to whether the reaction was "with a unit identified" or "without a unit identified"; however, display of both is included in all of the same options that the ANTIBODIES IDENTIFIED and BLOOD BANK COMMENTS appear (part of the LRDPA2 routine). In order to allow adequate supervisory review, it has also been included on the report generated by Patient Antibody Report (short list) [LRBLPR]. For those reactions associated with a unit, the date of the reaction, the type of reaction, the unit ID, and the component abbreviation are included. For those reactions that had no specific unit identified, the date and type of reaction as well as any comments entered are included.

The report generated by Transfusion Data Report [LRBLITR] includes all of the transfusion reactions without a unit identified, as well as those associated with a specific unit.

Transfusion reactions without identifying specific units are entered using this option.

NOTE: If data is changed after the initial data entry, these changes are captured on the audit trail.

Example:

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: EP  Blood bank patient edit options


Select Blood bank patient edit options Option: TR  Unknown unit transfusion
reaction


        Enter/edit transfusion reactions that do not have specific
                  units associated with the reaction

Select Patient Name: BOLE,DC          07-11-25     785204773     NON-VETERAN
(OTHER)
BOLE,DC ID: 785-20-4773 Physician: HARTFIEL,JACQUELINE
```

```
ABO group: A  Rh type: POS
AGE: 67  DATE OF BIRTH: JUL 11, 1925
Ward on Adm: 1A  Service: ALLERGY
Adm Date: SEP  7, 1984  Adm DX: RASH
Present Ward: 1A                          MD: WELBY,HARRY
PATIENT LOCATION: 1A// <RET>
    Warm autoantibodies in eluate and in serum Positive Direct Coombs (IgG
    2+.C3d neg) 3/5/93 sh


Select TRANSFUSION REACTION DATE: T-1   MAR 23, 1993

  TRANSFUSION REACTION DATE: MAR 23,1993// <RET>
  TRANSFUSION REACTION TYPE: ?
     Selects only transfusion reaction entries
 ANSWER WITH BLOOD BANK UTILITY NAME, OR FULL NAME
 DO YOU WANT THE ENTIRE BLOOD BANK UTILITY LIST? Y  (YES)
CHOOSE FROM:
   ALLERGIC NONHEMOLYTIC      ALLERGIC NONHEMOLYTIC
   ANAPHYLACTIC (IgA)      ANAPHYLACTIC (IgA)
   BACTERIAL INFECTION      BACTERIAL INFECTION
   CIRCULATORY OVERLOAD      CIRCULATORY OVERLOAD
   DELAYED HEMOLYTIC      DELAYED HEMOLYTIC TRANSFUSION REACTION
   FEBRILE NON-HEMOLYTIC      FEBRILE NON-HEMOLYTIC TRANSFUSION REACTION
   IMMEDIATE HEMOLYTIC      IMMEDIATE HEMOLYTIC TRANSFUSION REACTION
   NONCARDIOGENIC PULMONARY EDEMA      NONCARDIOGENIC PULMONARY EDEMA
   PTAIDS      POST-TRANSFUSION AIDS
   PTH      POST-TRANSFUSION HEPATITIS
   TTD      TRANSFUSION TRANSMITTED DISEASE (CMV,GVH, Chaga's disease)

  TRANSFUSION REACTION TYPE: ALLERGIC NONHEMOLYTIC       ALLERGIC NONHEMOLYTIC
  Select TRANSFUSION REACTION COMMENT: ?
 ANSWER WITH TRANSFUSION REACTION COMMENT
     YOU MAY ENTER A NEW TRANSFUSION REACTION COMMENT, IF YOU WISH
     Answer must be 2-68 characters in length.
  Select TRANSFUSION REACTION COMMENT: <RET>
```

Tests for Transfusion Follow-Up (EP-TX)

To allow identification of patients with potential transfusion transmitted diseases, mainly hepatitis, this option allows selection of tests to be screened by the Transfusion Follow-up Tests (R-UR-TX) option in the Reports menu.

The tests must be present in the LABORATORY TEST file (#60) in order to be selected. The test lists should be configured such that tests which are related are on the same test list. In addition to selecting the tests to be screened, the option allows you to specify the specimen type and the > or < value to be identified for each test.

If the results of HIV testing are entered into the system, this option will also aid in the follow-up. However its usefulness will not be as great as for monitoring potential cases of post transfusion hepatitis, since the incubation period for HIV is greater than six months.

Example:

```
Select Supervisor Option: EP  Blood bank patient edit options

Select Blood bank patient edit options Option: TX  Tests for transfusion
follow-up

      Test order#:   1       2       3       4       5       6       7
-----------------|-------|-------|-------|-------|-------|-------|-------|
Test list#:  1   |T. BIL |ALK PHO|
-----------------|-------|-------|-------|-------|-------|-------|-------|
(E)nter/edit a test  (D)elete a test list  (R)emove all test lists
Enter E, D, R or <CR> to accept lists: E
Enter list#,order# : 1,3

Select LABORATORY TEST NAME: SGOT
SPECIMEN: SERUM          0X500
VALUE: >50


      Test order#:   1       2       3       4       5       6       7
-----------------|-------|-------|-------|-------|-------|-------|-------|
Test list#:  1   |T. BIL |ALK PHO|SGOT   |
-----------------|-------|-------|-------|-------|-------|-------|-------|
Enter list#,order# : 1,4

Select LABORATORY TEST NAME: SGPT
SPECIMEN: SERUM          0X500
VALUE: >50

      Test order#:   1       2       3       4       5       6       7
-----------------|-------|-------|-------|-------|-------|-------|-------|
Test list#:  1   |T. BIL |ALK PHO|SGOT   |SGPT   |
-----------------|-------|-------|-------|-------|-------|-------|-------|
Enter list#,order# : <RET>

Select Blood bank patient edit options Option: <RET>
```

Outline for One or More Files (FD)

In order to better understand the operation of the Blood Bank Module, an outline of the various fields in the data dictionary can be very helpful. These outlines do not, however, include any other details about the field other than the field number and the field name.

Example:

```
Select Supervisor Option: FD  Outline for one or more files
Select FILE: 65  BLOOD INVENTORY
Select FILE: 65.5  BLOOD DONOR
Select FILE: 66  BLOOD PRODUCT
Select FILE: <RET>
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 24, 1993              BLOOD INVENTORY (65)                        Pg 1
-------------------------------------------------------------------------------
 .01  UNIT ID
 .02  SOURCE
 .03  INVOICE#
 .04  COMPONENT
 .05  DATE/TIME RECEIVED
 .06  EXPIRATION DATE/TIME
 .07  ABO GROUP
 .08  RH TYPE
 .09  LOG-IN PERSON
 .1   COST
 .11  VOLUME (ml)
 .12  TYPING CHARGE
 .13  SHIPPING INVOICE#
 .14  RETURN CREDIT
 1.1  BAG LOT #
 2    PATIENT XMATCHED/ASSIGNED (Subfile 65.01)
   .01  PATIENT XMATCHED/ASSIGNED
   .012 PARENT FILE
   .02  DATE/TIME UNIT ASSIGNED
   .03  LAST SPECIMEN DATE XMATCHED
   1    BLOOD SAMPLE DATE/TIME (Subfile 65.02)
     .01  BLOOD SAMPLE DATE/TIME
     .02  TREATING SPECIALTY
     .03  PHYSICIAN
     .04  XMATCH RESULT
     .05  XMATCH TECH
     .06  PATIENT SAMPLE ACC #
     .07  TREATING SPECIALTY NUMBER
     .08  PROVIDER NUMBER
     .09  DATE/TIME CROSSMATCHED
     .1   RELEASE REASON
     1    MAJOR XMATCH METHOD (Subfile 65.0911)
       .01  MAJOR XMATCH METHOD
```

```
      .02  TECHNIQUE
      .03  INTERPRETATION
      .04  IS
      .05  37 C
      .06  AHG
      .07  CONTROL CELL
      .08  ROOM TEMP
      .09  12-18 C
      .1   4 C
    2    MINOR XMATCH METHOD (Subfile 65.0912)
      .01  MINOR XMATCH METHOD
      .02  TECHNIQUE
      .03  INTERPRETATION
      .04  IS
      .05  37 C
      .06  AHG
      .07  CONTROL CELL
      .08  ROOM TEMP
      .09  12-18 C
      .1   4 C
    3    CROSSMATCH COMMENT (Subfile 65.0913)
      .01  CROSSMATCH COMMENT
3    DATE/TIME UNIT RELOCATION (Subfile 65.03)
  .01  DATE/TIME UNIT RELOCATION
  .02  INSPECTION
  .03  TECH INSPECTING


MAR 24, 1993            BLOOD INVENTORY (65.03)                    Pg 2
-------------------------------------------------------------------------
  .04  LOCATION
  .05  ISSUED TO/REC'D FROM
  .06  FOR PATIENT
  .07  VA PATIENT NUMBER
4.1  DISPOSITION
4.2  DISPOSITION DATE
4.3  DISPOSITION ENTERING PERSON
4.4  POOLED/DIVIDED UNITS
4.5  SHIP TO
5    DISPOSITION COMMENT (Subfile 65.06)
```

[etc.,...]

NOTE: Indented items are subfields of the field above.

Blood Bank Inventory Integrity Report (II)

Some loss of data can occur when an unplanned system crash interrupts the input of data, IF it occurs during the transfer of data in a routine such as the pooling of platelets. This action involves multiple transfers in order to create the new unit in inventory and assign final dispositions to the individual units in the pool, and, therefore, can take a couple of seconds to complete. Unfortunately, the loss of data is not immediately apparent, since the data which is usually lost is the "Modify to/from unit" information.

In addition, use of the "^" during the data entry will allow the user to skip certain remaining nonrequired fields. As with the data described above, the missing data is not always evident.

Once the hard copy printout of the unit information (generated using the Print Units with Final Dispositions (S-SR-PU) option) is printed and the units purged from the system for that time period, it would be extremely difficult to reconstruct a scenario involving the units.

In order to provide a system for taking the necessary corrective action in a timely manner, a search is done of the BLOOD INVENTORY file (#65) to look for missing data. At the same time, it automatically resets any cross references which might be missing. Those fields which are checked include:

DATE/TIME RECEIVED
COMPONENT
SOURCE
INVOICE #
EXPIRATION DATE/TIME

If the unit has a disposition,
DISPOSITION DATE
DISPOSITION ENTERING PERSON

If the unit disposition is MODIFY,
MODIFIED TO/FROM

At a minimum, this report should be run after any unscheduled downtime.

NOTE: It is now also automatically included whenever the Check Files for Inconsistencies option is run.

Example:

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: II  Blood bank inventory integrity report

                 Check inventory file entries for missing data.


Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 30, 1993  15:04   VAMC                                              g: 1
                    Missing data from Blood Bank Inventory File
-------------------------------------------------------------------------
-------------------------------------------------------------------------
(IFN:24) Unit ID: V44444              CPDA-1 RED BLOOD CELLS
DISPOSITION ENTERING PERSON missing
-------------------------------------------------------------------------
(IFN:50) Unit ID: Z11116              POOLED PLATELETS
MODIFIED TO/FROM missing
-------------------------------------------------------------------------
(IFN:58) Unit ID: L11111              PLATELETS,20-24 C, 5 DAY EXP.
MODIFIED TO/FROM missing
-------------------------------------------------------------------------
(IFN:123) Unit ID: JU11113            PLATELETS,20-24 C, 5 DAY EXP.
MODIFIED TO/FROM missing
-------------------------------------------------------------------------
(IFN:125) Unit ID: JU11115            PLATELETS,20-24 C, 5 DAY EXP.
MODIFIED TO/FROM missing
-------------------------------------------------------------------------
(IFN:172) Unit ID: P99993             PLATELETS,20-24 C, 5 DAY EXP.
MODIFIED TO/FROM missing
-------------------------------------------------------------------------
(IFN:205) Unit ID: I99999             PLATELETS,20-24 C, 5 DAY EXP.
"B" Cross reference required re-setting
-------------------------------------------------------------------------
(IFN:206) Unit ID: I99999             PLATELETS,20-24 C, 5 DAY EXP.
"B" Cross reference required re-setting
-------------------------------------------------------------------------
(IFN:207) Unit ID: I99999             PLATELETS,20-24 C, 5 DAY EXP.
"B" Cross reference required re-setting
```

NOTES:

• For unit V44444, the person entering the data must have entered a "^" after the "Date/Time Transfusion Completed" prompt. By not completing the entry for that unit, the person entering the data was not captured.

• For the four units of platelets and the pooled platelet (unit Z11116), the system had crashed after the data was entered, but before it had completed all of the data transfers. When this occurs, the quickest way to ascertain what has happened is to:

- look up the individual unit numbers and determine the date/time received.

- print an inventory transaction report for that time period to determine what pools were made before the platelets expired.

- look up any of the pooled units on the inventory transaction report within the time frame to determine which pool might be correct. The date/time received for the pool should be the same as the disposition date/time of the individual platelet packs. The volume and cost of the pool will also be reflective of the number of units in the pool.

• For unit I99999, several attempts had been made to label/release the unit from the donor module. The attempts had resulted in errors. However, a file entry had been created in the BLOOD INVENTORY file (#65). These duplicate entries needed to be deleted.

• Although the routine is helpful in resetting any B cross references which have gotten lost, loss of this cross reference reflects some type of data base degradation.

Edit Number of Lines in a Label (LL)

For those options using label stock for the printed output, the number of lines that should be skipped between the last line of one label and the first line of the next label must be specified.

The default in all of those options, whether displayed on the screen or not, is based on the entry in this option.

Example: Temporary changing of the number of lines to accommodate a different label stock being used on an emergency basis

```
Select Supervisor Option: LL  Edit number of lines in a label
LINES IN A LABEL: 7// 5

Select Supervisor Option: <RET>
```

Summary and Deletion Reports (SR)

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: ?

   AD     Print data change audits
   AP     Antibodies by patient
   AR     Patient antibody report (long-list)
   CD     Cumulative donations and awards
   DA     Acknowledge donor award by deletion
   PL     Delete a user's patient list
   PU     Print  units with final disposition
   PX     Print ex-donors
   RA     Remove data change audits
   RI     Remove inappropriate transfusion requests
   RU     Remove units with final disposition
   RX     Remove ex-donors

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Summary and deletion reports Option: <RET>
```

Print Data Change Audits (SR-AD)

Based on a review of both the data entered via the edit templates and any data changes entered for fields identified as "critical," this report can be printed and used for several purposes, including:

1) hard copy record of changes made in order to decrease the impact of "electronic white out" and

2) daily report of all significant edits made, showing a comparison of the old value and the new value and the name of the person making the change, for supervisory review of activity. Once printed, this audit trail report can then be used to note the reasons for the change and any corrective action indicated to resolve problems identified.

In order to use this option for the maximum possible benefit, this report should be printed and reviewed regularly. If it is not reviewed on a regular basis, its usefulness is greatly limited by the inability of the person making the change to recall the details of the problem leading to the change.

Example:

```
Select Summary and deletion reports Option: AD  Print data change audits
START WITH NAME: FIRST// ?
TO SORT IN SEQUENCE, STARTING FROM A CERTAIN NAME,
     TYPE THAT NAME
START WITH NAME: FIRST// <RET>
  START WITH DATA CHANGE DATE: FIRST// 1/25/93
  GO TO DATA CHANGE DATE: LAST// 1/31/93
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
DATA CHANGES                                        FEB 1,1993  15:16    PAGE 1
                    FILE                  FILE ENTRY                      Entry #
DATA ELEMENT         OLD VALUE            NEW VALUE            PERSON CHANGING
SUBFILE FIELD NAME               SUBFILE FIELD ENTRY              Subfile #
-------------------------------------------------------------------------------
        NAME: BLOOD BANK

JAN 26,1993  11:04 BLOOD DONOR            SNERD,SALLY                     24
RBC ANTIGEN PRESENT c                     deleted              EMBRY,SHARON
RBC ANTIGEN PRESENT                                               65.56

JAN 27,1993  13:38 LAB DATA              EMBRY,SHARON                     15
HBsAg                REACTIVE             NEGATIVE             EMBRY,SHARON
BLOOD BANK                       JAN 21, 1993                      65.54

JAN 28,1993  15:47 LAB DATA               IODAE,NOEI                      300
ABO INTERPRETATION  A                     O                    MALONEY,JAKE
BLOOD BANK                       JAN 28, 1993  15:46               63.01

JAN 29,1993  14:18 BLOOD INVENTORY        WA22222                         323
DATE/TIME UNIT ASSI                       JAN 29, 1993  20:00 EMBRY,SHARON
PATIENT XMATCHED/ASSIGNED        BOLE 4773                         65.01

JAN 29,1993  14:50 BLOOD DONOR            BRENNAN,PATRICIA                328
HOME PHONE           777-8888                  888-9999         EMBRY,SHARON
```

NOTES: (The example demonstrates how the report would look for the following five separate situations. Each patient report demonstrates a different situation.)

- Patient #1: The information on the unit phenotyping was accidentally entered on the wrong donor, using option D-DP. The tech realized it and corrected the entry using the same option.

- Patient #2: The data was entered through the P-ET option, based on the results of the testing on the clot. The testing was repeated on an EDTA sample and found to be negative. The data was changed using the same option.

- Patient #3: The patient's ABO/Rh was incorrect due to a specimen mix up which resulted in the wrong label being placed on the specimen. An incident report detailing the problem and corrective action was prepared. The change had been entered using option S-EP-PE.

- Patient #4: The unit could not be unit selected for the patient through the usual manner (i.e., the P-RS-US option) because the computer was down at the time the platelets were pooled, and by the time the system had come back up, the pooled product had expired. Therefore, the information as to the PATIENT XMATCHED/ASSIGNED, etc., had to be entered using the edit option, S-EI-PI.

- Patient #5: The donor's telephone number was changed. The change was entered using the D-DD option, which merely provides a hard copy of the change.

Antibodies by Patient (SR-AP)

Clinically significant antibodies in patient population listed by patient and antibody frequencies.

Example:

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: ?

   AD     Print data change audits
   AP     Antibodies by patient
   AR     Patient antibody report (long-list)
   CD     Cumulative donations and awards
   DA     Acknowledge donor award by deletion
   PL     Delete a user's patient list
   PU     Print  units with final disposition
   PX     Print ex-donors
   RA     Remove data change audits
   RI     Remove inappropriate transfusion requests
   RU     Remove units with final disposition
   RX     Remove ex-donors

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Summary and deletion reports Option: AP  Antibodies by patient


                    PATIENT ANTIBODIES IDENTIFIED
Select Print Device:  [Enter Print Device Here]

SEP 10, 1993  13:13 BLOOD BANK VAMC                          Pg: 1
-----------------------------------------------------------------------

ANDY,DUSTY                          ID:089485948
   ANTI K

BLOOD,JANE T                        ID:771251129
   ANTI K

HOFFSTADTER,ALEXIS                  ID:352441491
   ANTI Jk(a)

PROCESSING,SIMON                    ID:300010019
   ANTI K

SMITH,HINES MIDDLE NAME XXXXX       ID:111107180
   ANTI K
Patients in lab data file:    182
Patients with  antibodies:      5
ANTI K = 4
```

Patient Antibody Report (SR-AR)

Based on a review of all patients with previous entries in the Blood Bank files (those previously transfused or those with entries in either the Antibodies Identified field or the Blood Bank Comments field), this report can be printed to serve as a hard copy reference for those times when the computer system is down.

Example:

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: AR  Patient antibody report (long-
list)

                    PRINT PATIENT BLOOD BANK RECORDS

Print only patients with antibodies/special instructions ? YES// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? YES// <RET>  (YES)

Enter the maximum number of specimens to display
in reverse chronological order for each patient: ?
ENTER A WHOLE NUMBER FROM 0-99

Enter the maximum number of specimens to display
in reverse chronological order for each patient: 0

START WITH PATIENT NAME: FIRST// ?
TO SORT IN SEQUENCE, STARTING FROM A CERTAIN NAME,
       TYPE THAT NAME

START WITH PATIENT NAME: FIRST// A
GO TO PATIENT NAME: LAST// Z
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 30, 1993  15:20   VAMC                                                    Pg: 1
BLOOD BANK PATIENTS
          Patient                    SSN            DOB   ABO Rh
-------------------------------------------------------------------------------

BLOOD,JANE T                    771-25-1129 OCT 18, 1921  A POS

    Antibodies identified:  ANTI K

BLOOD,JOHN T                    398-02-9523 OCT 25, 1914  A POS

      Note to Physician:
      You may want to consider requesting WASHED packed RBC(s)
      for this patient.
      Patient Dx Febrile nonhemolytic transfusion RXN 12-09-92

BOLE,DC                         785-20-4773 JUL 11, 1925  A POS
    Warm autoantibodies in eluate and in serum Positive Direct Coombs
    (IgG 2+.C3d neg) 3/5/93 sh

HOFFSTADTER,ALEXIS              352-44-1491 AUG  6, 1951

    Antibodies identified:  ANTI Jk(a)

PROCESSING,SIMON                300-01-0019 AUG 12, 1923  B NEG

    Antibodies identified:  ANTI K

SMITH,HINES MIDDLE NAME XXXXX  111-10-7180 FEB 16, 1918  A POS

    Antibodies identified:  ANTI K

WASHINGTON,GEORGE               592-88-8888 MAR  1, 1900  A POS
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed cells
    only- febrile nonhemolytic reaction 3/5/93

    Antibodies identified:  ANTI C ANTI E ANTI K
```

NOTES:

- Because of the amount of time required to search all of the patients with Blood Bank records, you should time the printing of this report **very** carefully so as not to adversely affect the system's response time.

- It may be advantageous to print only a portion of the alphabet at any one time.

- By answering zero to the "Enter the maximum number of specimens to display..." prompt, you will see the listing only. If you enter a one, you will see the most recent specimen results. If you enter a two, you will see the most recent result and the previous result.

Cumulative Donations and Awards (SR-CD)

The Blood Bank Module tallies the number of donations for each donor, based on the generally accepted policies regarding Gallon Donor awards (one for each Whole Blood donation and four for each apheresis donation). This information is recorded in the Cumulative Donations field for the donor, which can be updated **only** by using this option.

Once the system has calculated the Cumulative Donations, it then lists those donors whose entry is greater than eight and who have not recently received an award, as designated using the Acknowledge Donor Award by Deletion (SR-DA) option in the Supervisor's Menu. By looking at the entries in both the Cumulative Donations field and the Awards field, you can then determine who should get new awards.

Example:

```
Select Summary and deletion reports Option: CD  Cumulative donations and awards

        Cumulative donations and new awards
Enter donation value for CYTAPHERESIS: 4
Enter donation value for NO DONATION: 0
Enter donation value for PLASMAPHERESIS: 4
Enter donation value for WHOLE BLOOD: 1

Print all donors to receive new awards ? NO// Y  (YES)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!


MAR 11, 1993  15:02   VAMC                                          Pg: 1
                    BLOOD DONORS TO RECEIVE NEW AWARDS
Donor                            DOB     Total Awards  Cumulative donations
-----------------------------------------------------------------------------
BRACE,NIKE                     11/04/51                        10
COLLINS,JOHN                   02/20/45       1                16
HOMES,SUSAN                    06/17/60                         9
JOHNSON,LARRY                  11/01/49                         8
```

NOTES:

- Only those donors whose most recent "DONATION OR DEFERRAL DATE" is within 365 days are included in this report. It will not include "old" donors.
- In this case, John Collins is due for another award.

Acknowledge Donor Award by Deletion (SR-DA)

In order to acknowledge that a One Gallon Award, or other appropriate amount, was given, it is necessary to indicate this fact to the system. Based on this acknowledgment, the Total Awards field will be updated and the donor's name will be removed from those being displayed in the Cumulative Donations and Awards (SR-CD) option in the Supervisor's Menu, until such time as the entry in the Cumulative Donations field reaches the next multiple of 8 (i.e., 16, 24, etc.).

Example:

```
Select Summary and deletion reports Option: DA  Acknowledge donor award by
deletion

Select BLOOD DONOR NAME: BRACE,NICKI          F      11-04-49      BROOKFIELD
GIVE NEW AWARD: YES// @
   SURE YOU WANT TO DELETE? Y  (YES)

Select BLOOD DONOR NAME: <RET>
```

Delete a User's Patient List (SR-PL)

Once a patient's name is entered in the Patient Transfusions & Hematology Results (R-UR-TH) option, the system enters the patient into the appropriate print queue. If the report is then not printed, for **any** reason, that user cannot enter any additional patients until the queue is deleted. If the user attempts to do so, the message displayed in that option is as follows:

Cannot use this option until your last report is completed. If the report was queued and never printed it must be removed from the list of queued reports (see your LIM). Also have your blood bank supervisor delete your patient list for transfusion and hematology data.

If the report was queued to a device, that job will need to be killed. If all of the necessary data was not entered for the report, only the list will need to be deleted. This is accomplished through this option.

Example:

```
Select Summary and deletion reports Option: PL  Delete a user's patient list
Select USER REQUEST LIST: ?
 ANSWER WITH USER REQUEST LIST
CHOOSE FROM:
   12              SOAK,WILLIAM   .
   46              HENBERG,DONALD

Select USER REQUEST LIST: 12  SOAK,WILLIAM   .
USER: SOAK,WILLIAM   .// ?
 ANSWER WITH NEW PERSON NAME, OR INITIAL, OR SSN, OR NICK NAME, OR DEA#, OR
     KEY DELEGATION LEVEL
 DO YOU WANT THE ENTIRE 393-ENTRY NEW PERSON LIST? N  (NO)
USER: SOAK,WILLIAM   .// @
   SURE YOU WANT TO DELETE THE ENTIRE USER? Y  (YES)
Select USER REQUEST LIST: <RET>

Select Summary and deletion reports Option: <RET>
```

Print Units with Final Disposition (SR-PU)

Before units are deleted from the BLOOD INVENTORY file (#65), it is necessary to print a "hard copy" which can be retained for the required five years. (For various reasons, this method was chosen instead of archiving the information on tape.)

Deleting units from the BLOOD INVENTORY file does not affect the patient's transfusion record, as the necessary information was entered in both files.

Example 1: Hard Copy Record

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: PU  Print  units with final
disposition

           INVENTORY- UNITS WITH FINAL DISPOSITION
                     FROM ONE DATE RECEIVED TO ANOTHER

Start with Date TODAY// 3-11-93  (MAR 11, 1993)
Go    to   Date TODAY// 3-18-93  (MAR 18, 1993)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 30, 1993  15:27   VAMC                                                Pg: 1
BLOOD BANK DISPOSITION (Date rec'd from: MAR 11, 1993 to: MAR 18, 1993)
UNIT ID       Component                                  Invoice #  Source
Date rec'd    ABO Rh Exp date       Logged-in by                   Cost Vol(ml)
Disposition          Disposition date  Person entering disposition
-------------------------------------------------------------------------------

Q45678        PLATELETS, 1-6 C, 20-30ML                 13456     ARC
03/11/93 14:02 O POS 03/12/93       EMBRY,SUSAN                    45.00 25
TRANSFUSE           03/12/93 20:00 EMBRY,SUSAN                   Pool/div:(10)
Pt transfused: GARRETT,PORTLAND SSN: 535-10-4531 ABO:O Rh: POS Physician:
CRAWFORD,JEAN(1201) Tx record#: 7069686.8
Tx reaction: NO Rx specialty: MEDICINE(5)
Modified to/from:
    1) Q56789       PLATELETS,20-24 C, 5 DAY EXP.
Patient xmatched/assigned:
GARRETT,PORTLAND SSN: 535104531 O POS Date assigned: 03/11/93 14:03
Date unit relocated:
03/17/93 15:40 Inspect: SATISFACTORY Tech: EMBRY,SUSAN    MICU
  Issued to/rec'd from: KP  For patient: GARRETT,PORTLAND (32)

WA33333       CPDA-1 RED BLOOD CELLS                    WA11111  LIFESOURCE
03/05/93 15:35 A POS 04/04/93       EMBRY,SUSAN                    57.00 250
TRANSFUSE           03/17/93 16:19 EMBRY,SUSAN
  Shipped to: WASTED (ISSUED/NOT USED)
Pt transfused: WASHINGTON,GEORGE SSN: 592-88-8888 ABO: A Rh: POS Physician:
WELBY,HARRY(6) Tx record#:7069681.8381
Tx reaction: NO Rx specialty: ALLERGY(3)
Transfusion comment(s):
DELAYED HEMOLYTIC
ABO intrp:A  Tech:EMBRY,SUSAN
Rh  intrp:POSITIVE  Tech:EMBRY,SUSAN
RBC antigen absent:
   C
   K
   E
Patient xmatched/assigned:
WASHINGTON,GEORGE SSN: 592888888 A POS Date assigned: 03/11/93 14:10
03/11/93 14:05 BB 0311 2 ALLERGY(3) WELBY,HARRY(6)
Xmatch tech:EMBRY,SUSAN    Result: COMPATIBLE
Date unit relocated:
03/17/93 15:37 Inspect:SATISFACTORY Tech:EMBRY,SUSAN    SURGERY
  Issued to/rec'd from:LK  For patient:WASHINGTON,GEORGE (221)
```

Example 2: If a list has been previously printed, but not deleted, the following prompts will appear

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: PU  Print units with final
disposition

          INVENTORY- UNITS WITH FINAL DISPOSITION
                    FROM ONE DATE RECEIVED TO ANOTHER

There is a list of units printed by EMBRY,SUSAN
They should be deleted before printing another list. OK ? YES// <RET>  (YES)

Use supervisor option RU- Remove units with final disposition to delete list.


Select Summary and deletion reports Option: <RET>
```

NOTE: Because this printout includes **all** information entered for a given blood inventory unit ID, it requires a significant amount of time to search and print the information. Therefore, it should **always** be queued to print at nonpeak activity times.

Print Ex-Donors (SR-PX)

Using the Donor Lists/Labels (DR-DR-XD) option in the Reports Menu allows the generation of lists and/or mailing labels to be used for specific recruitment efforts aimed at donors who have not donated since a predetermined time (e.g., within the last 12 months). Once a reasonable time period has elapsed since these recruitment efforts were implemented (two-three months), a hard copy report must be printed before the donors can be deleted from the system. The report will include all information previously entered on that donor for all previous donations. In addition, a cross reference listing is included at the end of the report, which lists the donor unit numbers and donor names for those donations included.

Example: Printing of donors who have not donated since May 4,1992

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: PX  Print ex-donors


          BLOOD DONORS WHO HAVE NOT DONATED SINCE A SPECIFIED TIME
Date since last donation: T-11M  (MAY 04, 1992)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 30, 1993  15:32   VAMC                                                Pg: 1
BLOOD BANK   NO DONATIONS SINCE MAY  4, 1992
          Donor (Reg #)                DOB     SEX ABO/Rh APHERESIS PERM DEFER
-------------------------------------------------------------------------------
HENBERG,DONALD    (4)                 10/28/38 M   A POS    NO         NO
Reg/edited: 04/17/91 demog ent/edit by:REG
103 EUCLID AVE   ALBANY NY Home:861-8181
Group affiliations:  VAH
Donation **04/17/91** Site:VAH Group:VFW Edit:REG
Donation type:HOMOLOGOUS WHOLE BLOOD Reaction:NO REACTION
UNIT ID: G12345 Disposition: PREPARE COMPONENT(S)
Primary bag: TRIPLE CPDA-1 tot gm:560 empty wt:90 ml:443 tech: REG
Collection start:04/17/91@12:05  stop:04/17/91@12:06  process:04/17/91@12:08
Test                           Tech
ABO INTERPRETAT A              AM
RH INTERPRETATI POSITIVE       AM
Component                                Grams Date stored    Expiration date
CPDA-1 RED BLOOD CELLS                   250   04/17/91@12:08 05/22/91
Label tech: Disposition:RELEASE COMPONENT date: tech:
FRESH FROZEN PLASMA, CPDA-1              225   04/17/91@12:08 04/16/92@18:05
Label tech: Disposition:RELEASE COMPONENT date: tech:
PLATELETS,20-24 C, 5 DAY EXP.            55    04/17/91@12:08 04/22/91
Label tech: Disposition:RELEASE COMPONENT date: tech:

HOFFMAN,LAURA (26)                      07/17/51 F   A POS    YES        NO
Reg/edited: 01/26/93 demog ent/edit by:SH
301 S HEMPHILL   OAK PARK IL Home:488-4943
Group affiliations:  VAH
Donor scheduling/recall:  JAN  JUN  XMAS  EMERGENCY
Donation **05/12/90** Site:VAH Group:VAH Edit:SH
Donation type:HOMOLOGOUS NO DONATION
Deferral reason:
HCT < 38% female, <41% male
Donation **02/04/90** Site:VAH Group:VAH Edit:SH
Donation type:HOMOLOGOUS WHOLE BLOOD Reaction:NO REACTION
UNIT ID: N11112
Test                           Tech
SYPHILIS SEROLO REACTIVE       TB

HUMPHREY,HUBERT (29)                    01/23/65 M   O NEG    YES        NO
Reg/edited: 03/18/93 demog ent/edit by:SH
   DALLAS TX Home:234-5656 Work:274-4389
Group affiliations:  PK-V
Donor scheduling/recall:  MAR  EMERGENCY
Donation **01/02/92** Site:VAH Group:PK-V Edit:SH
Donation type:HOMOLOGOUS WHOLE BLOOD Reaction:NO REACTION Taken by:MEL
UNIT ID: B34568 Disposition: PREPARE COMPONENT(S)

OWCZARZAK,MARGARET (5)                  04/07/62 F   O POS    NO         NO
Reg/edited: 04/24/91 demog ent/edit by:WL
25 GLIDDEN ST.  LAB SERVICE (113) CHEEKTOWAGA NY Home:895-3066 Work:2262
Group affiliations:  VAH
Donor scheduling/recall:  EMERGENCY
Donation **04/24/91** Site:VAH Group:VAH Edit:WL
Donation type:HOMOLOGOUS WHOLE BLOOD Reaction:NO REACTION Taken by:VM
UNIT ID: VAGS94123 Disposition: PREPARE COMPONENT(S)
Primary bag: DOUBLE CPD tot gm:579 empty wt:93 ml:458 tech: WL
Collection start:04/24/91@08:20  stop:04/24/91@08:35  process:04/24/91@09:00
```

```
MAR 30, 1993  15:32   VAMC                                                Pg: 2
BLOOD BANK   NO DONATIONS SINCE MAY  4, 1992
          Donor (Reg #)                 DOB   SEX ABO/Rh APHERESIS PERM DEFER
-----------------------------------------------------------------------------
OWCZARZAK,MARGARET (5) <continued from page 1>
Test                            Tech
ABO INTERPRETAT O               WL
RH INTERPRETATI POSITIVE        WL
SYPHILIS SEROLO NEGATIVE        WL
HBsAg           NEGATIVE        WL
HIV ANTIBODY    NEGATIVE        WL
ANTIBODY SCREEN NEGATIVE        WL
HBcAb           NEGATIVE        WL
ALT             NOT ELEVATED    WL
HTLV-I ANTIBODY NEGATIVE        WL
Component                                 Grams Date stored    Expiration date
FRESH FROZEN PLASMA, ACD-A                315   04/24/91@09:00 04/23/92
Label tech:49 Disposition:RELEASE COMPONENT date:04/24/91@09:27 tech:SAS
AS-1 RED BLOOD CELLS                      330   04/24/91@09:00 06/05/91
Label tech:49 Disposition:RELEASE COMPONENT date:04/24/91@09:28 tech:SAS

WATER,RANDY (8)                          01/02/34 M            NO         NO
Reg/edited: 03/04/92 cum donations: 4 demog ent/edit by:REG
   OURTOWN IL
Donation **03/04/92** Site:VAH Group:VAH
Donation type:HOMOLOGOUS NO DONATION
Deferral reason:
HCT < 38% female, <41% male
```

```
MAR 30, 1993  15:32   VAMC                                                Pg: 3
BLOOD BANK   NO DONATIONS SINCE MAY  4, 1992
Donor ID       DONOR NAME
-----------------------------------------------------------------------------
B34568         HUMPHREY,HUBERT
G12345         HENBERG,DONALD
N11112         HOFFMAN,LAURA
N11158         HOFFMAN,LAURA
VAGS94123      OWCZARZAK,MARGARET
```

NOTES:

1. Attempts were made to contact these donors in March 1993 by using the Donor Lists/Labels (DR-DR-XD) option in the Reports Menu and specifying T-11 months.

2. This report should be reviewed for completeness before using the Remove Ex-Donor (RX) option in the Supervisor's Menu, since this data will not be archived to tape.

Remove Data Change Audits (SR-RA)

Once the data changes have been printed, using the Print Data Change Audits (S-SR-AD) option, the entries should be deleted using this option.

Example:

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: RA  Remove data change audits

Delete BLOOD BANK data change audits

Start with Date TODAY// 12/1/92  (DEC 01, 1992)
Go    to   Date TODAY// 1/1/93  (JAN 01, 1993)

OK to delete audits? NO// Y  (YES)
.
DONE

Select Summary and deletion reports Option: <RET>
```

Remove Inappropriate Transfusion Requests (SR-RI)

In order to minimize the amount of storage space being used, the temporary file which holds the file of inappropriate transfusion requests should be deleted once the hard copy has been printed using the "Inappropriate Transfusion Requests Report" (R-UR-IT) prompt in the Reports Menu. Once the inappropriate request has been printed, the system will allow it to be deleted.

Example:

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: RI  Remove inappropriate
transfusion requests


This option deletes inappropriate transfusion requests
that have been previously printed.  OK ? NO// ?
    ANSWER 'YES', 'NO', '^', '@'
    or press RETURN key to accept default response (if one)

? NO// Y  (YES)
..............................
DONE
```

NOTE: Deletion of the temporary file of inappropriate requests does **not** in any way affect the actual component request information which was entered. It merely deletes the listing of those which the system deemed potentially inappropriate, based on predetermined audit criteria.

Remove Units with Final Disposition (SR-RU)

In order to minimize the amount of storage space being used for the BLOOD INVENTORY file (#65), units for which a final disposition has been entered should be deleted periodically on a regular basis once a "hard copy record" has been printed using the Print Units with Final Disposition (S-SR-PU) option in the Supervisor's Menu. The system uses the list compiled through that option to determine which units may be deleted.

Deletion of the units from the inventory file does not affect the patient's transfusion record. The necessary information was transferred to the patient's file when the transfusion data was recorded through the Patient Transfusion Data (DT) option in the Patient Menu.

Example:

```
Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: RU  Remove units with final
disposition

                        DELETE INVENTORY FILE ENTRIES
                           WITH FINAL DISPOSITIONS

                Units received from: FEB  1, 1993 to FEB 18, 1993
                with final dispositions will be deleted. OK ? NO// Y  (YES)

...EXCUSE ME , LET ME PUT YOU ON 'HOLD' ...


Deletion completed.


Select Summary and deletion reports Option: <RET>
```

NOTE: If there is no list, you will see the message:
NO DELETION LIST - Use the Print units with final disposition option under the Supervisor's Menu.

Remove Ex-Donors (SR-RX)

Once the Print Ex-Donor (SR-PX) option in the Supervisor's Menu has been used to print a hard copy listing of the donors to be deleted and the listing has been reviewed for completeness, the donors can be deleted.

Example:

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: SR  Summary and deletion reports

Select Summary and deletion reports Option: RX  Remove ex-donors

                DONORS WHO HAVE NOT DONATED SINCE A SPECIFIED DATE


                     DONORS NOT DONATING SINCE NOV 26, 1991
                     will be deleted. OK ? NO// Y  (YES)

...EXCUSE ME , JUST A MOMENT PLEASE...


Select Summary and deletion reports Option: <RET>
```

NOTE: This donor data is not archived to tape. Therefore, printing of the listing is required prior to deletion. This same listing is then deleted.

Blood Bank Workload (SW)

Display Workload for an Accession (SW-DW)

This option displays the tests and WKLD codes for an accession for a date for an accession area.

Example:

```
Select Supervisor Option: SW  Blood bank workload

   DW     Display workload for an accession

Select Blood bank workload Option: DW  Display workload for an accession

Select ACCESSION AREA: BB  BLOOD BANK

Select BLOOD BANK Date: 8-23-1993// 8-30-92   AUG 30, 1992

Select BLOOD BANK Accession Number for AUG 30, 1992: 1

 TEST: ABO/RH TYPING                      URGENCY OF TEST: ROUTINE
  TECHNOLOGIST: reg                       COMPLETE DATE: AUG 30, 1992@14:01
  RESULT: O POS
WKLD CODE: ABO Cell Serum and Rh(D)       TEST MULTIPLY FACTOR: 1
  WKLD CODE COUNTED: YES                  WKLD CODE TALLY: 2
  COMPLETION TIME: AUG 30, 1992@14:01     USER: GINS,RONALD
  INSTITUTION: REGION 5                   MAJOR SECTION: BLOOD BANK
  LAB SUBSECTION: BLOOD BANK              WORK AREA: BLOOD BANK

Select BLOOD BANK Accession Number for AUG 30, 1992: <RET>

Select BLOOD BANK Date: <RET>

Select ACCESSION AREA: <RET>
```

Blood Bank Validation Documentation (VD)

This option provides the mechanism for documenting the mandated validation of the Blood Bank software options. Data entry in the file is NOT intended to replace the mandated documentation of the validation testing, including: 1) observations from testing, e.g., screen prints, logging files, printed reports, written transcriptions, data tapes, data disks, etc., 2) a record/log of unusual occurrences, bugs, deviations from the BB User Manual & resolution, or 3) final approval by other responsible individuals, including the BB Medical Director and the LIM. It MAY be used to replace the documentation of the review, the acceptability/ outcome of the review, the date/signature of approval and the date of implementation.

This file offers longitudinal tracking of validation of the software to include the release of new versions, the installation of patches and the installation of any local modifications.

The content and the formatting of the file is consistent with the worksheets provided in the Blood Bank User Manual and the Technical Manual and complies with the requirements of the American Association of Blood Bank and the Food and Drug Administration. The fields which document the basic option information were exported with data, including:

```
66.2,.01      NAME                    0;1 FREE TEXT (Required)
      HELP-PROMPT:      Answer must be 3-30 characters in length.
         Enter name of option being validated.
      DESCRIPTION:  Name of option being validated.

66.2,.02      MENU NAME               0;2 FREE TEXT (Required)
      HELP-PROMPT:      Answer must be 2-50 characters in length.
         Enter menu text of option being validated.

66.2,.03      MENU ABBREVIATION       0;3 FREE TEXT
      HELP-PROMPT:      Answer must be 2-3 characters in length.
       To allow look up/access to option based on the abbreviation.

66.2,.04      FUNCTIONAL AREA         0;4 SET (Required)
      '1' FOR DONOR;
      '2' FOR INVENTORY;
      '3' FOR PATIENT;
      '4' FOR INQUIRIES;
      '5' FOR REPORTS;
      '6' FOR SUPERVISOR;
      '7' FOR INQUIRIES/WARD;
      '8' FOR DONOR/REPORTS;
      HELP-PROMPT:      Enter the Blood Bank menu in which the option appears.
```

```
66.2,.05      OPTION DESCRIPTION     0;5 SET (Required)
      '1' FOR DATA ENTRY;
      '2' FOR DATA EDITING;
      '3' FOR DATA ENTRY/REVIEW;
      '4' FOR EDIT TEMPLATE/SOFTWARE CONTROL;
      '5' FOR FILE SETUP/SOFTWARE CONTROL;
      '6' FOR FORM/LETTER CONTENT;
      '7' FOR FORM/REPORT GENERATION;
      '8' FOR PURGING DATA/FILE ENTRIES;
       '9' FOR DATA INQUIRY ONLY;
       HELP-PROMPT:      Enter option description in terms of functionality.
                                UNEDITABLE

66.2,.06 LIMITED ACCESS         0;6 SET (Required)
      HELP-PROMPT:      Does option require additional security access
      in addition to the LRLAB, LRVERIFY and the LRBLOODBANK keys, i.e. the
   LRBLSUPER or the LRLIAISON?
```

Example: Entry of validation data for a single option - no problems

```
Select Blood bank Option: S  Supervisor

Select Supervisor Option: VD     Blood bank validation documentation


Select BLOOD BANK VALIDATION NAME: LRBLPET          Enter test data

OPTION IN USE: ?
    Is option in use at the facility?  For example, if a site does not draw
    any type of donors, including therapeutic phlebotomy and autologous
    donation, the donor menu options would be set to NO.
CHOOSE FROM:
   1        YES
   0        NO
   1        yes
   0        no

OPTION IN USE: YES

Select DATE/TIME VALIDATED: T   SEP 23, 1993

REASON FOR VALIDATION: ?
   In accordance with M-2, Part VI, Chapter 5, validation testing must  be
performed at these specific times.
   CHOOSE FROM:
   1        NEW VERSION
   2        PATCH
   3        RETROSPECTIVE
   4        LOCAL MODIFICATION
REASON FOR VALIDATION: 1  NEW VERSION

VERSION NUMBER: V5.2
PATCH NUMBER:
Select PERSON PERFORMING VALIDATION: LH  HOFF,LYNN
   ARE YOU ADDING 'HOFF,LYNN' AS A NEW PERSON PERFORMING    VALIDATION (THE 1ST
FOR THIS DATE/TIME VALIDATED)? Y  (YES)
```

```
OUTCOME: ?
   CHOOSE FROM:
   1        ACCEPTABLE
   2        ACCEPTABLE WITH CORRECTIVE ACTION
   3        NOT ACCEPTABLE
OUTCOME: 1  ACCEPTABLE

APPROVED BY: LH  HOFF,LYNN

DATE APPROVED: T  (SEP 23, 1993)

DATE IMPLEMENTED: T  (SEP 23, 1993)
COMMENT:
1>No problems encountered.
2>
EDIT Option: <RET>
```

Ward Menu Options

Ward Menu

```
PO     Show list of accessions for a patient [LRUPT]
PR     Patient blood bank record [LRBLQDR]
TI     Test description information [LREV]
UA     Units assigned/components requested [LRBLQPR]
```

Ward Menu Data Flow Chart

Action	Option
1. Determine whether there is a current specimen in the Blood Bank	Show List of Accessions for Patient (PO)
2. Review a patient's transfusion record	Patient Blood Bank Record (PR)
3. Determine whether there are units available for transfusion	Units Assigned/Components Requested (UA)
4. Review specimen type and/request needed for various Blood Bank tests	Test Description Information (TI)

Show List of Accessions for a Patient (PO)

In order to determine whether a new specimen is needed to crossmatch additional units for a patient, the system displays the most recent specimens accessioned for a patient. This includes whether requests originally submitted as "Type and Screen" or "Type and Hold" can be converted to "TRANSFUSION REQUESTS."

Example:

```
Select Ward Option: PO  Show list of accessions for a patient

Select ACCESSION AREA: BB  BLOOD BANK

Select Patient Name: W8888 WASHINGTON,GEORGE  03-01-00  592888888  SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ANGINA
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K

Is this the patient ? YES// <RET>  (YES)

BLOOD BANK          WASHINGTON,GEORGE ID: 592-88-8888  TESTS ORDERED
Spec Date/time  Acc #           Site/specimen          Tests


03/11/93 14:05  BB 0311 2       BLOOD                 1)TRANSFUSION REQUES

03/05/93 14:02  BB 0305 3       BLOOD                 1)TRANSFUSION REQUES
                                                      2)ABO/RH TYPING

04/16/91 09:33  BB 0417 1       BLOOD                 1)TYPE & SCREEN

Select Patient Name: <RET>

Select ACCESSION AREA: <RET>
```

NOTE: If a specimen is accessioned on a date other than the date collected, as shown by BB 0417 1, the accession number will be assigned accordingly. However, the date/time entered for the "collection" will also be reflected.

Patient Blood Bank Record (PR)

In order to quickly review the patient's entire transfusion record since the data was first entered into the system, the system displays/prints the information in an abbreviated form. Transfusion episodes are displayed in reverse chronological order.

Example:

```
Select Blood bank Option: W  Ward

Select Ward Option: PR  Patient blood bank record

Select Patient Name:    WASHINGTON,GEORGE  03-01-00   592888888  SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: ANGINA
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K


Is this the patient ? YES// <RET>  (YES)

Another patient: ? NO// <RET>  (NO)
List all blood components ? YES// <RET>  (YES)
List only total number of units for each component ? NO// <RET>  (NO)
Start with Date TODAY// MAR 30, 1993
Go    to   Date TODAY// -90  (DEC 30, 1992)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 30, 1993  15:46   VAMC                                                Pg: 1
TRANSFUSION SERVICE/BLOOD BANK REPORT from DEC 30, 1992 to MAR 30, 1993
PATIENT: WASHINGTON,GEORGE 592-88-8888  A POS
Unit Transfused   Component         (# of Units/ml )      Date/Time Completed
-------------------------------------------------------------------------------

WA33333           CPDA-1 RED BLOOD CELLS   (/250)   A POS MAR 17, 1993  16:19
      DELAYED HEMOLYTIC
C11112            CPDA-1 RED BLOOD CELLS   (/250)   A POS MAR  2, 1993  15:32
Total RBC: 2

    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed cells
only- febrile nonhemolytic reaction 3/5/93


RBC Antibody present:ANTI C
                     ANTI E
                     ANTI K
RBC Antigen present :Jk(a)
RBC Antigen absent  :K
```

Test Description Information (TI)

Basic information regarding collection samples, requisitions, etc., entered in the File #60 is available for each test.

Example 1: ABO/RH Typing

```
Select Ward Option: TI  Test description information

Select LABORATORY TEST NAME: ABO
     1   ABO GROUP/RH TYPE  ABO/RH TYPING
     2   ABO TITER
CHOOSE 1-2: 1  ABO/RH TYPING


Lab test     Highest allowed urgency  Cost
ABO/RH TYPING               ASAP
Synonym:
     ABO GROUP/RH TYPE
Collection Sample    VA Lab Slip     Container                Vol Req(ml)
BLOOD                                LAVENDER                 5

BLOOD                                GENERAL

BLOOD                                GENERAL
```

Example 2: Type & Screen

```
Select LABORATORY TEST NAME: TYPE
     1   TYPE & HOLD
     2   TYPE & SCREEN
CHOOSE 1-2: 2


Lab test     Highest allowed urgency  Cost
TYPE & SCREEN               ASAP
Synonym:
     T & S
Collection Sample    VA Lab Slip     Container                Vol Req(ml)
BLOOD                                GENERAL
```

Example 3: Crossmatch

```
Select LABORATORY TEST NAME: TRANS
     1   TRANSFERRIN
     2   TRANSFUSION REACTION WORKUP
     3   TRANSFUSION REQUEST
     4   TRANSITIONAL EPITHELIAL CELLS
     5   TRANSTHYRETIN
CHOOSE 1-5: 3


Lab test     Highest allowed urgency  Cost
TRANSFUSION REQUEST         STAT
Collection Sample    VA Lab Slip     Container              Vol Req(ml)
BLOOD                                GENERAL                10


Select LABORATORY TEST NAME: <RET>
```

Units Assigned/Components Requested (UA)

In order to effectively answer questions regarding current and recent orders for blood/blood components, the system displays all units previously assigned/xmatched for the patient (in order based on date/time assigned, with most recent first), followed by the most recent request for each blood component requested.

Example:

```
Select Ward Option: UA  Units assigned/components requested

Select Patient Name:    WASHINGTON,GEORGE   03-01-00   592888888   SC VETERAN
WASHINGTON,GEORGE ID: 592-88-8888 Physician: WELBY,HARRY

ABO group: A  Rh type: POS
AGE: 93  DATE OF BIRTH: MAR  1, 1900
Ward on Adm: 1B  Service: ALLERGY
Adm Date: NOV 22, 1984  Adm DX: HIVES
Present Ward: 1B                        MD: WELBY,HARRY
PATIENT LOCATION: 1B// <RET>
    Transfuse K negative, C negative blood only 3/3/93 Transfuse Washed
    cells only- febrile nonhemolytic reaction 3/5/93

Antibody present: ANTI C
                  ANTI E
                  ANTI K


Is this the patient ? YES// <RET>  (YES)
Select Print Device:  [Enter Print Device Here]
Date/Time to Print: N (NOW)
REQUEST QUEUED!
```

```
MAR 30, 1993  15:49   VAMC                                                  Pg: 1
LABORATORY SERVICE
-----------------------------------------------------------------------------
WASHINGTON,GEORGE 8888                    A POS
      Unit assigned/xmatched:                        Exp date       Loc
 1)   DU11112    CPDA-1 RED BLOOD CE  A POS  MAR 16, 1993   BLOOD BANK
 2)   WW12345    CPDA-1 RED BLOOD CE  A POS  APR 13, 1993   BLOOD BANK

Component Requests          Units Request date  Date wanted Requestor    By
CPDA-1 RED BLOOD CELLS        3   03/08         03/11 1406  DR JONES     SH
RED BLOOD CELLS, WASHED       2   03/05 1404    03/05 1542  DR JONES     SH
```

NOTES:

- In order to ascertain whether a new specimen is needed if additional units are needed, use Show List of Accessions for a Patient (PO) option in the Ward Menu.

- If the system displays a recent request, but no units are assigned/xmatched, it means that the pretransfusion testing has not been completed, i.e., units have not been selected **or** crossmatch results have not been entered (if applicable to that component).

- If neither units nor requests are displayed, check the patient accessions to determine whether a specimen was logged in and exactly what was requested.

GLOSSARY

Glossary

Abbreviated Response	This feature allows you to enter data by typing only the first few characters for the desired response. This feature will not work unless the information is already stored in the computer.
Access Code	A code that allows the computer to identify you as a user authorized to gain access to the computer. Your code is greater than six and less than twenty characters long; can be numeric, alphabetic, or a combination of both; and is usually assigned by a site manager or application coordinator. (See the term verify code in the Glossary.)
Accession	A unique alpha numeric (combination of letters and numbers) assigned to an individual patient specimen when it is received in the laboratory. The accession is assigned by the computer and contains the laboratory departmental designation, the date and an accession number. This accession serves as identification of the specimen as it is processed through the laboratory. (Example: HE 09121)
Accession Area	A functional area or department in the laboratory where specific tests are performed. The accession area defines the departmental designation contained in each accession.
Accession Date	The date of the accession, part of the total alpha-numeric accession of each specimen.
Accession Number	A unique number assigned to each accession.
ADP	Automated Data Processing
ADT	Admission, Discharge, Transfer. A component of the MAS software package .
AEMS	Automated Engineering Management Systems. This is the Engineering Service software package.

AFIP	Armed Forces Institute of Pathology; an external review board.
AMIE	Automated Management Information Exchange. A system that allows the Veterans Benefits Administration to use their WANG System to query medical centers via the VADATS network. See WKLD.
AMIS	Automated Management Information System; a method for tabulating Workload.
ANSI	American National Standards Institute. An organization that compiles and publishes computer industry standards.
ANSI MUMPS	The MUMPS programming language, now officially called "M" Technology, is a standard; that is, an American National Standard. MUMPS stands for Massachusetts General Hospital Utility MultiProgramming System.
APP	Applications Portability Profile
Algorithm	A predetermined set of instructions for solving a specific problem in a limited number of steps.
Application	A computer program (e.g., a package) that accomplishes tasks for a user.
Application Coordinator	The designated individual responsible for user-level management and maintenance of an application package (e.g., IFCAP, Laboratory, Pharmacy, Mental Health).
ARG	Application Requirements Group. A designated group of applications experts who work with the developers of a software package to define and approve the contents of the package.
Array	An arrangement of elements in one or more dimensions. A MUMPS array is a set of nodes referenced by subscripts which share the same variable name.

ASCII	American Standard Code for Information Interchange. A series of 128 characters, including uppercase and lowercase alpha characters, numbers, punctuation, special symbols, and control characters.
Attribute Dictionary	See data dictionary.
Audit	An audit is a physical record of access to a file. The VA FileMan and Kernel provide audit tools that may be used to maintain a continuous audit trail of changes that are made to an existing database. Elements that can be tracked include, but are not limited to, fields within files and files themselves. Records are kept of the date/time and user making changes. In addition, the Kernel provides tools for auditing system access, option access, and device usage. Logs store the date/time of access, user identification and name of the option or device used.
Audit Access	A user's authorization to mark or indicate that certain information stored in a computer file should be audited.
Audit Trail	A chronological record of computer activity automatically maintained to trace the use of the computer.
Auto Instruments	Automated instruments used in the Lab that identify and measure tissue or other specimens.
Backup	The process of creating duplicate data files and/or program copies that serve in case the original is lost or damaged.
Baud (Baud rate)	A measure of times per second that switching can occur in a communications channel. Data transmission speed roughly equivalent to 1 bit per second (bps). Commonly used baud rates include 300, 1200, 2400, 3600, 4800, and 9600.
Bidirectional	Automated instruments that send and receive information from DHCP.
Boolean	A term used in computer science for data that is binary (i.e., either true or false).

Boot	To load instructions into main memory to get a computer operational.
Buffer	A temporary holding area for information.
Bug	An error in a program. Bugs may be caused by syntax errors, logic errors, or a combination of both.
Bypass Options	Ability to bypass selected data pages not meaningful to the end user. This could include system-generated data, banner pages, alignment pages or selected reports in multiple report file.
CAP	College of American Pathology
CAP Codes	Numbers assigned to lab procedures by the College of American Pathology for compiling work statistics.
Caret	A symbol expressed as ^ (up caret), < (left caret), or > (right caret). In many MUMPS systems, a right caret is used as a system prompt and an up caret as an exiting tool from an option. The up caret is also known as the up-arrow symbol or "shift 6" key.
Checksum	The result of a mathematical computation involving the individual characters of a routine or file.
Cipher	A system that arbitrarily represents each character by one or more other characters.
Collection List	A listing of routine laboratory tests ordered for inpatients. The list is used by the Phlebotomy team during routine collection of specimens from the wards. The list is sorted by ward location, and includes both patient information (Name, SSN, bed/room number) and test information, type of specimen to collect, amount needed, date and time tests were ordered, urgency status, order number, and accession number.
Command	A combination of characters that instruct the computer to perform a specific operation.

Computed Field	This field takes data from other fields and performs a predetermined mathematical function (e.g., adding two columns together). You will not, however, see the results of the mathematical calculation in the file. Only when you are printing or displaying information on the screen will you see the results for this type of field.
Computer	A device that processes information. A machine that has input, output, storage, and arithmetic devices plus logic and control units.
Control Key	The Control Key (Ctrl on the keyboard) performs a specific function in conjunction with another key. In some word processing applications, for example, holding down the Ctrl key and typing an A will cause a new set of margins and tab settings to occur; Ctrl S causes printing on the terminal screen to stop; Ctrl Q restarts printing on the terminal screen; Ctrl U deletes an entire line of data entry when the return key is pressed.
Core	The fundamental clinical application packages of DHCP. The original core of applications built on the Kernel and VA FileMan were Admission, Discharge and Transfer (ADT), Scheduling, Outpatient Pharmacy, and Clinical Laboratory. Additional software packages were added to implement Core+6 and Core+8 configurations.
CPU	Central Processing Unit. Those parts of computer hardware that carry out arithmetic and logic operations, control the sequence of operations performed, and contain the stored program of instructions.

Cross Reference	A cross reference on a file provides direct access to the entries in several ways. For example, the Patient file is cross referenced by name, social security number, and bed number. When asked for a patient, the user may then respond with either the patient's name, social security number, or bed number. Cross reference speeds up access to the file for printing reports. A cross reference is also referred to as an index or cross index.
CRT	Cathode Ray Tube. A piece of computer hardware that looks something like a television screen. The CRT and keyboard collectively are called your terminal. A vacuum tube that guides electrons onto a screen to display characters or graphics. Also called VDT for video display terminal.
Cumulative	A chartable patient report of all data accumulated on a patient over a given time period.
Cursor	A flashing image on your screen (generally a horizontal line or rectangle) that alerts you that the computer is waiting for you to make a response to an instruction (prompt).
Data	In the generic sense, data is information that can be processed and/or produced by computers.
Data Attribute	A characteristic of a unit of data such as length, value, or method of representation. VA FileMan field definitions specify data attributes.
Database	A set of data, consisting of at least one file that is sufficient for a given purpose. The Kernel database is composed of a number of VA FileMan files. A collection of data can be about a specific subject (e.g., the Patient file). A data collection has different data fields (e.g., patient name, SSN, and date of birth). An organized collection of data about a particular topic.

Database Management System	A collection of software that handles the storage, retrieval and updating of records in a database. A Database Management System (DBMS) controls redundancy of records and provides the security, integrity, and data independence of a database. VA FileMan is the Database Management System for the DHCP software.
Databreak options	Ability to break to the next microfiche or the next column whenever a significant change in data occurs. This allows selective grouping of specific reports to various user groups, or a selective breakdown of a large report to specific user areas.
Data Dictionary	A Data Dictionary (DD) contains the definitions of a file's elements (fields or data attributes); relationships to other files; and structure or design. Users generally review the definitions of a file's elements or data attributes; programmers review the definitions of a file's internal structure.
Data Dictionary Access	A user's authorization to write/update/edit the data definition for access computer file. Also known as DD Access.
Data Dictionary Listing	This is the printable report that shows the data dictionary. DDs are used by users, programmers, and Documenters.
Data Processing	Logical and arithmetic operations performed on data. These operations maybe performed manually, mechanically, or electronically. Sorting through a card file by hand would be an example of the first method; using a machine to obtain cards from a file would be an example of the second method; and using a computer to access a record in a file would be an example of the third method.
DBA	Within the VA, the Database Administrator oversees package development with respect to DHCP Standards and Conventions (SAC) such as name-spacing, file number ranges, and integration issues.

Debug	To correct logic errors and/or syntax errors in a computer program. To remove errors from a program.
Default	A response the computer considers the most probable answer to the prompt being given. It is identified by double slash marks (//) immediately following it. This allows you the option of accepting the default answer or entering your own answer. To accept the default, you simply press the enter (or return) key. To change the default answer, type in your response.
Delete	The key on your keyboard (may also be called D or backspace on some terminals) which allows you to delete individual characters working backwards by placing the cursor immediately after the last character of the string of characters you wish to delete. The @ sign (the "shift 2" key) may also be used to delete a file entry or data attribute value. The computer will ask "Are you sure you want to delete this entry?" to insure you do not delete an entry by mistake.
Delimiter	A special character used to separate a field, record, or string. VA FileMan uses the " character as the delimiter within strings.
Device	A terminal, printer, modem, or other type of hardware or equipment associated with a computer. A host file of an underlying operating system may be treated like a device in that it may be written to (e.g., for spooling).
Device file	A DHCP file (in VA FileMan) where devices (printers or terminals) are defined.

DHCP	The Decentralized Hospital Computer Program of the Veterans Health Administration (VHA), Department of Veterans Affairs (VA). DHCP software, developed by the VA, is used to support clinical and administrative functions at VA medical centers nationwide. It is written in MUMPS and, via the Kernel, will run on all major MUMPS implementations regardless of vendor. DHCP is composed of packages which conform with name spacing and other DHCP standards and conventions.
Disk	The medium used in a disk drive for storing data.
Disk Drive	A peripheral device that can be used to "read" and "write" on a hard or floppy disk.
Documentation	User documentation is an instruction manual that provides users with sufficient information to operate a system. System documentation describes hardware and operating systems provided by a system vendor. Program documentation describes a program's organization and the way in which the program operates and is intended as an aid to programmers who will be responsible for revising the original program.
DRG	Diagnostic Related Group
DSCC	The Documentation Standards and Conventions Committee
DSS	Decision Support System
E3R	Electronic Error Enhancement Reporting System
Electronic Signature	A code that is entered by a user which represents his or her legally binding signature.

Encryption	Scrambling data or messages with a cipher or code so that they are unreadable without a secret key. In some cases encryption algorithms are one directional; they only encode and the resulting data cannot be unscrambled (e.g., access/verify codes).
Enter	Pressing the return or enter key tells the computer to execute your instruction or command or to store the information you just entered.
Entry	A VA FileMan record. It is uniquely identified by an internal entry number (the .001 field) in a file.
EP	Expert Panel
Extended Core	Those applications developed after the basic core DHCP packages were installed (e.g., Dietetics, Inpatient Pharmacy). Also referred to as Core+6 or Core+8.
Eyeball pages	Eye readable data to highlight major changes within data; for example: new report, or change in departments. Data breaks can be used with the eyeball pages to advance to the top of the next column for quicker user access to their data.
Field	In a record, a specified area used for the value of a data attribute. The data specifications of each VA FileMan field are documented in the file's data dictionary. A field is similar to blanks on forms. It is preceded by words that tell you what information goes in that particular field. The blank, marked by the cursor on your terminal screen, is where you enter the information.
File	A set of related records treated as a unit. VA FileMan files maintain a count of the number of entries or records.
FileManager	See VA FileMan.

FOIA	The Freedom Of Information Act. Under the provisions of this public law, software developed within the VA is made available to other institutions, or the general public, at a nominal charge that covers the cost of reproduction, materials, and shipping.
Free Text	The use of any combination of numbers, letters, and symbols when entering data.
FTAM	File Transfer, Access, and Management
GKS	Graphic Kernel Standard
Global	In the MUMPS language, a global is a tree structured data file stored in the common database on the disk.
Global Variable	A variable that is stored on disk (MUMPS usage).
GOSIP	Government Open Systems Interconnection Profile
GUI	Graphic User Interface
Hacker	A computer enthusiast; also, one who seeks to gain unauthorized access to computer systems.
Handshake	A method for controlling the flow of serial communication between two devices, so that one device transmits only when the other device is ready.
Hardware	The physical equipment pieces that make up the computer system (e.g., terminals, disk drives, central processing units). The physical components of a computer system.
Header	Information at the top of a report.
Help Prompt	The brief help that is available at the field level when entering one or more question marks.

HINQ	Hospital Inquiry. A system that permits medical centers to query the Veterans' Benefits Administration systems via the VADATS network.
HIS	Hospital Information Systems
HOST	Hybrid Open Systems Technology
IFCAP	Integrated Funds Distribution, Control Point Activity, Accounting and Procurement
IHS	Indian Health Service
IHS	Integrated Hospital System
Interactive Language	The dialogue that takes place between the computer and the user in the form of words on the screen of the user's CRT.
Initialization	The process of setting variables in a program to their starting value.
Input Transform	An executable string of MUMPS code which is used to check the validity of input and converts it into an internal form for storage.
IRAC	Information Resources Advisory Council
IRM	Information Resource Management
ISC	Information Systems Center
JCAHO	Joint Commission for the Accreditation of Health Care Organizations.
Jump (also called Up-Arrow Jump)	The Up Arrow Jump allows you to go from a particular field within an input template to another field within that same input template. You may also Jump from one menu option to another menu option without having to respond to all the prompts in between. To jump, type an up arrow (^) - the "shift 6" key on most keyboards - and then type the name of the field in the template or option on your menu you wish to jump to.

Kernel

A set of DHCP software routines that function as an intermediary between the host operating system and the DHCP application packages such as Laboratory, Pharmacy, IFCAP, etc. The Kernel provides a standard and consistent user and programmer interface between application packages and the underlying MUMPS implementation. Two Kernel components, VA FileMan and MailMan, are self-contained to the extent that they may stand alone as verified packages. Some of the Kernel components are listed below along with their associated namespace assignments.

VA FileMan Dl
MailMan XM
Sign-on Security XU
Menu Management XQ
Tools XT
Device Handling ZIS
Task Management ZTM

Key

A security code that is assigned to individual users that allows access to options.

Lab Sub-section

Refers to the subdivision of lab major sections. If your lab uses this system, your reports will be printed and totaled by lab subsection as well as lab section.

LAYGO access

A user's authorization to create a new entry when editing a computer file. (Learn As You GO, the ability to create new entries.)

Line Editor

This is VA FileMan's special line oriented text editor. This editor is used for the word processing data type.

LMIP

Laboratory Management Index Program

Local Variable

A variable that is stored in a local partition.

Load List	Used for organizing the workload in various accession areas of the laboratory. A load list is generated for each automated instrument, and is used to arrange the order in which standards, controls and patient specimens are to be run on the specific instrument.
Log In/On	The process of gaining access to a computer system.
Log Out/Off	The process of exiting from a computer system.
Looping	A set of instructions in a program that are repeatedly executed. When set up correctly, VA FileMan allows you to loop through groups of entries in a file without having to select each entry individually.
LSI	Large Scale Integrating Device also known as Laboratory System Interface, an instrument for translating data between DHCP and auto instruments.
Magnetic Tape	Plastic or mylar tape on reels or cassettes used for data storage (also called mag tape).
MailMan	An electronic mail system that allows you to send and receive messages from other users via the computer.
Major section	Refers to the grouping of lab subsections into major groups within the lab. A lab may consist of the following major sections: General Clinical (may include hematology, toxicology, serology, chemistry, etc.), Blood Bank Microbiology, and Anatomic Pathology. If your lab uses this system, your workload report will be reported by major section ("Section Workload Report").
Mandatory Field	This is a field that requires a value. A null response is not valid.
MAS	Medical Administration Service
Menu	A list of options you are authorized access to and may select from.

Menu Tree	A series of menus you sequence through in order to get to the specific option you desire.
Microfiche	A device for microfilming for data storage.
Microscan	An automated instrument used for organism identification and for measuring antibiotics within the Microbiology module.
MIRMO	Medical Information Resources Management Office in the Department of Veterans Affairs Central Office in Washington, DC.
MIS	Management Information Systems
Modem	A device for connecting a terminal to a telephone line, allowing it to communicate with another modem. Modems include the following types. Direct Connect —The modem is directly hooked into the phone line. Acoustic—The modem is connected to the telephone through the handset. Auto Answer—When it detects a ring signal, the modem will "answer the phone." Auto Dial—The modem, upon command from the terminal or the computer, will dial another modem.
Multiple-valued	More than one data value is allowed as the value of a data attribute for an entry.
MUMPS	Massachusetts General Hospital Utility Multi-Programming System
Name spacing	A convention for naming DHCP package elements. The DBA assigns unique character strings for package developers to use in naming routines, options, and other package elements so that packages may coexist. The DBA also assigns a separate range of file numbers to each package.
NAVAP	National Association of VA Physicians

NCD	National Center for Documentation, located at the Birmingham ISC.
NIST	National Institute of Standards and Technology
NOAVA	Nationwide Office Automation for Veterans Affairs
Node	In a tree structure, a point at which subordinate items of data originate. A MUMPS array element is characterized by a name and a unique subscript. Thus the terms node, array element, and subscripted variable are synonymous. In a global array, each node might have specific fields or "pieces" reserved for data attributes such as name. In data communications, the point at which one or more functional units connect transmission lines.
Numeric field	A response that is limited to a restricted number of digits. It can be dollar valued or a decimal figure of specified precision.
OE/RR	Order Entry and Results Reporting
On-line	A device is on-line when it is connected to the computer.
On-the-fly	A term given to the process of not permanently storing data in the data dictionary but having a computation performed at run time.
Operating System	A basic program that runs on the computer, controls the peripherals, allocates computing time to each user, and communicates with terminals.

Order number	A number generated by the computer each time a test is ordered - unique for each patient's order - starting at midnight JAN 1 with order number 1. The order number provides identification of patient specimens both during transport to the laboratory and until accession numbers have been assigned to the specimens. Generally used by non-laboratory personnel; e.g., ward, section, and number.
OS/M	Occurrence Screen/Monitor
Output Transform	An executable string of MUMPS code which converts internally stored data into a readable display.
PACS	Picture Archiving and Communications Systems
Package	The set of programs files, documentation, help prompts, and installation procedures required for a given software application. For example, Laboratory, Pharmacy, and MAS are packages. A DHCP software environment composed of elements specified via the Kernel's Package file. Elements include files and associated templates, name spaced routines, and name spaced file entries from the Option, Key, Help Frame, Bulletin, and Function files. Packages are transported using VA FileMan's DIFROM routine that creates initialization routines to bundle the files and records for export. Installing a package involves running the installation routines that will recreate the original software environment. Verified packages include documentation. As public domain software, verified packages may be requested through the Freedom of Information Act (FOIA).
Password	A user's secret sequence of keyboard characters, which must be entered at the beginning of each computer session to provide the user's identity.

Pattern Match	A preset formula that includes any one of the following types: 1) letters, numbers, or symbols; 2) letters, numbers, and symbols; 3) letters and numbers; 4) symbols and letters; 5) numbers and symbols. If the information entered (does not match the formula exactly, the computer rejects the user's response.
Peripheral Device	Any hardware device other than the computer itself (central processing unit plus internal memory). Typical examples include card readers, printers, CRT units, and disk drives.
Pointer	Points to another file where the computer stores information needed for the field of the file in which you are currently working. If you change any of the information in the field in which you are working, the new information is automatically entered into the "pointed to" file.
POSIX	Portable Operating System Interface for Computing Environments
Printer	A printing or hard copy terminal.
Program	A list of instructions written in a programming language and used for computer operations.
Programmer Access Code	An optional three to eight character code that allows the computer to identify you as a user authorized to enter into programmer mode (see also access code). Once in programmer mode, you will use Standard MUMPS, DHCPs official programming language, to interact with the computer. Programmer access is very tightly restricted to authorized, qualified individuals.
Programmer Access	Privilege to become a programmer on the system and work outside many of the security controls of Kernel.
Prompt	The computer interacts with the user by issuing questions called prompts, to which the user issues a response.

QA	Quality Assurance
RAM	Random Access Memory
Read Access	A user's authorization to read information stored in a computer file.
Reader-printer	A device for displaying and printing microfiche.
Record	A set of related data treated as a unit. An entry in a VA FileMan file constitutes a record. A collection of data items that refers to a specific entity. For example, in a name-address-phone number file, each record would contain a collection of data relating to one person.
Required Field	A mandatory field, one that must not be left blank. The prompt for such a field will be asked until the user enters a valid response.
RMEC	Regional Medical Education Center
ROM	Read Only Memory. A type of memory that can be read but not written.
Routine	A program or a sequence of instructions called by a program, that may have some general or frequent use. MUMPS routines are groups of program lines which are saved, loaded, and called as a single unit via a specific name.
SAC	Standards and Conventions. Through a process of verification, DHCP packages are reviewed with respect to SAC guidelines as set forth by the Standards and Conventions Committee (SACC). Package documentation is similarly reviewed in terms of standards set by the Documentation Standards and Conventions Committee (DSCC).
SACC	Standards and Conventions Committee of the Decentralized Hospital Computer Program.
Screen (Noun)	The display surface of a video terminal.

Screen (Verb)	The process of checking a user's input for a pre-defined format or condition (e.g., date within a permitted range).
Screen Editor	This is VA FileMan's special screen oriented text editor. This editor is used for the word processing data type.
Scroll/no scroll	The scroll/no scroll button (also called hold screen) allows the user to "stop" (no scroll) the terminal screen when large amounts of data are displayed too fast to read and "restart" (scroll).
SERA	Systematic External Review of Autopsies.
SERS	Systematic External Review of Surgical Pathology.
Set of codes	Usually a preset code with one or two characters. The computer may require capital letters as a response (e.g., M for male and F for female). If anything other than the acceptable code is entered, the computer will reject the response.
Site Manager/IRM Chief	At each site, the individual who is responsible for managing computer systems, installing and maintaining new modules, and serving as liaison to the ISCs.
SIUG/ARG	Special Interest User Group/Application Requirements Group. A designated group of applications experts who work with the developers of a software package to define and approve the contents of the package.
SNOMED	Systematized Nomenclature of Medicine, developed to standardize the coding of information regarding specific diseases. It is used by Anatomic Pathology, Blood Bank and Microbiology packages.

Software	The set of instructions and data required to operate the computer. One type is called operating system software - fundamental computer software that supports other software. The second type is called applications software - customized programs that tell the computer how to run applications (e.g., Pharmacy or Laboratory).
Spacebar Return Feature	You can answer a VA FileMan prompt by pressing the spacebar and then the return key. This indicates to VA FileMan that you would like the last response you were working on at that prompt recalled.
Spooling	Procedure by which programs and output can be temporarily stored until their turn to print.
SQL	Structured Query Language
Stop Code	A number assigned to the various clinical, diagnostic, and therapeutic sections of a facility.
Sub-routine	A sequence of MUMPS code that performs a specific task, usually used more than once.
Subscript	A symbol that is associated with the name of a set to identify a particular subset or element. In MUMPS, a numeric or string value that is enclosed in parentheses; is appended to the name of a local or global variable; identifies a specific node within an array.
Syntax	A term for the rules that govern the construction of a machine language.
Template	A means of storing report formats, data entry formats, and sorted entry sequences is the opposite of "On the Fly". A template is a permanent place to store selected fields for use at a later time.
Terminal	See CRT. May be either a printer or CRT/monitor/visual display terminal.

Titling	Methods of displaying titles on microfiche. - Normal and reverse polarity. By title segments or portion of segments. Multiple number and variable size of characters by title segments.
Treating Area/Specialty	The section or service of the hospital that requests a test. Some hospital systems have an embedded code that determines if the ordered test is for an inpatient or outpatient.
Tree Structure	A term sometimes used to describe the structure of a MUMPS array. This has the same structure as a family tree, with the root at the top, and ancestor nodes arranged below, according to their depth of subscripting. All nodes with one subscript are at the first level, all nodes with two subscripts at the second level, and so on.
Trigger	A trigger is an instruction that initiates a procedure. In VA FileMan, a trigger can be set up when entry of data in one field automatically updates a second field value.
Truncate	Truncating is a process that drops characters of text or numbers (without rounding) when the text or numbers are limited to a specific location to store or print them. For example, the number 5.768 is truncated to 5.76 when stored or printed in a location that holds only four characters.
Uneditable Field	This is a status given to fields to prevent any editing of data in the field.
Up Arrow	A character on your keyboard that looks like this: "^" character is used mainly for exiting or opting out of answering VA FileMan prompts and jumping to other fields in VA FileMan. The "^" character is the "shift 6" key on most keyboards.
User Access	Access to a computer system. The user's access level determines the degree of computer use and the types of computer programs available. The systems manager assigns the user an access level. (See also access code and programmer access code.)

Utility Routine	A routine that performs a task that many programmers utilize.
VA	The Department of Veterans Affairs, formerly called the Veterans Administration.
VACO	Department of Veterans Affairs Central Office
VADATS	Veterans Administration Data Transmission System (replaced by IDCU about two to three years ago).
VA FileMan (also called VA FileManager)	A set of programs used to enter, maintain, access, and manipulate a database management system consisting of files. A package of on line computer routines written in the MUMPS language which can be used as a stand-alone database system or as a set of application utilities. In either form, such routines can be used to define, enter, edit, and retrieve information from a set of computer stored files.
VA MailMan	A computer based message system
VAMC	Department of Veterans Affairs Medical Center
Variable	A character or group of characters that refer to a value. MUMPS recognizes three types of variables: local variables, global variables, and special variables. Local variables exist in a partition of main memory and disappear at sign off. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays. The term "global" may refer either to a global variable or a global array. A special variable is defined by system operation (e.g., $TEST).
VAX	Virtual Address Extension
VDT	Video Display Terminal (See CRT)

Verification (data verification)	The process by which technologists review data in the computer for a specific patient and verify (validate) that it is accurate before releasing the data to the physician.
Verification (package verification)	A process of internal and external package review carried out by a DHCP verification team (people who were not involved in the development of the package. Software and associated documentation are reviewed in terms of DHCP Standards and Conventions.
Verify Code	An additional security precaution used in conjunction with the access code. Like the access code, it is also 6 to 20 characters in length and if entered incorrectly will not allow the user to access the computer. To protect the user, both codes are invisible on the terminal screen.
VHA	Veterans Health Administration
VITEK	An automated instrument is used for organism identification and for measuring antibiotics within the Microbiology module.
WKLD	Abbreviation for workload. The Department of Veterans Affairs offshoot of CAP workload reporting. Also used for LMIP applications. See LMIP.
WKLD Code	Numbers assigned to lab procedures by the Laboratory program for compiling work statistics.
Work List	Used for collecting and organizing work in various accession areas of the laboratory. A work list is generated for manual or automated tests (singly or in batches) and can be defined by number of tests and/or which tests to include. It can also be used as a manual worksheet by writing test results directly on the worklist.

Wrap-around mode	Text that is fit into available column positions and automatically wraps to the next line, sometimes by splitting at word boundaries (spaces).
Write Access	A user's authorization to write/update/edit information stored in a computer file.

APPENDIX A

Blood Bank Computer Software Requirements

Blood Bank Computer Software Requirements

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The following is a suggested policy for documenting the software requirements for Blood Bank.

Laboratory Service
Generic VA Hospital

Blood Bank Policy #XX
Date

Blood Bank Computer Software Requirements

1.01 INTRODUCTION

Blood banking involves many sophisticated analyses which without automation/ computerization can only be performed by highly skilled persons. The human ability to "look for things" is more flexible than the computer's, but the ability to flexibly and intelligently search for and analyze information starts to break down as the quantity of information becomes larger. Computers, however, can handle vast amounts of information without suffering any deleterious effects.

Therefore, a sophisticated computer system allows the highly trained technical staff to devote more time and energy to those problems and sophisticated analyses not within the realm of a computer. However, in order to provide appropriate quality assurance of the computer system, there are specific detailed requirements from the AABB, the CAP, and the FDA. See M-2, Part VI, Chapter 5 and/or paragraphs 1.09 for specific details.

The hospital computer system is a fully integrated medical center system. Information is accessible from a variety of packages, including laboratory, pharmacy, and medical administration service (admission/discharge/transfer).

The goals of the Blood Bank module of the Laboratory package of the Decentralized Hospital Computer Program (DHCP) software are to:

A. Improve the safety of blood/blood component transfusion by decreasing the number and severity of errors, through retrieval of previous records, verification of present results, detection of inconsistencies in data, bar code entry of unit ID, ABO/Rh, etc., and computer assisted donor labeling.

B. Improve the quality of patient care through evaluation of transfusion appropriateness, flags for specific components, and evaluation of transfusion increments.

C. Decrease the clerical workload through bar code entry of unit information, printing of transfusion requests, transfer of information to multiple records, and preparation of labels for specimens and unit tags.

D. Improve resource management through statistics by location, physician, and/or treating specialty, through access of information by other medical staff and by optimizing inventory control.

1.02 GENERAL POLICY

A. Statement of Policy

1. Computer software used in the daily operations of the blood bank transfusion service and/or blood donor activities must meet the requirements of the various regulatory and accrediting agencies, including the Food and Drug Administration (FDA), the American Association of Blood Banks (AABB), and the College of American Pathologists (CAP), as mandated in M-2, Part VI, Chapter 5.

2. Computer software used in the daily operations of the blood bank transfusion service and/or blood donor activities must be properly verified and validated. See paragraph 1.05 for details.

3. Computer software used in the daily operations of the blood bank transfusion service and/or blood donor activities must meet all of the record requirements detailed in the current editions of the *Standards for Blood Banks and Transfusion Services and the Inspection report Form* of the AABB (see paragraph 1.09b and c).

B. Responsibilities

1. The VA Program Official, i.e., the Director, Pathology and Laboratory Medicine Service, VA Central Office, is responsible for assuring that appropriate software designed for use as part of the Laboratory package of the Decentralized Hospital Computer Program (DHCP) is developed and meets the requirements of the various regulatory and accrediting agencies, including the AABB, the CAP, and the FDA.

2. The developers of the software are responsible for identifying potential control functions, providing a listing of warning messages, and informing the user of override capabilities. (See Appendix A)

3. The Development Information System Center designated by the VA to develop and maintain the DHCP Laboratory package, is responsible for providing verified software and appropriate documentation, i.e., Technical Manuals, User Manuals, and Release Notes, for distribution and implementation in all VA facilities.

4. The (XXXX) Information System Center (ISC), designated by VA Central Office to provide support for this specific facility, is responsible for providing both hardware and software support to the Information Resource Management (IRM) staff at each facility in resolving problems identified by the Blood Bank staff.

5. The medical center is responsible for using the verified, released version of the software unless there are documented testing agreements to use unverified software in a structured setting. Local modifications are the responsibility of the medical center.

6. The Information Resource Management (IRM) Service is responsible for:

   a. installing the software,

   b. maintaining the hardware used to support the Blood Bank computer software,

   c. developing and maintaining an appropriate ADP Security Plan for the facility in accordance with Circular 30-88 developed by the Office of the Inspector General and Circular 20-86-30 developed by the Department of Veterans Benefits,

   d. performing backups and, where necessary, restoration of data,

   e. providing software support in resolving problems identified, and

   f. providing archiving and data extracts as necessary.

7. The Blood Bank Medical Director is responsible for evaluating whether the software provided by the VA meets the needs of this medical center, i.e., for approval of the overall functionality and review of the validation testing results.

8. The Laboratory Information Manager (LIM) is responsible for providing both hardware and software support for the Blood Bank computer software during implementation of a specific version and for providing software support in resolving problems identified by the Blood Bank staff either during or subsequent to implementation.

9. The Blood Bank Supervisor is responsible for:

   a. evaluating whether the software provided by the VA meets the needs of the XXXX VA Blood Bank.

b. assuring that all of the necessary steps are taken to validate the software prior to full implementation, as detailed in paragraph 1.05.

c. maintaining the required documentation of the validation testing, as detailed in paragraph 1.05 f.

d. maintaining a listing of the access for each of the individuals who have access to the Blood Bank Menu options so that it can be retrieved by user or by option.

e. assuring that all personnel who will be using the software are adequately trained in all of the options that they might be using, as detailed in paragraph 1.07.

f. assuring that the standard operating procedure manual reflects the integration of the computer into the policies and procedures, as detailed in paragraph 1.04.

g. assuring that all problems identified are handled and documented appropriately and that corrective action is taken in a timely manner, as detailed in paragraph 1.06.

10. The Blood Bank staff is responsible for:

a. referring to and following established procedures in the procedure manual(s) and

b. maintaining appropriate security in accordance with Hospital Policy 00-135.

1.03. SECURITY

A. General principles

1. Access to the DHCP computer system is under the control of IRM. Software/file access is controlled through Kernel through security keys, menu management, and device handling. Appropriate documentation is available in IRM Service.

2. Each user of the computer system has an access code and a second totally encrypted verify code which must be changed on a scheduled basis, usually every 90 days.

3. Regardless of the mechanism for accessing the computer, i.e., CRT, modem, or personal computer, security is handled in the same manner.

B. Access to view data/enter data and edit data

1. Each user has a specific menu of options assigned by the LIM at the written request of the Blood Bank Supervisor and approved by the Blood Bank Medical Director.

2. Access to each option can be, and is in some cases, further restricted by additional security keys as appropriate, based on the sensitivity of the data being entered or accessed.

C. Access to edit files/modify software

1. Access to alter files is restricted both by the level of FileMan access assigned to the specific user and by whether the user has access to a specific file.

2. In the case of the primary files utilized by the Blood Bank software, i.e., Files 61.3, 62.5, 62.55, 65, 65.4, 65.5, 65.9, and 66, access is available through Blood Bank Menu option as well as through FileManager options. These menu options require additional security keys as described above.

D. Access to edit file structures/routines

1. Access to alter the file structure, i.e., data dictionaries, is restricted either to the software developers associated with the Development ISC or to designated individuals in the IRM Service.

2. Access to alter the routines and edit templates is restricted either to the software developers associated with the Development ISC or to designated individuals in the IRM Service.

1.04 MINIMUM STANDARD OPERATING PROCEDURES

A. The standard operating procedure manual must contain information on how the computer functions are integrated into the daily operations. The information must reflect the current version of the software.

B. Written procedures exist which detail the backup system to be used during computer downtimes.

1. The ability to immediately start this procedure must be in place at all times. See paragraph 1.09 m, page 1-61.

2. During computer downtimes, the transfusion service must still be able to access the necessary data in order to review the patient history records, to determine the current location and status of units and to release units for transfusion.

3. Once the computer downtime is over, the necessary data shall be entered into the computer system in order to ensure that all of the records are complete. See paragraph 1.09, page 1-61, for specific details.

C. Information is included in the Blood Bank User's Manual and in the Standard Operating Procedure Manual that describes the procedure for correction of data entry errors.

1. The system includes a mechanism to identify who edited (corrected) any significant data elements, and controlled access of who can correct data through the usual security mechanism. In addition, IF it is a reportable result, the results must be identified as "corrected."

2. The system for maintaining data integrity includes:

   a. an audit trail for changes in verified data, i.e., a report generated using the Print data change audits [LRBLAD] option,

   b. periodic checks on data integrity following both scheduled and unscheduled downtimes,

      1) Either the Inventory Integrity Check [LRBLII] option <u>OR</u> the Check File for Inconsistencies [LRCHKFILES] option (which also includes that routine) and Check Patient and Lab Data Cross Pointers [LRCKPTR] options should be done following unscheduled downtimes.

      2) A report should be generated periodically using the Inventory Integrity Check [LRBLII] option.

      3) Sample testing of the BLOOD DONOR file (#65.5) should be done after unscheduled downtimes since no routine currently exists to check this file.

   c. a mechanism for reconstructing lost data through retention of records of work done, routinely generated daily reports and other periodic hard copy reports. See paragraphs 1.09 m, page 7-53 for some additional details.

3. The numbers of and type of changes for both reportable and nonreportable data will be monitored as part of the ongoing quality assurance program. See Laboratory Policy # XXX, "XXXX," for specific details.

4. There must be a written procedure that describes maintenance procedures for hardware and software. Maintenance must be regularly scheduled to have minimum impact on operations. These procedures may be located in the IRM Service; however, internally the Blood Bank should keep a log of hardware repair similar to that for other equipment to determine the impact on overall function of the Blood Bank.

1.05 SOFTWARE VALIDATION

Prior to the release of software, the DHCP developers are required to subject the software to intensive testing and review as part of the development and verification process; however, a great deal of the functionality of software is affected by the operating system, interaction with other software packages in the same database and files that accommodate local modification. This verification is not equivalent to validation testing, as detailed below, nor can it be substituted for the mandatory validation testing.

A. General Principles

1. In order to confirm that the computer software logic functions as desired, using the local database, operating system and hardware configuration, validation testing must be performed in accordance with the current requirements of the various accrediting and regulatory agencies. See paragraphs 1.09 a through k for specific details.

2. Validation testing may be performed by the Blood Bank Supervisor, or may be delegated to other appropriate personnel; however, all of the testing (including definition of the test cases and review of the actual results) must be overseen by the Blood Bank Supervisor.

NOTE: The person performing the testing MUST initial the actual test case printouts.

B. Environment

Validation testing must be performed in an environment that is a duplicate of the operating system file structure, programs, site specific options, etc., of those found in production. Although performance of this testing in a test account is preferable, this may not be possible if the test account is not complete or well maintained. If the final testing must be done in production, there must be strict controls to ensure that it does not adversely affect daily operations and that testing data is not confused with actual patient, donor or inventory data.

C. Time Requirements

Validation testing must be performed according to specified time frames.

1. Retrospective validation is required for current systems/software in operation before the FDA memorandum of September 1989. This validation testing must include the full scope of testing detailed in paragraph 1.05 c, i.e., any control functions not already adequately tested during the validation of the previous version must be tested before the next version is installed.

2. Prospective validation testing must be performed before new software is put into use for daily operations. This testing must be completed before any parallel, manual systems are discontinued and the computer is no longer redundant. This validation testing must include the full scope of testing detailed in paragraph 1.05 c.

3. Patches or local modifications, i.e., change control, must undergo prospective validation testing before revisions or modifications in software are put into use for daily operations. This validation testing may encompass a more limited scope depending on the nature of the change and the interaction of that specific routine on other functions. This is particularly crucial for any local modifications made since these modifications do not go through the usual regimented verification process.

D. Methodology

Validation testing must include ALL control functions as well as routine operations. Since different levels of security access are required for various options, testing must be done with each of the various levels.

1. A control function is a system function that causes an activity to occur or that influences the behavior of the user of the system. Control functions may exist even when competent human intervention occurs.

Such functions include options in which labels are created, records are created, modified, retrieved, deleted and/or archived, data is compared to a standard or a warning message is generated. Examples:

- calculation of component expiration data
- interpretation of results acceptability
- comparison of current results to historical results
- prevent issue of units if not compatible, indate, etc.
- display of warning messages such as:
  - testing not complete
  - current results do not match
  - unit expires or is expired

a. For each control function, the spectrum of control must be indicated, i.e., process control or decision support. Process control involves functions in which the system software actually makes a decision using available information and algorithms. Decision support functions are those in which an individual bases a decision on information obtained from the system

2. Routine operations are those used in the daily operations of the blood bank in that medical center. Options, routines, or functions which are not utilized in that medical center need not be tested. These operations should include:

a. data entry methods,

b. security procedures, i.e., access beyond the LRLAB, LRVERIFY and LRBLOODBANK security keys,

c. program overrides, including those requiring additional security access,

d. data storage and retrieval of results/data, and

e. traceability of results, including changes in significant data elements and test results.

3. Although the Blood Bank User Manual for the appropriate version of the software should be consulted for examples that can be used as test cases, the test cases MUST reflect the actual procedures and workflow of this VA medical center. See Appendices A and C for some additional specific cases. Although all of these conditions may not be applicable for many of the options, a variety of test conditions must be addressed, including:

a. normal data,

b. exceptional data which provides an unusual twist for the program to force the program to react to data or a situation that might be unexpected, e.g. data entered out of order from the usual workflow, or not completely entered,

c. boundary situations to force the evaluation of conditions that are of borderline validity, e.g., crossmatches which are "IG" or donors in which testing is not completed,

d. invalid data to force a program to prove that it can detect invalid input, e.g., absurd dates, or invalid ABO types, and

e. stress conditions to determine whether the system has acceptable performance limits, e.g., large volumes of data to determine whether the storage capacity and response time are appropriate;

4. Testing must be done with each of the various levels of access.

   a. Testing of menu options and LRLAB and LRVERIFY keys, with no LRBLOODBANK key, must be included to ensure that individuals with the full lab menu cannot access Blood Bank data inappropriately, particularly in the area of blood donors.

   b. Testing of menu options and the LRLAB and LRVERIFY and LRBLOODBANK keys, but with no LRBLSUPER key, must be included to ensure that individuals with specific menu options cannot perform restricted data entry/editing functions.

E. Acceptance Criteria

All test cases must perform as detailed in the documentation provided, i.e., the appropriate version of the Blood Bank User Manual, the appropriate version of the Release Notes or the documentation provided with the patch.

F. Evaluation of testing

1. Once the testing is performed, the Blood Bank Supervisor must determine whether the testing is acceptable. This determination must be documented. Appendix B provides the mechanism for detailing this information on an option by option basis.

   a. If the option is not used, a notation should be made to that effect on the form.

   b. If a specific test condition is not appropriate for that specific option, e.g., boundary or stress, an NA notation should be made on the form.

   c. If additional access is required beyond the LRLAB, LRVERIFY and LRBLOODBANK keys, this should be recorded on the form.

2. In the event that the software does not perform as expected OR does not meet the requirements of the Blood Bank, an evaluation must be done to determine whether the failure is critical or noncritical.

   a. If an error ("bug") occurs, this must be recorded in a log designated for this purpose. See paragraph 1.06 b for details.

   b. If the software does not function as described in the appropriate documentation or results in an error, the Blood Bank Supervisor must evaluate the ramifications of the failure, i.e., is it critical to the function of the software or does it merely represent an opportunity for improvement?

1) If the nature of the problem indicates that there is a system deficiency which can handled by an alteration in the workflow processes until the situation is corrected, the Blood Bank Supervisor may decide to continue with the implementation, provided the alternative procedures are implemented.

2) If the nature of the problem indicates that there is a system deficiency that cannot be handled by an alteration in the workflow processes, the Blood Bank Supervisor should not continue with the implementation until the problem is corrected.

3) Deficiencies in the system must be handled in accordance with paragraph 1.06 b.

G. Documentation

Validation testing must be documented in a comprehensive manner.

1. Testing documentation must include observations from testing. This should be in the form of printouts generated by the pass through printer utilized during testing.

2. Testing documentation must include proof of review of the test cases, whether testing met the acceptance criteria or required any correction action, the signature and date of approval by the Blood Bank medical director and the implementation date. This should be done by a combination of notes on the actual testing printouts and the use of the forms included in Appendices A and B.

NOTE: The signature of the person performing the testing MUST be included on the actual printouts of the testing.

1.06 PROCEDURES FOR RESOLVING PROBLEMS

A. Error Messages

1. Errors can be created which may or may not have anything to do with the Blood Bank software. When an error occurs, an error message is generated. If the error occurs while the CRT display is on, the error message will appear on the screen. In any case, the error is recorded in the official Error Trap accessible to the IRM staff.

2. If the error involves the Laboratory package software, the portion of the message immediately following the "^" will be LR. If it involves a Blood Bank routine, that portion will probably be "LRBL" or may be "LRU."

B. Reporting and Tracking of Errors

1. A record or log must exist to detail unusual occurrences and errors ("bugs"), the clinical significance of errors, the corrective action taken to resolve the problem, and the final resolution.

2. Unusual occurrences and errors shall be evaluated by the Laboratory Information Manager (LIM) and/or the VA medical center Information Resource Management (IRM) Service to determine whether the problem is local or whether it involves the released version of the software.

   a. All errors related to the released version of the software shall be immediately reported to the laboratory DHCP software developers using the Electronic Error and Enhancement Reporting, "E3R" system.

   b. Procedures for requesting software modifications should include the details of the request submission, including the rationale for changes/modifications, the local approval process, i.e., authorizations of changes, and the mechanism for submitted requests for change to the verified software. (Fix based on description of E3R process - see old FDA document.)

   c. Errors related to local database problems or local modifications shall be resolved by the Laboratory Information Manager (LIM), the VA medical center Information Resource Management (IRM) Service or the supporting Development ISC staff/ developers.

3. In the event that an error exists, or the software does not perform a necessary control function, immediate action must be taken to provide backup procedures until the problems are resolved. This includes any error that allows the inappropriate release and distribution of unsuitable blood and blood components.

4. Those errors which actually occur and can be attributed to the computer system which allow the release and distribution of unsuitable blood and blood components must be reported to the FDA - (refer to specific FDA memo regarding directions for ERRORS/ACCIDENTS, REPORTABLE INCIDENTS).

C. Enhancements

1. Requests for software changes are handled by a system of "Electronic Error and Enhancement Reports" or "E3Rs." A standard template is used by all VA facilities to submit requests for change through electronic mail (FORUM).

2. The E3R for requesting software modifications should include the details of the request submission, including the rationale for changes/modifications, the local approval process, i.e. authorizations of changes.

3. The E3Rs are entered into a tracking system that provides accountability and status reports. They are discussed by a subcommittee of the Laboratory Service Expert Panel that controls the functional development of the software. They are then prioritized as deficiencies, improvements or enhancements and submitted to the developers.

4. Deficiencies may be corrected through one of two mechanisms, depending on the significance of the problem. If the E3R represents a significant deficiency, a patch will be developed, verified and issued for installation. If the priority does not require a patch, the change will be incorporated into the next version of the software.

1.07. PERSONNEL TRAINING

A. All persons utilizing the computer shall undergo appropriate training prior to performance of duties involving the DHCP or comparable computer software.

B. Ongoing assessment of personnel competency, as detailed in M-2, Part VI, Chapter 2, paragraph 2.07, shall include the use of the computer software.

C. Prior to the implementation of software changes and/or modifications, all users of the Blood Bank software shall be trained as part of the validation testing.

1.08. DOCUMENTATION

A. There must be a written record of unscheduled downtimes, including the reason for failure and any corrective action taken. This need not necessarily be maintained in the Blood Bank.

B. In accordance with the provisions of paragraphs 1.05 e and f, there must be documentation of validation testing and of errors that occur.

C. Documentation of training must be maintained.

1.09 REFERENCES

A. Accreditation Requirements Manual, American Association of Blood Banks, 4th edition, 1992.

B. Standards for Blood Banks and Transfusion Services, American Association of Blood Banks, 14th edition, 1991.

C. Inspection Report Form, American Association of Blood Banks, November, 1991.

D. Control Function Guidelines (DRAFT), American Association of Blood Banks. Letter to all institutional members, November 25, 1991.

E. User Validation Guidelines (DRAFT), American Association of Blood Banks. Letter to all institutional members, November 25, 1991.

F. Software Manufacturing Process Guidelines (DRAFT), American Association of Blood Banks. Letter to all institutional members, November 25, 1991.

G. CAP Inspection Report Form, 1991.

H. "Blood Bank Inspection Checklist and Report Form 2609, part K," Food and Drug Administration, US Department of Health and Human Services, Public Health Service, May 1991.

I. "Instruction Booklet for Blood Bank Inspection Checklist and Report Form 2609", Food and Drug Administration, US Department of Health and Human Services, Public Health Service, May 1991.

J. Food and Drug Administration, Requirements for computerization of blood establishments. Letter to all registered blood establishments, September 8, 1989.

K. Code of Federal Regulations, 21 CFR, parts 211.68, 606.20, 606.60, 606.100 and 606.160, US Department of Health and Human Services, Public Health Service, 1991.

L. Hospital Policy Memorandum XXXX.

M. Blood Bank User Manual, Version XXX, XXX.

N. Laboratory Policy # XXX, "XXX"

1.10 RECISION: none

1.11 APPROVAL

XXXX Blood Bank Supervisor	XXX, M.D. Blood Bank Medical Director
XXXX Laboratory Information Manager	XXX Administrative Technologist, Lab. Service

1.12 CONCURRENCES

XXX Laboratory Manager	XXX Chief, IRM Service

REQUIREMENTS	FDA (1-5)	CAP (8)	AABB (6-7)	CLIA'88 (9)
Responsibilities				
Vendor	93N-0394 p4			
Institution	93N-0394 p4			
Institution License Amendment	601.12(a)			
BB Medical Director		1.1919	14.500	
Facilities				
Environmental conditions/safeguards				493.1801(a)
System operating limits				493.1801(b)
Emergency hardware/software service		1.2124	14.150	493.1801(b)(4)
Maintenance				
Regular schedule	606.160 211.68(b)	1.2050 1.2060	14.111	493.1801 (b)(2) 493.1801 (b)(4)
Minimum impact		1.2085	14.100	493.1801 (b)(2)
Procedures		1.2086		
Record of unscheduled downtimes		1.2090	14.120	
Record of corrective actions		1.2124		
Record of repairs		1.2126		
Standard Operating Procedures				
Current	606.100(b)			493.1801 (b)(5)
Integrated into daily operations	606.100 211.100			493.1801 (d)(2)
Available to all personnel	606.201(b)	1.1830	14.035	493.1801 (b)(5) 493.1801 (d)(2)
Backup	606.100	1.0286 1.2110	14.082 14.200	493.1801 (b)(4)
Computer failure	606.100		14.037	
Emergency service		1.2124	14.150	493.1801 (d)(2)
Hardware/software configuration description			14.501	
General validation			14.558	
Enforcement			14.050	
Archiving of SOPs	606.100		14.210	

REQUIREMENTS	FDA (1-5)	CAP (8)	AABB (6-7)	CLIA'88 (9)
Appropriate Security				
Programs protected to prevent alteration		1.1860	14.046	493.1801 (e)
Security of access codes		1.1903	14.049	
Access codes function as expected		1.1900 1.1905	14.045 14.048	493.1801 (c)(1) 493.1801 (e)(1)
Listing of access by function		1.1870		
Confidentiality of donor files/inf.			14.058	
Tracking capability		1.1990	14.032	493.1801 (e)(2)
Product Suitability				
Adequate for facility/design specifications	211.100 211.110a 606.100	1.2140	14.029	493.1801 (c) 493.1801 (f)
Reliability		1.2130		
Adequate mechanism for data storage		1.2020		493.1801 (d)(3)
Adequate data storage		1.2015 1.2035		
Adequate patient information		1.1911		493.1801 (d)
Verification of results before release		1.1920	14.054	493.1801 (d)(2)
Adequate specimen description		1.1980		493.1801 (d)(2)
Adequate data retrieval	606.160(a) 211.180(a) & (b) 211.198	1.2000 1.2010	14.080 14.081	493.1801 (d)(3)
Data Integrity				
Audit trail for changes in verified data	606.160			
Identification of corrected results		1.1960 1.1970	14.061 14.062	493.1801 (d)(2) 493.1801 (d)(3)
Identification of person correcting results			14.070	
Periodic checks for accuracy		1.1914 1.1916 1.1917 1.1918	14.055	
Data preservation after unsched. downtime/disasters		1.1850 1.2040		493.1801 (b)(4)
Checks for data integrity after unscheduled downtime		1.2064 1.2066		
Adequacy of storage media	211.68(b)	1.1975		

REQUIREMENTS	FDA (1-5)	CAP (8)	AABB (6-7)	CLIA'88 (9)
Validation Testing				
Responsible individuals	211.221 211.680 211.100a			
Plan	211.68 606.16 211.194		14.558	
Test cases	93N-0394 p10	1.2063	14.560	493.1801 (c)(2)
Test conditions	211.68 606.100			
Documentation	606.160 211.110 211.68	1.2063	14.556	493.1801 (c)(2)
Time requirements	211.68 211.63		14.554	
Software Modifications				
Rationale for changes			14.503	
Authorization of changes	211.68 606.100(b)	1.2068	14.500	
Installation & testing	606.100(b)	1.2070	14.300	
Documentation	606.160	1.2067		
Quality Assessment				
Integration into QA Program	91N-0450 600.10(a) 211.22			
System for detection of errors		1.1912		
Documentation of errors	606.160	1.2122		
Correction of errors		1.1950 1.1952		
Clinical significance of errors	606.160(b)(7)			
Reporting to FDA of errors				
Training of Personnel				
Adequacy	606.20(b)	1.1840	14.040	
Initial training	606.160	1.2074	14.041	493.1801 (c)(2)
Ongoing competency			14.041	
Following installation of modifications	606.160	1.2074		493.1801 (c)(2)

REFERENCES

1. Blood Bank Inspection Checklist and Report Form 2609, part K, Food and Drug Administration, US Department of Health and Human Services, Public Health Service, May 1991.
2. Instruction Booklet for Blood Bank Inspection Checklist and Report Form 2609, Food and Drug Administration, US Department of Health and Human Services, Department of Public Health Service, May 1991.
3. Food and Drug Administration, CBER Draft Guideline for the Validation of Blood Establishment Computer Systems, Sept. 28, 1993, Docket # 93N-0394.
4. Food and Drug Administration, CBER Draft Guideline for Quality Assurance in Blood Establishments June 17, 1993, Docket # 91N-0450.
5. Code of Federal Regulations, 21 CFR, parts 211, 600 and 606, US Department of Health.
6. Accreditation Requirements Manual, American Association of Blood Banks, 5th edition, 1994.
7. Standards for Blood Banks and Transfusion Services, American Association of Blood Banks, 15th edition, 1993.
9. Proposed Rule for 42 Code of Federal Regulations, Part 405, Subpart P Computer Systems for Level I and Level II Testing, US Department of Health and Human Services, Federal Register 55(98), May 21, 1990.

NOTE: Final Rule still pending - not included in Federal Register 57(40), dated February 28, 1992.

APPENDIX B

Training Implementation Checklist

Training Implementation Checklist

This checklist is intended for use in setting up a Test account to be used for review of and training on the Blood Bank Module of the Laboratory package. As in production, certain tasks will need to be performed before the options will be operational as described in the Blood Bank User's Guide. The following checklist includes some, but certainly not all, of the same tasks which will need to be accomplished before fully implementing the module in production. (Consult pages 1-4 of the Blood Bank User's Guide for an overview of all of the issues that need to be addressed.)

1. Review the following files and edit, if necessary, BEFORE attempting to perform the Training Exercises. Specific entries applicable to the Training Exercises are included when they are: **COMPLETED**

1) different from the notes included in the reference or

2) not included in the reference.

	COMPLETED
a. File #61.3 - FUNCTION FIELD	_____
b. File #44 - HOSPITAL LOCATION	_____
c. File #19.1 - SECURITY KEY	_____
d. File #19 - OPTION	_____
e. File #69.2 - LAB SECTION PRINT	_____
f. File #60 - LABORATORY TEST NAME	_____
g. File #62.07 - EXECUTE CODE	_____
h. File #62.6 - ACCESSION TEST GROUP	_____
i. File #68 - ACCESSION	_____
j. File #62 - COLLECTION SAMPLE	_____
k. File #69.6 - LABORATORY SITE	

l. File #62.5 - LAB DESCRIPTIONS

```
BLOOD BANK DESCRIPTIONS NAME:  BLD
LAB DESCRIPTIONS EXPANSION:  Patient actively bleeding
LAB DESCRIPTIONS SCREEN:  BB AUDIT
BLOOD BANK DESCRIPTIONS NAME:  HEART
LAB DESCRIPTIONS EXPANSION:  EXTENSIVE CARDIAC BYPASS SURGERY
LAB DESCRIPTIONS SCREEN:  BB AUDIT
```

m. File #65.4 - BLOOD BANK UTILITY FILE (optional)

```
BLOOD DONOR UTILITY NAME:  VAH
BLOOD DONOR UTILITY SCREEN:  GROUP AFFILIATION & COLLECTION SITE
BLOOD DONOR UTILITY FULL NAME:  VA HOSPITAL BLOOD CENTER
```

n. File #66 - BLOOD PRODUCT FILE

Add this new supplier for CPDA-1 Red Blood Cells (04060), Fresh Frozen Plasma (18201) and Platelets.

```
SUPPLIER:  THE BEST BLOOD CENTER
COST:  45.00 (RBC); 24.00 (FFP); 27.00 (PLTS)
PREFERENCE NUMBER:  2
SUPPLIER PREFIX ID:  <RET>
REGISTRATION NUMBER:  <RET>
UNIT LABEL NON STANDARD:  <RET>
```

Add the following for CPDA-1 Red Blood Cells (04060):

```
TESTS TO CHECK:  HGB  (HEMOGLOBIN)
SPECIMEN:  BLOOD
> OR <TEST VALUE:  >10
TESTS TO CHECK:  HCT  (HEMATOCRIT)
SPECIMEN:  BLOOD
> OR <  VALUE:  >30
```

Add the following for 5-day Platelets.

```
PRE-OP TESTS TO CHECK:  PLT (PLATELET COUNT)
SPECIMEN:  BLOOD
> OR < TEST VALUE:  >100
TESTS TO CHECK:  BT  (BLEEDING TIME)
SPECIMEN:  BLOOD
> OR < VALUE:  <9
```

2. Enter the patients to be used into the PATIENT file. _____

Make sure that the necessary entries are present in the appropriate related files for physician, hospital location, and treating specialty.

The following patients are used in the training exercises. These patients may be added to the Test account **or** other patients may be substituted.

WASHINGTON, GEORGE 592-88-8888
DOE, JOHN 333-22-4444

3. Enter the appropriate tests to be displayed during Specimen Log in._____

```
TESTS TO DISPLAY:  HGB  (HEMOGLOBIN)
SPECIMEN:  BLOOD
TESTS TO DISPLAY:  HCT  (HEMATOCRIT)
SPECIMEN:  BLOOD
TESTS TO DISPLAY:   PLT  (PLATELET COUNT)
SPECIMEN:  BLOOD
```

4. Using the regular laboratory options, accession tests and enter test results for the hemoglobin, hematocrit, and platelet count for the two patients to be used. _____

WASHINGTON, GEORGE 592-88-8888
Hemoglobin: 11.5 gm/dl
Hematocrit: 34%
Platelet count: 75,000/mm^3

DOE,JOHN 333-22-4444
Hemoglobin: 14.5 gm/dl
Hematocrit: 43%
Platelet count: 200,000/mm^3

5. Enter the tests to appear in the "Patient transfusions and hematology results" report. _____

```
TESTS TO PRINT:  HGB  (HEMOGLOBIN)
TESTS TO PRINT NUMBER:  1
TESTS TO PRINT:  HCT  (HEMATOCRIT)
TESTS TO PRINT:  2
TESTS TO PRINT:  PLT (PLATELET COUNT)
TESTS TO PRINT NUMBER:  3
TESTS TO PRINT:  BT  (BLEEDING TIME)
TESTS TO PRINT NUMBER:  4
```

6. Enter previous antibody identification information on the patients identified as having problems.

```
Patient Name:  DOE, JOHN 3332244444
ANTIBODIES IDENTIFIED:  K
RBC ANTIGENS PRESENT:  <RET>
RBC ANTIGENS ABSENT:  K
HLA ANTIGENS PRESENT:  <RET>
HLA ANTIGENS ABSENT:  <RET>
BLOOD BANK COMMENTS:
1> TRANSFUSE K negative rbcs only 11/13/87
2> <RET>
TRANSFUSION DATE/TIME:  <RET>
```

Training Exercises

These exercises could be performed either by using "real" data from your own facility or by using the data given in the examples included in the Blood Bank User Manual on the pages referenced. They are designed primarily as a demonstration and training tool for the user to quickly view those options used routinely in the performance of his/her duties. They will NOT include all of the various options in each menu.

Before beginning the exercises, make sure that the items on the Implementation Checklist on the preceding pages have been completed.

Inventory/Patient Modules

A. Entry of units into inventory

1. Enter at least 6 units of Red Blood Cells, 4 A+ and 2 O+, and 2 units of A+ Fresh Frozen Plasma into inventory.

   Option: Log in regular (invoices) (I-LR)

   Invoice:01 SUPPLIER: THE BEST BLOOD CENTER

   RED BLOOD CELLS, CPDA-1

UNIT ID	ABO/RH	EXPIRATION
V11111	A POS	*
V11112	A POS	*
V11114	A POS	*
V11116	A POS	*
V11117	O POS	*
V11118	O POS	*

   FRESH FROZEN PLASMA, CPDA-1

UNIT ID	ABO/RH	EXPIRATION
V11111	A POS	*
V11113	A POS	*

   * Select an appropriate expiration date, based on the component.

2. Enter the additional antigen typings (C and K negative) for the 2 units of O+ Red Blood Cells received, i.e. V11117 & V11118.

   Option: Unit phenotyping (I-UP)

3. Print the worksheet for recording the results of the ABO/Rh rechecks on the units received.

   Option: Inventory ABO/Rh testing worksheet (I-UW)

4. Enter the results of the ABO recheck information for the units of red blood cells as follows:

   Option: Unit ABO/Rh confirmation (I-UC)

   Example:

   V11111 A V11117 O
   V11112 A V11118 O
   V11114 A V11116 A

B. Entry of patient specimens and pretransfusion testing

1. Log in 2 different patient specimens, i.e., Patient #1 and Patient #2, including test request for Transfusion Requests for the components as shown.

   Option: Specimen log in (P-SL)

   Example:

```
Patient #1:<RET>
Name:  WASHINGTON,GEORGE     SSN:  592-88-8888
TEST:  TRANSFUSION REQUEST
Pre-Op:  NO
BLOOD COMPONENT REQUEST:  04060  CPDA-1 RED BLOOD CELLS
Request still OK?  Yes
Requesting Person:  Jones
Request date/time:  N
Number of units:  4
Date/Time Wanted:  N
Component request reason:  BLD  Patient actively bleeding
Approved by:  KILDARE
BLOOD COMPONENT REQUEST:  18201  Fresh Frozen Plasma
Requesting Person:  Jones
Request date/time:  N
Number of units:  2
Date/Time Wanted:  N
Patient #2:<RET>
Name:  DOE,JOHN                SSN:  333-22-4444
TEST:  TRANSFUSION REQUEST
Location: <RET>
Pre-Op:  Y
BLOOD COMPONENT REQUEST:  04060  CPDA-1 RED BLOOD CELLS
Requesting Person:  SMITH
Request date/time:  N
Number of units:  10
Date/Time Wanted:  T+1@8A
BLOOD COMPONENT REQUEST:  P1/5  PLATELET CONCENTRATE, 5 DAY EXP
Request still OK?  Yes
Requesting Person:  SMITH
Request date/time:  N
Number of units:  10
Date/Time Wanted:  T+1@8A
Component request reason:  HEART EXTENSIVE CARDIAC BYPASS SURGERY
Approved by:  KILDARE
```

2. Enter the pre-transfusion compatibility testing (ABO/Rh & Antibody screening) as follows:

   Option: Enter test date (P-ET)

```
LABORATORY TEST NAME:  TRANSFUSION REQUEST

Accession Number:  as assigned to WASHINGTON,GEORGE
ABO/Rh:  A POS
DIRECT AHG:  NEGATIVE
ANTIBODY SCREEN:  NEGATIVE  (technique & method as appropriate)

Accession Number:  as assigned to DOE,JOHN
ABO/Rh:  O POS
DIRECT AHG:  NEGATIVE
ANTIBODY SCREEN:  POSITIVE  (technique & method as appropriate)
SERUM ANTIBODY:  K
ANTIBODIES IDENTIFIED:  K
```

3. Select two units of A+ Red Blood Cells and two units of A+ Fresh Frozen Plasma for Washington, George 524-88-8888

   Option: Select units for patient (P-RS-US)

4. Enter the crossmatch results for the 2 units of Red Blood Cells for Washington, George (524-88-8888).

   Option: Enter crossmatch results (P-RS-XM)

5. Request a listing of the units already phenotyped for use in selecting units for Doe, John 333-22-4444 (anti-K), specifying 04060 as the component, and O POS as the ABO/Rh.

   Option: Phenotyped units available (R-UP)

   Example: Use Default as the device so you can quickly see the listing of units which are either antigen negative or have not been typed.

6. Select the two units of Red Blood Cells for Doe, John (333-22-4444) by requesting the system to provide a listing of the units already phenotyped which are either K negative or have not been tested, i.e., enter two "??" at the "Select Unit" prompt.

   Option: Select units for patient (P-RS-US)

7. Enter the crossmatch results for Doe, John (333-22-4444).

   Option: Enter crossmatch results (P-RS-XM)

8. Print labels for the Caution tags for those units crossmatched for both patients.

   Option: Unit CAUTION tag labels (R-CT)

   Example: Indicate that you want to save the labels for reprinting in order to later queue them to the printer, then accept Default as the DEVICE to allow a quick review of what they look like.

Optional

9. Attempt to select units of Fresh Frozen Plasma for Patient #2 by 1) entering a "??" to see the list of available units if only unassigned units are selected, and 2) entering two "??" to see the list of available units if you indicate that you want to double up assignments by entering NO to that prompt.

C. Issue/Relocation and transfusion units

1. Issue the first unit of Red Blood Cells for Washington, George (524-88-8888).

   Option: Disposition-relocation (I-DR)
   Issued to: S.Smith,RN
   Location: as appropriate
   Inspection: S
   Date/time relocation: N

2. Enter the initial transfusion data for the unit issued on Washington, George (524-88-8888), including the fact that the patient had a suspected transfusion reaction.

   Option: Blood transfusion results (P-DT)

   Enter a Y in response to the prompt "TRANSFUSION REACTION" with no subsequent entry for the prompt "Select TRANSFUSION COMMENT" since the workup is not yet complete.

3. Enter (update) the results of the completed transfusion reaction workup for Washington, George (524-88-8888) for the unit transfused.

   Option: Edit unit disposition fields (S-EI-DI)

   TRANSFUSION REACTION: YES
   TRANSFUSION COMMENT: FNH FEBRILE NONHEMOLYTIC

4. Enter a comment on George Washington record to indicate that the patient should receive WASHED Red Cells in the future as a result.

NOTE: This is not a suggested policy, merely an example.

```
Option: Special instructions (P-SI)

BLOOD BANK COMMENT:
1> Febrile nonhemolytic reaction 9-21-87
2> Transfuse ONLY washed red blood cells (your initials)
```

5. Review the patient s record to see what all has transpired.

```
Option: Display blood bank record (Q-PR)

Select Patient Name:  W8888  WASHINGTON,GEORGE  03-01-00   592888888
WASHINGTON,GEORGE  ID: 592-88-8888
ABO group:  A  Rh type:  POS
AGE:  87  DATE OF BIRTH:  MAR 1, 1900
PATIENT LOCATION:  ORTHOPEDICS//  <RET>
   Febrile nonhemolytic reaction 9-21-87.  Transfuse ONLY washed red blood
cells.

Is this the patient ?  YES //  <RET>  (YES)

WASHINGTON,GEORGE  8888                          A POS
  Febrile nonhemolytic reaction 9-21-87.  Transfuse ONLY washed red blood
cells.

TRANSFUSIONS
Unit Transfused   Component                 (# of Units/ml) Date/time completed
1) V11111         CPDA-1 RED BLOOD CELLS     A POS  as entered
    FEBRILE NONHEMOLYTIC
```

D. Modify units in inventory

1. Modify the other unit crossmatched for Washington, George from Red Blood Cells to Washed Cells for subsequent issue/transfusion.

   Option: Disposition-not transfused (I-DN)

```
DISPOSITION:  MO  MODIFY
Modify to:  RED BLOOD CELLS, WASHED (04800)
DATE/TIME RECEIVED:  <RET>
VOLUME:  <RET>
EXPIRATION DATE/TIME:  <RET>
```

2. Review what has happened to the unit which was modified.

   Option: Single unit information-display (Q-SD)

   Select BLOOD INVENTORY UNIT ID: as appropriate (see D1 above)
   1 as appropriate O POS CPDA-1 RED BLOOD CELLS
   2 as appropriate O POS RED BLOOD CELLS, WASHED
   CHOOSE 1-2: 1
   UNIT ID: as appropriate
   SOURCE: SELF
   INVOICE#: 01
   COMPONENT: CPDA-1 RED BLOOD CELLS
   DATE/TIME RECEIVED: as appropriate
   EXPIRATION DATE/TIME: as appropriate
   ABO GROUP: A
   RH TYPE: POSITIVE
   LOG IN PERSON: as appropriate
   COST: 0.00
   ABO INTERPRETATION: A
   TECH INITIALS: as appropriate
   PATIENT XMATCHED/ASSIGNED: WASHINGTON 8888
   BLOOD SAMPLE DATE/TIME: as appropriate
   SERVICE: MEDICINE
   ACC#: as appropriate
   DISPOSITION: MODIFY
   DISPOSITION DATE: as appropriate
   DISPOSITION ENTERING PERSON: as appropriate
   NUMBER: 1
   MODIFIED TO/FROM: RED BLOOD CELLS,WASHED
   UNIT ID: as appropriate

   Select BLOOD INVENTORY UNIT ID: as appropriate (see D1 above)
   1 as appropriate O POS CPDA-1 RED BLOOD CELLS
   2 as appropriate O POS RED BLOOD CELLS, WASHED
   CHOOSE 1-2: 2
   UNIT ID: as appropriate
   SOURCE: SELF
   INVOICE#: 01
   COMPONENT: RED BLOOD CELLS, WASHED
   DATE/TIME RECEIVED: as appropriate
   EXPIRATION DATE/TIME: as appropriate
   ABO GROUP: A
   RH TYPE: POSITIVE
   LOG IN PERSON: as appropriate
   COST: 0.00
   PATIENT XMATCHED/ASSIGNED: WASHINGTON 8888
   BLOOD SAMPLE DATE/TIME: as appropriate
   SERVICE: MEDICINE
   ACC#: as appropriate

NUMBER: 1
MODIFIED TO/FROM: CPDA-1 RED BLOOD CELLS
UNIT ID: as appropriate

3. Review what is currently available for WASHINGTON, GEORGE (524-88-8888).

   Option: Units assigned/components requested (Q-UA)

   The unit which was transfused should no longer appear and the 2nd unit of red blood cells which was modified should now be shown as washed red cells.

```
Select Patient Name:  W8888   WASHINGTON, GEORGE   03-01-00  592888888
WASHINGTON,GEORGE   ID:  592-88-8888
ABO GROUP:  A   RH TYPE:  POS
AGE:  94  DATE OF BIRTH:  MAR 1, 1900
PATIENT LOCATION:  ORTHOPEDICS// <RET>
  Febrile nonhemolytic reaction 9-21-93.  Transfuse ONLY washed red blood
cells.
Is this the patient?  YES//  <RET>  (YES)

WASHINGTON, GEORGE  8888                    A POS
  Febrile nonhemolytic reaction 9-21-93.  Transfuse ONLY washed red blood
cells.

Unit assigned/xmatched:                          Exp date            Loc
1) as appropriate RED BLOOD CELLS,WASHED A POS  AUG 31,1993 as
appropriate

Component Requests   Units Request date  Date wanted  Requester  By
CPDA-1 RED BLOOD CELLS  2  as appropriate....
FRESH FROZEN PLASMA,CPDA-1 2  as appropriate....
```

Optional

4. Attempt to relocate the washed cells on WASHINGTON,GEORGE (524-88-8888)

   Option: Disposition-relocation (I-DR)

   The system will not allow relocation of the Washed Red Cells because no unit recheck has been entered for the modified unit.

5. Print a Blood Bank Cumulative Report for WASHINGTON,GEORGE.

   Option: Print single BB patient report (R-BR-3)

   Accept the Default as the Device in order to quickly review the format of the information entered thus far. This will be queued to a printer at a later time.

E. Reports

NOTE: Specific examples of the printouts have not been included because the data will be totally dependent on the information entered during the exercises. The reference pages will allow review of the type of information to be expected.

1. Print the accession list to review whether the testing requested so far has been completed.

   Option: Patient accession list (R-PL)

2. Print a listing of units that are currently assigned/xmatched which have no final dispositions.

   Option: Units on Xmatch by date/time xmatched (R-IS-UX)

3. Print a report of the result entries from the day for the supervisor to review.

   Option: Patient antibody report (short list) (R-AR)

4. Print a listing of supplier transactions to verify billing.

   Option: Supplier transactions (inventory)(R-IT-IT)

5. Print the hard copy reference for the issues/relocations.

   Option: Unit relocation record book entries (R-UR-IS)

6. Print the hard copy reference for the transfusion data.

   Option: Transfusion data report (R-UR-TR)

7. Print the hard copy reference for the transfusion reactions.

   Option: Transfusion reaction report (R-UR-RR)

III. DONOR MODULE (OPTIONAL)

A. Donor registration

1. Register two new donors not previously donating at your institution.

   Option: Donor registration (D-DR)

   Name: SMITH,JOHN
   SEX: M DOB: 061953
   GROUP AFFILIATION: VAH

   Collection Site: VAH
   Donation Group: VAH
   Arrival/Appt time: T@8A
   Donation: Whole Blood
   Donation type: Homologous
   NOTE: Enter donor in list? YES

   Name: CON,JIM
   SEX: M DOB: 071858
   GROUP AFFILIATION: VAH

   Collection Site: VAH
   Donation Group: VAH
   Arrival/Appt time: T@9A
   Donation: Whole Blood
   Donation type: Homologous

2. Print the form to be used to record the history, physical, etc., for the donation for each donor.

   Option: Donor history, physical and consent form (D-DH)

   Collection Site: VAH Date: T

   Enter (printer name) as the DEVICE and 80 as the margin to allow printing on the printer.

B. Donor collection/component preparation

1. Enter the collection data for Smith, John showing that he successfully donated a unit of Whole Blood (in a double bag).

   Option: Donor collection/processing (D-DC)

   Name: S0617
   Phlebotomist: as appropriate
   Donor reaction code: NONE
   Unit #: V22222
   Bag: Double Anticoagulant: CPDA-1
   Bag Lot #: 12345
   Date/time Collection Started: T @820
   Date/time Collection Completed: T @830
   Collect Wt: 575 Empty Bag: 98

2. Enter the deferral data for Con,Jimmy.

   Option: Donor collection/processing (D-DC)Page #2-11

   Name: C0718
   Donation/deferral code: No donation
   Deferral reason: Blood pressure & medication

3. Prepare a unit of Red Blood Cells (04060) and a unit of Fresh Frozen Plasma (18201) from the donor unit successfully collected, i.e. V22222.

   Option: Collection disposition/component preparation (D-CP)

C. Donor processing/labeling

1. Enter the ABO/Rh testing interpretation for the donor unit V22222.

   Option: ABO/Rh testing of donor units (D-DU-DT)
   Unit ID: V22222 ABO/Rh: O POS

2. Enter the results of any additional red cell antigen typings performed on the donor unit V22222.

   Option: Donor phenotyping (D-DP)
   Unit ID: V22222 RBC Antigen Present: c.E
   RBC Antigen Absent: C.e

3. Request a worklist in order to see what testing is not completed for the donor units.

   Option: Donor unit testing worklist (D-DU-DL)
   Enter Printer name as the DEVICE with a margin of 132.

> **NOTE:** Usually you would wait until all of the current testing is entered to use this as an incomplete.

4. Enter the results of the HBsAg, RPR, HIV Antibody, HBcAb and ALT testing for the donor unit V22222.

   Option: Lab tests (not ABO/Rh) on donor units

   Donor ID: V22222 SYPHILIS SEROLOGY: N HBsAg: N
   HIV ANTIBODY: N HBcAb: N
   ANTIBODY SCREEN: N ALT: N

5. Label and release ONLY the unit of Red Blood Cells for V22222 (requires two techs unless using a bar code reader).

   Option: Test review/component labeling/release (D-DU-LR)

6. Order a prooflist to review the units labeled, etc., including all relevant data.

> **NOTE:** This may be discarded after review, as it will be printed at the end of the month, for the entire month, to be saved as a hard copy reference.

   Option: Donor unit testing prooflist (D-DU-DR)
   Donor unit supplemental testing (D-DU-DS)

   Enter Printer name as the DEVICE on which the report should be printed.

Optional

7. Change the test result on V22222 for the HBsAg test from negative to positive, repeat pending.

   Option: Lab tests (not ABO/Rh) on donor units (D-DU-LA)

8. Attempt to label and release the unit of Fresh Frozen Plasma for V22222 (requires two techs unless using a bar code reader).

NOTE The system will allow the unit to be labeled but not released.

Option: Test review/component labeling/release D-DU-LR)

Respond with a <RET> in response to the prompt "OK to label component?" to see what happens if you erroneously attempt to label a unit.

APPENDIX C

Accreditation Requirements
AABB Requirements
CAP Requirements-Final
V. 5.2 Control Functions
V. 5.2 Test Case Tracking

Accreditation Requirements

Meeting American Association of Blood Bank (AABB) Accreditation Requirements - VA Decentralized Hospital Computer Program

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While each facility participating in the Inspection and Accreditation Program of the AABB will be ultimately responsible for ensuring that the appropriate records are maintained in accordance with the 15th edition of ***Standards for Blood Banks and Transfusion Services*** and the 5th edition of the ***Accreditation Requirements Manual***, the following information is intended to provide some guidance in devising a system to generate the necessary hard copy information on a regular basis.

Specific references will be made to the following documents and will be coded as noted:

1. AABB Inspection Report Form Rev. May 1993. ***IRF***

2. AABB Standards for Blood Banks and Transfusion Services, 15th edition, 1993. ***STD***

3. AABB Accreditation Requirements Manual, 5th edition, 1994. ***ARM***

NOTE: Specific computer requirements are included in this Appendix in spreadsheet format entitled "Proposed DHCP Standardized Responses to AABB Computer Requirements". In addition, Appendix A provides a generic facility policy/procedure entitled "Blood Bank Computer Software Requirements" and detailed information for validation testing.

1. Facility Records

REFERENCE (*STD*, page 39)

M1.000 Each blood bank and transfusion shall have a system of record keeping, manual or computerized.

M1.100 Records must be complete, retrievable in a reasonable period of time, preserved and protected from accidental or unauthorized destruction or modification.

M1.200 A system to ensure confidentiality of donor and patient records must be established and followed.

EXPLANATION (*ARM*, p. 166)

Each blood bank and transfusion service must have a procedure that describes the system of record keeping. The contents of this procedure should include, but need not be limited to, the following:

1. Location of records, including completed records and new forms.

2. Method of error correction, including the prohibition of the use of any system that obscures the original entry.

3. System for protection from accidental destruction or modification.

4. Method for generation or revision, approval, distribution, and retention of records and forms used in the blood bank or transfusion service.

5. Length of storage of records.

6. System of ensuring confidentiality of donor and patient records.

Records may be generated manually or with the use of a computer system. Manually generated records may eventually be transferred to microfilm or microfiche as described in the procedure for record keeping. In the case of information maintained in a computer system, there must be a procedure relative to the maintenance of this information. This may include procedures for backup, maintenance, retention of data, storage of tapes, air conditioning requirements and procedures to be used in the event of power loss, fire, and flood. See also Section 14. The backup procedure in most cases will rely on the availability of hard copy records.

Records must be retrievable within a reasonable period of time. Some records must be immediately available in order to maintain patient care. See Record Retention section. Other records must be retrievable in a time frame which will not compromise the service of the facility and the patients which it serves. Certainly most records should be retrievable in a matter of a few hours.

COMMENTS

Although the majority of blood bank manual records can be eliminated if the Blood Bank module is fully utilized, it is necessary to maintain some specific work documents since data entry into DHCP includes only the interpretations of testing and not the actual recorded results.

For transfusion service activities, this means that, at a minimum, the actual pretransfusion worksheet and the inventory worksheet used to record retypes must be retained.

Most edits are restricted to a higher level of security access and are incorporated into the Supervisor's Menu. In order to prevent "electronic white out" all edits and changes are recorded, including the initial information, the new information, the data changed, and the identity of the persons entering both pieces of information. In order to meet the requirement regarding corrections in data entry, it is necessary to retain the report generated by Print Data Audit Changes if that report contains data changes of specific data described above.

For donor center activities, this means that, at a minimum, the actual donor history form must be retained.

NOTE: Changes in donor demographic information are not captured as part of the data change audit process.

In order to accommodate the other record requirements, the periodic printing of reports needs to be evaluated. Prior to purging of data from the computer for either the BLOOD INVENTORY file (#65) or the BLOOD DONOR file (#65.5), hard copy reports need to be generated or data needs to be archived to microfiche, computer disk or some other format from which data can be retrieved in a timely manner. See the Reports Menu Data Flow sheet for suggestions regarding periodic printing of various reports. Additional suggestions are offered under Item 6, Records Required for Review.

2. Record Retention

REFERENCE *(IRF)* *Note: Only a portion has been included.*

12.110 **Indefinite Retention of Records**

12.117 Blood and components received from outside sources, including numeric or alphanumeric identification of the blood unit.

12.120 Information to identify facilities that carry out any part of the preparation of components and the function performed.

12.122 Final disposition of all blood and components, including the appropriate final disposition of all blood or components with abnormal test results.

REFERENCE *(STD)*

M2.100 **Indefinite Retention**
Records that must be retained indefinitely, although not all must be immediately available, include:

M2.111 Donors' medical history, physical examination, consent, and interpretations of tests for disease markers, for each donation including hemapheresis.

M2.112 Blood and component received from outside sources, including numeric or alphanumeric identification of blood unit, and identification of the collection facility.

M2.113 Information to identify facilities that carry out any part of the preparation of blood components and the function performed.

M2.114 Final disposition of each unit of blood or component.

EXPLANATION *(ARM, p. 169)* *Note: Only a portion has been extracted.*

"A numbering system to identify all blood and blood components is necessary in order to trace a unit from its source (donor and collecting facility) to final disposition (transfused, shipped, or destroyed). This unit number (donor number being a misnomer) will be used by the inspector to determine if blood and components can be traced from the source to final disposition. During the inspection, a unit number will be randomly selected from one or more readily retrievable donation records and/or from records of units of blood or components received from another facility. All of the records pertaining to those units must be available either at the institution being inspected or at the collecting facility if blood and components are obtained from a central blood center. This is done to ascertain that blood and components can be traced from the source to final disposition."

Intermediate facilities or transfusion services are not required to assign a local number to blood or components received. The number already present may be used for recording purposes if the provider is easily identified and cannot be confused with other providers because of numbering system similarities. If a local unique number is assigned, the label for the number must include identification of the facility assigning the number. The facility name may be abbreviated.

A record of the final disposition of each unit of blood or component must be made and kept indefinitely. This will make it possible to trace a unit from its origin to final disposition. The reason for the discard and the date of disposition must be noted.

The procedure manual must contain a description of the method of discard and destruction. This is particularly important for those units that test positively for a viral marker. Whether or not the record is computerized, it must be retained indefinitely and must be retrievable within a reasonable period of time."

EXPLANATION ***(ARM, p. 170)***

"Each accredited facility must have a list of names of each of the personnel and each physician authorized to sign or to initial or review reports and records. With each name there must be an example of the signature and initials written adjacent to the person's name. It is permissible for the examples of signatures and initials to be kept in the personnel files of the employees. If some or all blood bank or transfusion service records are computerized, there must be a list of codes by which personnel or physicians identify themselves when entering information in the computer."

COMMENTS

Blood Bank patient data (stored in File #63) is not archived. It remains on line until such time as the entire patient is removed from the system as specified in MAS protocols following the patient's death. It is not done on a routine basis.

Inventory data (stored in File #65) is not currently archived; however capabilities will exist in versions subsequent to Version 5.2. At the present time, records may be printed using the Print Units with Final Disposition [LRBLRUF] option and then removed using the Remove Units with Final Disposition [LRBLSER] option. In order to minimize the volume of paper records generated, the cost:benefit ratio of this activity, in terms of storage space in the LRD global, is not significant. The space required for storage in the LRD global is minimal and current recommendations are to leave the date on line until archiving utilities are available which will make "look backs" simple and still accommodate the need for indefinite retention.

Donor data (stored in File #65.5) is not currently achieved. It remains on line unless a decision is made to print the information and remove donors who have not donated within a specified time. Like File #65, this date is stored in the LRD global and takes minimum space. Current recommendations are to leave data on line until archiving utilities are available which will make 'look backs' simple and accommodate the need for indefinite retention.

3. Identification of Personnel

REFERENCE (*STD*, page 39)

M1.600 There must be a means to identify persons performing each significant step in collection, processing, compatibility testing, and distribution of blood or blood components.

EXPLANATION (***ARM***, p. 167)

"It must be possible to relate the person responsible for recording the information to the actual information. If only one person performed testing and recorded information, a single signature or set of initials is all that is required. If multiple individuals recorded on a single form, it is necessary to have a column where each signature or set of initials can be recorded."

"If all tests recorded on one form are performed on the same day, single date may be recorded, but if results and interpretations from several days are recorded on the same form, each date must be recorded."

EXPLANATION (***ARM***, p. 168)

"All blood bank and transfusion service records must be readable and, if prepared manually, made with indelible ink. In the event that an error is made on a manually prepared record, it is necessary to make a correction. It is recommended that this be done by drawing a line through the incorrect result and then writing the correct result as near as possible to the indicated space. The initials of the person making the correction and the date must be written alongside the corrected item. Erasure, overwriting and the use of liquids that "white out" or obscure the original entry are not acceptable. The original notations must not be obliterated. The procedures manual must include policies on how to correct recording errors."

"For computers used in blood banks and transfusion services, there must be a means to record corrections of previously transmitted information. The records of corrections must be kept for the period required by local or state laws. They should be kept at least five years."

COMMENTS

The entire security system, including those aspects which are governed by KERNEL and those governed by appropriate Menu Management, provides an adequate security system to prevent access by unauthorized individuals. In addition, the security procedures for each facility using the DHCP packages will provide detailed information on assignment of access and verify codes, specific menus, dates of employment, etc.

The Blood Bank Module, unlike the other areas of the laboratory package, does not require a conscious effort to enter the tech ID. Whenever the tech enters his/her access code, the computer automatically assigns all subsequent actions to that user. Since entry of data is usually done in informational groupings, the entire grouping will be attributed to the individual entering the information, rather than having the information recorded for each individual piece of data. Conversely, if the information can be entered for only one piece of data at a time, such as the entry of a specific antigen on a specific unit of blood in inventory, the tech is recorded for each entry.

For example, when recheck information is entered, the tech is recorded for each field; however, when issue/relocation information is entered, the tech is recorded only once for the entire grouping of information.

Since the actual recorded results of the pretransfusion testing are not entered into the computer, but are recorded manually, the data entry need not be done by the person performing the testing. While this is desirable, certain circumstances, such as extended downtimes, may preclude this. No requirements currently exists to indicate that this is unacceptable since the primary document still indicates the identity of the person performing the testing.

For required data, an electronic audit trail exists to track any editing done to data previously entered/verified. This audit trail is stored with the unit; however, it does not appear in the majority of display/print options. The Print data audit changes option in the Supervisor Menu allows printing of the information on demand. This report should be printed and reviewed regularly. Comments can be annotated as appropriate to detail the circumstances which required the change. These records must then be stored in accordance with stated requirements as they represent a primary record.

4. Records Requiring Immediate Access

REFERENCE *(IRF)*

12.300 **Records Immediately Available**

12.301 The following records must be immediately available.

12.302 Patient's ABO group and Rh type determined during the past 12 months.

12.303 Records of patient known to have significant unexpected antibodies, severe adverse reaction to transfusion and/or difficulty in blood typing during the past five years.

REFERENCE *(STD)*

H1.101 ABO grouping and Rh typing done during the past 12 months.

H1.102 Difficulty in typing, clinically unexpected antibodies and severe adverse reaction to transfusion and/or difficulty in blood typing during the past five years.

EXPLANATION *(ARM, p. 174)*

"Records containing information of clinical significance in relation to ongoing transfusion therapy must be immediately available. Records of ABO group and Rh type determined in the past 12 months must be immediately available in order to compare the interpretations of current tests so as to detect possible error. Records for the previous five years of difficulty in typing, clinically significant unexpected antibodies, as well as severe adverse reactions to transfusion must also be immediately available, in the interest of prompt and effective patient care. These records may be maintained as manual records, or they may be maintained in the blood bank computer. There must be documentation that these records have been examined prior to the issue of the units of blood or component."

EXPLANATION *(ARM, p. 172)*

"Patient records must be retained a minimum of five years and longer if prescribed by local legal requirements. Storage on microfilm, computer hard disk, or magnetic medium is acceptable."

COMMENT

Depending on the amount of unscheduled downtime, the extent of the backup system may vary. In some facilities which have shadow capabilities, routine backups and system maintenance can be done with a bare minimum of interruption. In such cases, the backup system may be minimal. In other cases, the computer may be inaccessible for a few hours on a routine basis or may experience repeated scheduled and/or unscheduled downtime. In such cases, a viable backup system is crucial.

In smaller facilities, the Patient Antibody Report (long-list) [LRBLPRA] option can be used to print a listing of patients with antibodies or previous transfusion reactions; however, this routine is fairly system intensive. In larger facilities, this is not a practical solution. Utilities to download information to a PC are currently being investigated. This would allow relevant information to be downloaded to create a database which could be updated on a regular basis to be accessed during downtimes. It would not be used for input of any new information.

5. Quality Assurance of Transfusion Practices

REFERENCE (*IRF*)

2.012 Is there a peer review program that documents monitoring of transfusion practices, including ordering, use and waste of blood components?
2.013 Frequency of review _____
2.015 Are there written criteria for evaluating transfusion practice?
2.016 Does this program include evaluation of all blood and blood components transfused?
2.018 Is the crossmatch/transfusion (C/T) ratio monitored?
2.020 Is the number of type and screen orders reviewed periodically?

EXPLANATION (*ARM*, p. 8-9)

"The purpose of peer review is to enhance the quality of patient care by evaluating practice against established criteria for indications and efficacy of the use of blood and blood components. Intradepartmental review alone may be insufficient to ensure proper review and intervention. The committee should establish and review at least annually the screening criteria for all components transfused and all services performed."

"Other committee functions must include reviewing and evaluating all transfusion reactions. The committee shall also monitor resource conservation as evidenced by review and intervention regarding use of type and screen orders and the crossmatch/transfusion ratio."

COMMENTS

In order to facilitate the performance of active blood usage review, the system automatically audits each transfusion request as the request is entered into the system, either through the Blood component requests (P-RS-CR) [LRBLPCS] option or the Specimen log-in (P-SL) [LRBLPLOGIN] option in the Patient Menu. The criteria used to audit the various component requests are both site specific and specific for the type of request, i.e., PreOp or non-PreOp. If none of the audit criteria are determined to be satisfied, the system will display the prompt "OK to continue? NO//" At this point, the system initiates a record for this particular request which has been deemed to be potentially inappropriate. A hard copy report of these requests can then be generated, using the Inappropriate Transfusion Requests Report (R-UR-IT) [LRBLPRIT] option in the Reports Menu.

A report can also be generated using the Transfusion Data Report (R-UR-TR) [LRBLITR] option in the Reports Menu, which includes all of the units transfused within the time period specified. It is sorted in alphabetical order by patient and includes all relevant issue and transfusion data. This report can then be used to identify patients for further review. For example, by using the information printed via the Patient Transfusions & Hematology Results (R-UR-TH) [LRBLPCH] option, it is possible to evaluate specific laboratory parameters in conjunction with the transfusion episodes for a specific blood component.

In order to assist in attempts to improve resource management, using the Transfusions by Treating Specialty/Physician (R-UR-TS) [LRBLITS] option in the Reports Menu, the system will generate a report which is sorted by treating specialty. It includes all of the patients transfused within the time period specified. However, it is sorted by component within each treating specialty. Since the report also includes the name of the physician, it can be used for identifying specific areas or physicians for further review.

Ordering practices can be evaluated by treating specialty and physician using the Transfusions by Treating Specialty/Physician [LTRBLAA] option in the Reports Menu. This option uses the data which is captured for the crossmatch in the specimen multiple, (i.e., Field #65.02,.03).This data is captured during specimen accessing in the Specimen Log-in P-SL [LRBLPLOGIN] option and put in the LAB ORDER ENTRY file (#69), Field #7, and Practitioner field (#68.02,6.5). It is NOT based on the REQUESTING PERSON entered with the component request since at that present time, the individual component request information is NOT stored. This component request information was intended for short term use only.

6. Records Required For Review

The following listing is taken from the envelope which accompanies the Inspection Report Form. In each case, there is an indication as to whether the information is available on the computer and/or can be generated in hard copy, including the appropriate option abbreviation.

Name of record	On computer?	Hard copy?
I. DONOR RECORD		
1. Donor (Donation) Record	NO, although a blank history form with donor demographics is generated and can be retained as the hard copy.	
2. Donor Blood/Components received from other Blood Banks	Q-SU (single)	R-IS-SU (single) S-SR-PU (by unit)
3. Donor Blood Testing, Records-initial (by facility drawing blood) *Interpretations only	Q-SD (single) D-DU-DS (batch)	D-DU-DR (batch)
4. Donor Blood Test Records -Repeat (by facility importing blood) *Interpretations only	Q-SU (single) I-UW generates a worksheet which can be used to record actual testing results.	S-SR-PU (by unit)
5.Component Preparation (single or multiple units per record)	Q-SD (single)	D-DU-DR (batch)
6.Donor Blood/Components shipped to other facilities	Q-SD or Q-SU (single only)	site configurable using FileMan or I-SH

Name of record	On computer?	Hard copy?
7. Donor Blood and Component inspections (Periodic and *Preissue only	Q-SU (single)	R-UR-IS (batch) S-SR-PU (by unit) Pre-issue)
8. Disposition of Unused Donor Blood/Components	Q-SD or Q-SU (single only) R-IS-DU (discards)	R-DR-CD (donor) R-DR-PR (comp)
9. Microbiology-Sterility Testing, Donor Blood and Components	NO	NO

II. PATIENT (RECIPIENT) RECORDS

1. Emergency Blood/Component	P-CR or P-SL Request for Transfusion	NO
2. Emergency Blood Component Issue	NO, only as recorded later using the regular options	
3. Routine Blood/Component	P-CR or P-SL Request for Transfusion	NO
4. Patient Blood Test Record(s), Routine *Interpretations only	R-BR-3	R-BR-3
5. Patient (and Donor) Blood Testing Testing Records, Special Immuno hem. *Interpretations only	I-UP (units) D-DP (donors) P-PR (patient)	R-UP (units) P-PR(patient)
6. Donor-Patient Compatibility Testing *Interpretations only	P-ET and P-RS-XM	NO
7. Routine Blood/Component Issue	Q-SU (single) R-IS-SU	R-UR-IS(batch) (single)
8. Pre-transfusion Confirmation of Patient and Donor Identity Record	NO	NO
9.Patient Transfusion Record		
(a) Clinical Chart	NO	NO
(b) Blood Bank	Q-PR	Q-PR

Name of record	On computer?	Hard copy?
10. Recipient Adverse Reaction to Transfusion Records:		
(a) Report of Blood Bank	NO	NO
(b) Laboratory Investigation	NO (not in BB module)	NO
(c) Report to Recipient's Physician *Transfusion outcomes, not specific to reactions	Q-PR (by patient)	R-UR-RR (batch)
(d) Microbiology-Sterility Testing	NO	NO
11. Compatibility Label (if separate)	NO	R-CT
12. Label for Patient Blood Sample	Q-PA (record of all accessions by patient)	P-SL (label is generated during log in)

III. THERAPEUTIC PHLEBOTOMY

1. Donor's Physician Request for Bleeding	NO	NO
2. Blood Bank Medical Director's Authorization	NO	NO
3. Label for Blood Unit-Therapeutic Bleeding with Diagnosis	NO	NO

IV. AUTOLOGOUS PHLEBOTOMY AND TRANSFUSION

1. Patient's Physician Consent for Bleeding	NO	NO
2. Donor-Patient's Informed Consent for Bleeding & Transfusion	NO	NO
3. Blood Bank Physician's Permission to Bleed	NO	NO
4. Donor (Donation) Record (If not the same as for homologous)	*same as for homologous, including additional restrictions for patient	
5. Records of Exchange Transfusion	NO	NO

Name of record	On computer?	Hard copy?
6. Donor-Patient Blood Testing	*same as for homologous, including additional restrictions for patient	
7. Component Preparation if stored as RBCs or Frozen RBCs	*same as for homologous, including additional restrictions for patient	
8. Request for Autologous Blood for Transfusion	*same as for homologous	
9. Patient Blood Testing Record (if the same as for homologous)	*same as for homologous, including additional restrictions for patient	
10. Blood/Component Unit Label-For Autologous Use Only	NO	NO

AABB Requirements

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Description of Computer System: Software manufacturer: Department of Veterans Affairs, DHCP Laboratory Package, Version 5.2 Hardware manufacturer/# hard drives/size of drives/RAM & operating system: variable by site (VAX or 486 sites)--check with IRM				
Which areas are computerized?	14.005			
Donor Recruitment	14.006	X		
Donor Registration	14.007	X		
Laboratory processing	14.008	X		Test result interpretations only
Component Preparation	14.009	X		
Labeling	14.010	X		
Distribution and/or Issue	14.011	X		
Inventory Control	14.012	X		
Blood/Component Orders	14.013	X		Current orders only-not stored
Archives (Patient records, transfusion history)	14.014		X	Maintained on line for BB (no archiving)
Reference Laboratory Tests	14.015	X		Results entered in same manner as other testing
HLA Testing	14.016	X		Typings only (for both patient and units)
Paternity Exclusion Testing	14.017		X	
Patient Laboratory Tests	14.018	X		Interpretations only
Compatibility/Crossmatch	14.019	X		Interpretations only
Transfusion Records	14.020	X		
Temperature Monitoring	14.021		X	
Equipment Maintenance	14.022		X	
Result reporting	14.023	X		Interpretations only
Is computer shared by other departments, regionally, or as part of network?	14.025	X		Fully integrated hospital system
Is computer interfaced with the hospital system?	14.026		X	Fully integrated hospital system-not separate lab system
Is software developed by your own personnel or consultants?	14.027		X	Part of the VAs Decentralized Hospital Computer Program (DHCP)
Is software commercially available?	14.028		X	
Is the computer adequate for your facility?	14.029			

Prepared based on the Inspection Report Form (Revised May 1993)

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Is a complete manual, or parts thereof, available to all authorized personnel?	14.035			BB User Manual is designed to be used as a reference for SOP and does constitute the facility procedures manual.
Are there adequate procedures for preservation of data/equipment in case of software/hardware failures and any unforeseen disasters?	14.037	X		Described in IRM hospital wide plan; includes Failsoft & journal tapes; backups done routinely.
Do personnel follow the written procedures?	14.038			
Are all personnel adequately trained?	14.040			
Is there a record of personnel training and competency?	14.041			Should be included as part of orientation training & regular performance evaluations.
Is the computer system designed to prevent access by an unauthorized individual?	14.045	X		Kernel functions, i.e., access/encrypted verify codes, combined with security keys & menu management.
Are programs protected to prevent alterations/destruction?	14.046	X		Access to routines is limited to IRM staff/programmer access; some Data Dictionary control is limited to developers.
Do policies specify who may alter programs, enter/access patient data, change results, change billing?	14.048			Should be incorporated into local policy; menu management by position description allows standardization.
Are assigned codes, passwords protected against unauthorized use?	14.049			Verify code totally encrypted;employee also signs security agreements; codes change periodically-frequency determine by site.
Are policies understood and enforced?	14.050			Signed security agreements; monitoring of access problems.
In shared systems, does policy protect stored data from unauthorized access?	14.052			Not applicable- all access in under the same controls
Is all data, including donor and patient information and test results/interpretations, displayed and verified for accuracy before final acceptance and reporting by computer?	14.054	X		All data entry options have the information displayed prior to verification. Some options also have built in checks comparing current results to historical records.

Prepared based on the Inspection Report Form (Revised May 1993)

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Are donor deferral files maintained accurately and validated periodically?	14.055			Donor deferral information is part of File #65.5; editing is limited to supervisory access & appears on audit trail. Periodic checks?
				NOTE: No integrity check currently exists for File #65.5.
Are the backup procedures for donor deferral files adequate?	14.056			Hard copy printouts can be generated; journal tapes are made on a routine basis.
Are the procedures for maintaining confidentiality of donor files adequate?	14.058			If the security keys and menu options are properly assigned; listings can be provided as to who has access to this data.
Can data entry errors be corrected?	14.060			Yes & significant data changes are captured on the audit trail. Some require additional security keys & supervisory menu options.
Are corrected results/interpretations clearly specified as such?	14.061			The only results which are printed and therefore accessible to persons outside the lab are the patient results printed on the Blood Bank Tests Report. These include clearly designated comments noting the previous result, the date/time changed & the person changing it.
Are previously printed erroneous results clearly identified?	14.062			See note for 14.061
Is there a system to identify personnel who enter modified data?	14.070			All edits in significant information/results are tracked via an audit trail. These should be printed on and reviewed regularly by the BB supervisor. This should be retained for at least 2 years to meet the accreditation cycle.

Prepared based on the Inspection Report Form (Revised May 1993)

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Can stored data/archival information be retrieved in a reasonable period of time?	14.080			BB Patient data is not archived- it remains on line. Inventory data and donor data can be left on line, down loaded or printed and purged. This data needs to be accessible within a short time period for look-back & other medical-legal purposes.
Can previous reports be reprinted within a reasonable period of time? *(Recommendation-not deficiency)*	14.081			Since BB data is not archived or purged, it can be reprinted at any time the computer is accessible.
Are patient or donor data necessary for continuous operation available during computer downtime?	14.082			Mechanism to be determined by the site. Data can be downloaded to a personal computer for access during downtime. In addition, the [LRBLPRA] S-SR-AR allows printing of patient inf. for hard copy reference if updated regularly. A listing of Donor deferrals can be printed for quick reference OR release of units for transfusion can be delayed until the computer is accessible.
Is downtime for maintenance scheduled to minimize interruption of service? *(Recommendation-not deficiency)*	14.100			Variable by site
Is there a written schedule for regular hardware maintenance?	14.111			Should be available through IRM Service-need to check.
Is there a written record of unscheduled downtime, including reason(s) for failure and corrective actions taken? *(Recommendation-not deficiency)*	14.120			Although this should be available through IRM Service, the BB/lab keeps a log to detail the overall time to determine overall impact on functions. In addition, all errors/software functionality issues which are part of the Lab or BB software are tracked through E3Rs for corrective action. If these issues affect control functions, alternative manual methods are put in place until the problem is resolved.

Prepared based on the Inspection Report Form (Revised May 1993)

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Is emergency service for hardware/software available at all times? *(Recommendation-not deficiency)*	14.150			Determined by each site
Is there a written definition of alternative procedures in the event of computer system failure?	14.200			Basic information is included in the BB User Manual; however, this is then adapted to local policy/procedures.
Do personnel understand the procedure and follow it?	14.210			Information is included in the orientation checklist & in the performance evaluations.
After changes/modifications, are programs checked for proper functions?	14.300			Changes/modifications can either a result of a local modification by the IRM staff, an official "patch" or a new version release. Both official patches and new versions undergo stringent verification before release, and are then validated by the BB staff prior to implementation in "production." Local modifications are tested more intensively at the local level because they represent Class III software. (Some sites may have no local modifications.)
Does the medical director or authorized designee approve changes/additions/deletions in programs, test library and major computer functions?	14.500			Validation testing is reviewed prior to implementation of the software for all new software, including minor "patches," which involves the Blood Bank. Input to request changes in functionality is handled through the national E3R mechanisms. Requests are categorized by whether they represent a system deficiency, a system improvement or a system enhancement. These requests are reviewed by a national committee and then prioritized accordingly. Deficiencies are generally corrected within a short period of time through a "patch" to a specific routine/file.

Prepared based on the Inspection Report Form (Revised May 1993)

Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	AABB	YES	NO	Source of data/Manner in which it is met
Is there a document describing the hardware configuration?	14.501			Available through the IRM Service or in the Technical Manual;need description & interaction between the software & the data base.
When additions, deletions, and modifications are made to the system, is there a procedure that includes the purpose, the individual requesting the change, the data to be used, how data are to be handled and reported, the expected versus the actual results, and who reviewed and approved the test?	14.503			File changes to the files which control the functionality, e.g., File #66, File 61.3, File #62.55, and File #65.4, are documented through periodic printouts (FileMan listings) which are saved for the required time for medico-legal purposes. Interim changes are documented through MailMan messages/handwritten notes, are dated & include the purpose of the changes. Software changes are requested through the E3R mechanism which details all of this information. Copies of the E3R and the status reports are available through the LIM. For each new version of the software, the Release Notes provided with the updated User Manual include the listings of the new functionality, the new options and routines and the data dictionary changes to the files.
Checklist Items	**AABB**	**YES**	**NO**	**Source of data/Manner in which it is met**
Is there documentation of:				
Program development if done internally?	14.552			Documentation of local changes (Class III) software only.
Installation of the system?	14.554			Included as part of the validation testing-see sheets in Vf. 2.5 Test Case Tracking.
Validation of functionality?	14.556			See Tracking of Test Case Testing sheets, Control Function testing and the worksheets/printouts of the actual testing (See V. 5.2 Control Functions).

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Proposed DHCP Standardized Responses to AABB Computer Requirements

Checklist Items	**AABB**	**YES**	**NO**	**Source of data/Manner in which it is met**
Is there documentation of:				
Is there a written procedure for validation of the computer system?	14.558			See local plan- example "Computer Software Requirements."
Are the policies and procedures for system maintenance and operation adequate?	14.560			

Prepared based on the Inspection Report Form (Revised May 1993)

CAP Requirements

Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Types of Services				
Is a dedicated micro computer used only in the lab?	1.1590		X	
Is a dedicated mini computer used only in the lab?	1.1600		X	
Is a dedicated main frame computer used only in the lab?	1.1610		X	
Is the lab computer a shared system used by other dept.?	1.1620	X		
Is the lab computer a shared system used by other hospitals?	1.1630		X	(may have some sites which respond differently if multiple sites)
Is the lab computer part of a complex network?	1.1640	X		
Sections where computer is used:				Software available- all lab except AP has been mandated.
Chemistry	1.1700	X		
Hematology	1.1710	X		
Microbiology	1.1720	X		
Blood Bank	1.1730	X		
Nuclear Medicine	1.1734	X		
Anatomic Pathology	1.1735	X		
Source of Programs:				
In house (lab/hospitals) development?	1.1750		X	
Purchased package (software only)?	1.1760		X	
Purchased package (hardware & software)?	1.1770	X		Although not technically purchased, essentially same concept; DHCP developed nationally by VA personnel in a manner equivalent that of a software vendor.
Personnel - Operators				
Are procedure manuals clearly written & readily available?	1.1830	X		Although the DHCP Manuals provide a good source of information, specific details should be incorporated into either a lab-wide or a department specific procedure manual.

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Personnel - Operators				
Are operators adequately trained?	1.1840	X		Option specific training should be documented for each employee. Examples include orientation checklists & annual performance evaluations.
Do operators know what to do to preserve data?	1.1850	X		Although IRM is required to have a hospital wide contingency plan to cover this, the lab must also have such a plan which is dept. specific.
System Security				
Are major programs protected to prevent alteration?	1.1860	X		Access to routines is limited to IRM staff or persons with programmer access. Some Data Dictionary/File control is limited to developing ISC.
Are there explicit policies which specify access?	1.1870	X		Should be incorporated into local policy; menu management by position description allows standardization.
Do appropriate personnel understand these written policies?	1.1880	X		Signed ADP security agreements; Hospital security officer monitors problems.
Are user codes required to enter/access data etc.?	1.1900	X		Access codes & encrypted verify codes
Is the security of the access codes maintained?	1.1903	X		Access codes & encrypted verify codes which must be changed regularly. Routine monitoring by Hospital security officer/IRM.
Do access codes permit access only to specific functions?	1.1905	X		Access codes plus security keys & menu options assigned according to position descriptions.
Is access to the data storage in shared systems protected?	1.1910	X		All access is under the same types of controls described for 1.1905 and is user specific.
Does the system have appropriate fields to capture all pertinent pt. inf.?	1.1911	X		

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Data Entry and Reports				
Written system to detect/document test requesting errors?	1.1912	X		Weekly/monthly chart review according to local lab QA/QI policies.
Written system to verify accuracy of transmission of pt results to all types of patient reports?	1.1914	X		Local lab QA/QI policies to include comparison of Cume/Interim instrument tape/worksheets or other raw data records.
Written system to monitor internal system tables to verify accuracy?	1.1916	X		Not applicable to current DHCP structures.
Documentation that calculations performed by the comp. are tested for accuracy?	1.1917	X		Manual calculation done regularly & checked against DHCP.
Review of comp generated reports for errors before being distributed?	1.1918	X		Review cumes in lab for gross printing errors; other errors evaluated as described in 1.1912; Review AP reports as part of routine QA/QI.
Review of computer generated reports by med. dir. or designee?	1.1919	X		LIM or person rotating on chart reviews (1.1912) or supervisory summary review.
Verification of manual/auto results before final acceptance/release?	1.1920	X		Results must be reviewed before verification using all data entry options .
Are result entries checked against defined error limits before reporting?	1.1930	X		Use of delta checks, high/low/therapeutic ranges.
Can data entry errors be readily corrected (manual or automated)?	1.1950	X		Demonstrate computer procedure (EM) [LRENTER].
Does the system provide for timely correction of errors?	1.1952	X		Results can be corrected whenever discovered by persons with appropriate access.
Are corrected results clearly specified as such?	1.1960	X		Demonstrate example of "Incorrectly reported as..." for clinical path & modified report for anatomic path.
Are corrected results clearly identified as "errors" in subsequent reports?	1.1970	X		Demonstrate example of "Incorrectly reported as..." for clinical path & modified report for anatomic path.
Are corrected results stored for at least two years?	1.1975	X		Corrected results are stored/archived the same as other results.
Comments on specimen quality (e.g., hemolyzed, lipemic)?	1.1980	X		Demonstrate comment from File #62.5 or free text examples.

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Data Retrieval				
Adequate system to identify persons who have entered/modified pt data, files or programs?	1.1990	X		Prior to V 5.2, the ID captured is based on ID entered, not based on access. When changing result, the ID of the person changing the result is actually captured. Access to files/routines is further restricted by security keys, etc., through various Kernel functions.
Rapid retrieval (1-4hrs) of archived pt result data when necessary?	1.2000	X		Dearchiving is done by IRM for the most part; 1-4 hrs is too short. Most can be done within 24 hours/1 working day.
Can a copy of previous patient results be reprinted?	1.2010	X		Variety of possible print options can be utilized.
Data Storage				
Sufficient data storage capacity to meet the pt. care needs?	1.2015	X		M-2, Part VI, Chapter 2 states that the length of time results are stored must meet the needs of the facility, but be at least 6 mos-1 year.
Proper labeling/storage data media (e.g., tape, reels, disk cartridges)?	1.2020	X		IRMs responsibility; however needs to be checked by LIM
Can arch records prod a comp generated copy of the orig. pt test results?	1.2025	X		IRMs responsibility to dearchive- suggest keeping an example for next inspection or do one ahead of day of inspection.
Is online data base maintained to ensure adequate storage capacity/response time?	1.2035	X		Although it is IRMs responsibility to monitor disk space, etc., the LIM must establish the frequency of purging/archiving.
Acceptable system to prev data loss in case of hardware/software failure?	1.2040	X		Failsoft software; journal tapes & backup tapes are made routinely.
Are auto alarms that alert computer operator of imminent problems monitored/tested?	1.2050			Although this is IRMs responsibility, LIM should check. Messages are displayed on console with beep/bell.

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Hardware and Software				
Written schedule/procedure for regular hardware maintenance?	1.2060	X		Even if this is mostly IRMs responsibility, some documentation must exist in Lab Service for printers, etc.
Evidence of active review of system maint/function records?	1.2061	X		Although this is IRMs responsibility, LIM should check. (should be a log).
Are hardware/software functions tested and corr actions documented?	1.2063	X		Although IRM is responsible for the hardware and the operating system, testing of the laboratory software functionality is the responsibility of the Lab. Should be done in a TEST account for new versions. Patch installation should be documented. System deficiencies and requests for change are handled through E3Rs. IRM monitors the error trap.
Written system to verify hardware/software integrity/back-up and/or restoration of data files?	1.2064	X		Although IRM is required to have a hospital wide contingency plan to cover this, the lab must also have such a plan which is dept. specific. Plan should include integrity check routines.
Are any discrepancies documented?	1.2066	X		Although this is primarily IRMs responsibility, problems directly involving lab should be documented in the lab as well.
Written record of all hardware and software modifications?	1.2067	X		Although this is primarily IRMs responsibility, installation of new versions & patches should also be documented in lab or be immediately retrievable by lab. New tests, changes in reference ranges, etc., should be documented in lab.

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
Hardware Software				
Med director approval of all changes, in programs/major comp functions?	1.2068	X		This authority is generally given to LIM who reports to the medical director or service chief.
Are programs tested appropriately when 1st installed and after changes/modifications?	1.2070	X		Testing of new software versions/patches should be done in the TEST account before being installed in production. Documentation of testing should be kept. Problems are handled through the E3R mechanism.
Are computer programs appropriately documented?	1.2072	X		DHCP Manuals, i.e., Release notes/LIG/Technical Manual/User Manuals
Documentation that all users are trained in the new/mod system?	1.2074	X		Local training notes/signed checklists
Is the responsible person in the lab notified of program malfunction?	1.2080	X		Specific chain of notification is determined locally. Both LIM and IRM Service are included.
System Maintenance				
Is down time for maintenance scheduled to minimize interruption of service?	1.2085	X		System maintenance and scheduled downtime are done during the midnight shift and on weekends.
Written procedures for partial/computer downtime and recovery?	1.2086	X		Although IRM is required to have a hospital wide contingency plan to cover this, the lab must also have such a plan that is dept. specific.
Written procedure for partial/computer shutdown/recovery of system which interface w/lab?	1.2087	X		Although this is IRMs responsibility, LIM should check.
Written record of unscheduled downtime/system degradation, including reasons & corrective actions?	1.2090	X		Although this should be available through IRM Service, the lab should keep a log to detail the overall time to determine the impact on functions. In addition, all errors/software functionality issues which are part of the lab are tracked on E3Rs for corrective action.

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Proposed DHCP Standardized Responses to CAP Requirements

REQUIREMENTS	CAP	Yes	No	Source of data/Manner in which it is met?
System Maintenance				
Written definition of backup procedures for computer failure so pt results are reported promptly?	1.2110	X		Although IRM is required to have a hospital wide contingency plan to cover this, the lab must also have such a plan that is dept. specific.
Does the lab staff understand backup procedure & know how to implement it?	1.2120	X		Training checklists/alternatives should include the laboratory contingency plan.
Written record of problems or errors encountered in the system?	1.2122	X		Although the error trap is available through IRM Service, the lab should keep a log to detail problems to determine the impact on functions. In addition, all errors/software functionality issues which are part of the lab are tracked on E3Rs for corrective action.
Is emergency service for hardware/software avail at all necessary times?	1.2124	X		Locally determined by the IRM Service
Are service and repair records available for all hardware/software?	1.2126	X		These can be kept outside of the lab, i.e., IRM, Biomed, etc.; however, the LIM should check.
Is the system reliability satisfactory to the laboratory director?	1.2130	X		
System meet needs for patient care in the judgment of the lab director?	1.2140	X		

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V. 5.2 Control Functions

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

A control function is a system function that causes an activity to occur or that influences the behavior of the user of the system. Control functions may exist even when competent human intervention occurs. There are two types of controls, i.e., process control and decision support. Process control exists when the system actually makes a decision using available information and algorithms. Decision support exists if an individual bases a decision on information obtained from the system. NOTES: (1) The descriptions of the control functions are abbreviated and the Blood Bank User Manual, Version 5.2 should be consulted for additional details. (2) Override capabilities designated as "Limited" indicates that additional supervisory access is required, either in the security level or additional specific supervisory level edit options that are tracked by the audit trail.

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Patient	[LRDELOG]	P-DA	Process control	Prevents deletion of accession if there is verified data	Yes	No	
Patient	[LRBLPT]	P-DT	Process control	Prevents entry of future transfusion dates	No	No	
Patient	[LRBLPT]	P-DT	Process control	Updates patient transfusion record	No	No	
Patient	[LRBLPET]	P-ET	Decision support	Compares current ABO/Rh to patient history	Yes	Yes	
Patient	[LRBLPET]	P-ET	Decision support	Displays previous antibody history	Yes	NA	
Patient	[LRBLPER]	P-PR	Process control	Prevents entry of unit inf. if unit is in current inventory (File #65)	Yes	No	
Patient	[LRBLPER]	P-PR	Process control	Prevents inadvertent entry of duplicate unit ID	Yes	Yes	
Patient	[LRBLPCS]	P-RS-CR	Process control	Limits component selection to those which "can be requested"	No	Limited	
Patient	[LRBLPCS]	P-RS-CR	Decision support	Evaluates age of patient specimen	Yes	NA	
Patient	[LRBLPCS]	P-RS-CR	Decision support	Evaluates request against audit criteria & current lab results	Yes	Yes	
Patient	[LRBLPCS]	P-RS-CR	Decision support	Displays previous antibody history	Yes	NA	
Patient	[LRBLPCS]	P-RS-CR	Decision support	Displays autologous units in inventory	Yes	Yes	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDATION
Patient	[LRBLPIC]	P-RS-US	Process control	Compares current ABO/Rh to patient history	Yes	Yes	
Patient	[LRBLPIC]	P-RS-US	Process control	Prevents selection of units which are not ABO/Rh compatible	No	Limited	
Patient	[LRBLPIC]	P-RS-US	Process control	Evaluates unit phenotyping against clin. significant pt. antibody	No	Limited if +	
Patient	[LRBLPIC]	P-RS-US	Process control	Prohibits selection of autologous unit for different patient	No	Limited	
Patient	[LRBLPIC]	P-RS-US	Process control	Prohibits use of pt. specimen which is too old	Yes	Limited	
Patient	[LRBLPIC]	P-RS-US	Process control	If requested, limits selection to unassigned units	No	Limited	
Patient	[LRBLPIC]	P-RS-US	Process control	Prevents selection of expired units	No	Limited	
Patient	[LRBLPIC]	P-RS-US	Decision support	Checks for low volume units	Yes	Yes	
Patient	[LRBLPIC]	P-RS-US	Decision support	Displays days left before expiration	Yes	NA	
Patient	[LRBLPIC]	P-RS-US	Decision support	Displays autologous units in inventory	Yes	Yes	
Patient	[LRBLPX]	P-RS-XM	Process control	Prevents entry of XM if no ABO/Rh on current specimen	Yes	Limited	
Patient	[LRBLPX]	P-RS-XM	Process control	Evaluates unit recheck results against unit history	Yes	No	
Patient	[LRBLPX]	P-RS-XM	Process control	Prevents status change to "assigned" unless XM is "C" or "IG"	No	Limited	
Patient	[LRBLPX]	P-RS-XM	Process control	Prevents status change based on "IG" unless appropriate access	No	Limited	
Patient	[LRBLPX]	P-RS-XM	Decision support	Evaluates whether AbScreen results are entered on current spec	Yes	Yes	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Patient	[LRBLPX]	P-RS-XM	Decision support	Evaluates unit phenotyping against clin. significant pt. antibody	Yes	Limited if +	
Patient	[LRBLPLOGIN]	P-SL	Process control	Limits component selection to those which "can be requested"	No	Limited	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Checks for previous specimen within 72 hours	Yes	NA	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Displays previous antibody history	Yes	NA	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Displays recent lab values for auditing request	Yes	Yes	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Displays autologous units in inventory	Yes	Yes	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Evaluates age of patient specimen	Yes	NA	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Evaluates request against audit criteria & current lab results	Yes	Yes	
Patient	[LRBLPLOGIN]	P-SL	Decision support	Evaluates request against MSBOS audit criteria	Yes	Yes	
Inventory	[LRBLIDN]	I-DN	Process control	Prevents entry of future disposition dates	Yes	No	
Inventory	[LRBLIDN]	I-DN	Process control	Restricts modification of components to specified components	Yes	No	
Inventory	[LRBLIDN]	I-DN	Process control	Prevents mod. of auto. comp. to non-auto comp. if test incom/+	Yes	No	
Inventory	[LRBLIDN]	I-DN	Process control	Checks volumes of modified(split/ divided) units against maximum	Yes	No	
Inventory	[LRBLIDN]	I-DN	Process control	Deletes modification if no new unit ID entered	Yes	No	
Inventory	[LRBLIDN]	I-DN	Process control	Assigns ABO/Rh of pool	NA	No	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Invento-ry	[LRBLID N]	I-DN	Process control	Prevents multiple modifications to the same unit	No	No	
Invento-ry	[LRBLID N]	I-DN	Decision support	Calculates new expiration date for modified components	Yes	Yes	
Invento-ry	[LRBLID N]	I-DN	Decision support	Identifies units which were released w/incomplete results	Yes	Yes	
Invento-ry	[LRBLID R]	I-DR	Process control	Prevents issue if no entry for required recheck results	Yes	Limited	
Invento-ry	[LRBLID R]	I-DR	Process control	Evaluates unit phenotyping against clin. significant pt. antibody	Yes	Limited	
Invento-ry	[LRBLID R]	I-DR	Process control	Prevents issue if inspection is unsatisfactory	Yes	Limited	
Invento-ry	[LRBLID R]	I-DR	Decision support	Evaluates expiration date of unit	Yes	Yes	
Invento-ry	[LRBLID R]	I-DR	Decision support	Identifies all autologous units available (in inventory) for patient	Yes	Yes	
Invento-ry	[LRBLIL R]	I-LR	Process control	Prevents duplicate entry of unit ID of the same component	Yes	Limited	
Invento-ry	[LRBLIL R]	I-LR	Process control	Checks validity of expiration date based on maximum days	Yes	Limited	
Invento-ry	[LRBLIL R]	I-LR	Process control	Restricts entry of components to those in File #66 w/suppliers, etc.	No	No	
Invento-ry	[LRBLIL R]	I-LR	Process control	Limits re-entry of units to those with dispositions of "S" or "R"	Yes	No	
Invento-ry	[LRBLPE D]	I-PD	Process control	Restricts component selection to those appropriately defined	Yes	No	
Invento-ry	[LRBLPE D]	I-PD	Process control	Restricts unit selection to those of appropriate age	Yes	Limited	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDATION
Inventory	[LRBLPED]	I-PD	Process control	Prevents entry of expiration date without time	Yes	No	
Inventory	[LRBLPED]	I-PD	Decision support	Identifies low volume units	Yes	Yes	
Inventory	[LRBLPED]	I-PD	Process control	Assigns final disp. to units w/ 0 ml. remaining volume after split	No	No	
Inventory	[LRBLISH]	I-SH	Decision support	Identifies units which were released w/ incomplete results	Yes	Yes	
Inventory	[LRBLIUC]	I-UC	Decision support	Compares current results to unit log-in information	Yes	Yes	
Inventory	[LRBLIUP]	I-UP	Process control	Prevents entry of same antigen as "present" and "absent"	Yes	No	
Inventory	[LRBLIUP]	I-UP	Process control	Updates donor record if appropriate	Yes	Yes	
Inventory	[LRBLIUR]	I-UR	Process control	Prevents release of units from location other than BB	Yes	No	
Donor	[LRBLDCP]	D-CP	Process control	Checks # components prepared against bag type	Yes	No	
Donor	[LRBLDCP]	D-CP	Process control	Ensures that no more than 1 RBC component is prepared	Yes	No	
Donor	[LRBLDCP]	D-CP	Process control	Checks time between collection & component preparation	Yes	No	
Donor	[LRBLDCP]	D-CP	Process control	Compares anticoagulant of collection w/ that for components	Yes	No	
Donor	[LRBLDCP]	D-CP	Process control	Prevents access to donors entered through "Old records"	Yes	No	
Donor	[LRBLDCP]	D-CP	Decision support	Calculates the expiration date	NA	Yes	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Donor	[LRBLDC]	D-DC	Process control	Limits entry of pt. restrictions for auto units to pts in PATIENT file	Yes	No	
Donor	[LRBLDC]	D-DC	Process control	Prevents entry of future donation date/time	Yes	No	
Donor	[LRBLDC]	D-DC	Process control	Prevents entry of duplicate donor IDs within five years	Yes	No	
Donor	[LRBLDC]	D-DC	Process control	Prevents entry of completion date/time prior to start date/time	Yes	No	
Donor	[LRBLDC]	D-DC	Process control	Eliminates some gender specific questions on DH form	No	NA	
Donor	[LRBLDC]	D-DC	Process control	Prevents access to donors entered through "Old records"	Yes	No	
Donor	[LRBLDC]	D-DC	Decision support	Checks for duplicate donors	Yes	Yes	
Donor	[LRBLDC]	D-DC	Decision support	Calculates collection volume	NA	Yes	
Donor	[LRBLDR]	D-DH	Process control	Prevents printing of regular DH form if donor is perm. deferred	Yes	No	
Donor	[LRBLDR]	D-DH	Decision support	Includes special comments on DH form if appropriate	NA	Yes	
Donor	[LRBLDO]	D-DO	Process control	Prevents entry of duplicate donor IDs within 5 years	Yes	No	
Donor	[LRBLDPH]	D-DP	Process control	Prevents entry of same antigen as "present" and "absent"	Yes	No	
Donor	[LRBLDLG]	D-DR	Process control	Prevents entry of data if donor is perm. deferred	Yes	Limited	
Donor	[LRBLDLG]	D-DR	Process control	Enters donor in donor letter print queue	No	No	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Donor	[LRBLDLG]	D-DR	Process control	Limits entry of pt. restrictions for auto units to pts in PATIENT file	Yes	No	
Donor	[LRBLDLG]	D-DR	Decision support	Checks age of donor to see if outside limits	Yes	Yes	
Donor	[LRBLDLG]	D-DR	Decision support	Checks for duplicate donors	Yes	Yes	
Donor	[LRBLDUC]	D-DU-DC	Process control	Compares recheck inf. to original processing results	Yes	Yes	
Donor	[LRBLDUC]	D-DU-DC	Process control	Prevents same tech from entering both original & recheck results	Yes	Limited	
Donor	[LRBLDAT]	D-DU-DT	Decision support	Checks current results against donor's historical record	Yes	Yes	
Donor	[LRBLDT]	D-DU-LA	Process control	Generates bulletin if + results entered after component released	Yes	No	
Donor	[LRBLDT]	D-DU-LA	Process control	Prevents editing of results after components are released	Yes	Limited	
Donor	[LRBLDT]	D-DU-LA	Decision support	Adds units needing repeat testing to worklist	Yes	Yes	
Donor	[LRBLDRR]	D-DU-LR	Process control	Checks current ABO/Rh results against historical record	Yes	Limited	
Donor	[LRBLDRR]	D-DU-LR	Process control	Prevents release of homologous units w/ + disease marker testing	Yes	Limited	
Donor	[LRBLDRR]	D-DU-LR	Process control	Enters units into inventory if "released"	No	No	

Control Functions in the Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	OPTION NAME	MENU NAME	TYPE OF CONTROL	CONTROL FUNCTION DESCRIPTION	WARNING MESSAGE	OVERRIDE CAPABILITY	VALIDA-TION
Donor	[LRBLDR R]	D-DU-LR	Process control	Verifies accuracy of labeling via bar code reader	Yes	No	
Donor	[LRBLDR R]	D-DU-LR	Process control	Prevents same tech doing both labeling & verifying if manual	Yes	No	
Donor	[LRBLDR R]	D-DU-LR	Process control	Flags auto units released to inventory with +/incomplete testing	No	NA	
Donor	[LRBLDR R]	D-DU-LR	Process control	Flags homol. units released to inven. with incomplete testing	No	NA	

Note: The Inquiry and Reports menu options do not have any type of data entry, and therefore, have not been included. Conversely, the Supervisory menu options have significant control in determining how the package works. The specific details are included in the Blood Bank User Manual. In addition, the checks provided in the routine data entry options are NOT generally included in these options. These menu options are locked with the additional LRBLSUPER key. These options allow override capability for many of the control functions available in the routine data entry options. These options do, however, provide more control than straight FileManager access, as well as updating the appropriate cross references and other related data.

V. 5.2 Test Case Tracking

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

Validation testing must include ALL control functions (see separate listing) as well as routine operations. Routine operations to be tested include: (1) all data entry methods, (2) security procedures, i.e., access beyond the LRLAB, LRVERIFY and LRBLOODBANK security keys must be noted, (3) software program overrides, (4) data storage and retrieval of results/data, and (5) traceability of results, including changes in significant data elements and test results. Test conditions must include: (1) normal, i.e., valid data sets used to produce normal outputs,
(2) exceptional, i.e., valid data which provides an unusual twist for the program to force the program to react to something that might be unexpected, (3) boundary, i.e., to force the evaluation of conditions that are of borderline validity, (4) stress, i.e., significant volume of data to determine whether the system has acceptable performance limits, and (5) invalid data, i.e., invalid data designed to force a program to prove that it can detect invalid data input. Although the Blood Bank User Manual can be consulted for examples, the test cases MUST reflect the actual procedures and workflow of the VA medical center. Acceptance criteria must detail: (1) definition of successful completion of test case, (2) a determination of whether the user requirements were met, and (3) an evaluation of any unexpected occurrences, i.e., are they critical or not?

Documentation of the validation testing must include: (1) observations from testing, e.g., screen prints, logging files, printed reports, written transcriptions, data tapes, data disks, etc., (2) the review of the test cases, i.e., acceptability of output based on data entered (3) a record/log of unusual occurrences, bugs, deviations from User Manual & resolution, (4) the conclusion of the testing, i.e., acceptable or not, (5) any corrective action, (6) a date/signature of approval and (7) the implementation date/time. This documentation must be also be retrievable by function.

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Donor	D-CP	[LRBLDCP]	Collection disposition/ component preparation	Data entry						
Donor	D-DC	[LRBLDC]	Donor collection/ processing	Data entry						
Donor	D-DD	[LRBLDD]	Donor de-mographics	Data entry (mainly editing)						
Donor	D-DH	[LRBLDR]	Donor history, physical & consent form	Form generation (donor history)						
Donor	D-DO	[LRBLDO]	Old blood donor records	Data entry (historic ONLY!)						
Donor	D-DP	[LRBLDPH]	Donor phe-notyping	Data entry/ editing						
Donor	D-DR	[LRBLDLG]	Donor registration	Data entry/ editing						
Donor	D-DU-CR	[LRBLDCR]	Component preparation report	Report generation						
Donor	D-DU-DA	[LRBLDTA]	Abnormal donor tests	Report generation						
Donor	D-DU-DC	[LRBLDUC]	Donor unit ABO/Rh recheck	Data entry/ editing (optional)						
Donor	D-DU-DL	[LRBLDDAW]	Donor unit testing worklist	Report generation						
Donor	D-DU-DR	[LRBLDTR]	Donor unit testing prooflist	Report generation						
Donor	D-DU-DS	[LRBLDTRS]	Donor unit supplemen-tal testing prooflist	Report generation						
Donor	D-DU-DT	[LRBLDDAT]	ABO/Rh testing of donor units	Data entry/ editing						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Donor	D-DU-LA	[LRBLDT]	Lab tests (not ABO/Rh) on donor units	Data entry/ editing						
Donor	D-DU-LR	[LRBLDRR]	Test review/ component labeling/ release	Result review/ data entry						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

___ I approve implementation of the software effective _____.

___ I do NOT approve implementation until necessary corrective action is taken.

Comments:

Signature: _____ (BB Supervisor)
Date: _____

Signature: _____ (IRM staff/LIM)
Date: _____

Signature:
_____
(BB Medical Director)
Date: _____
Date/time Implemented in Production:
_____

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Inven tory	I-DN	[LRBLID N]	Disposition not transfused	Data entry						
Inven-tory	I-DR	[LRBLID R]	Disposition-relocation	Data entry						
Inven-tory	I-LR	[LRBLIL R]	Log-in regular (invoices)	Data entry						
Inven-tory	I-LS	[LRBLIL S]	Enter blood inventory typing charges	Data entry						
Inven-tory	I-PD	[LRBLPE D]	Pediatric unit preparation	Data entry						
Inven-tory	I-SH	[LRBLIS H]	Shipping invoices for blood components	Form generation						
Inven-tory	I-UC	[LRBLIU C]	Unit ABO/Rh con-firmation	Data entry						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Inven-tory	I-UP	[LRBLIUP]	Unit phenotyping	Data entry/ editing						
Inven-tory	I-UR	[LRBLIUR]	Units release to stock (cancel) by patient	Data entry (i.e., unit status change)						
Inven-tory	I-UW	[LRBLIW]	Inventory ABO/Rh testing worksheet	Form generation						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

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Signature: _____ (IRM staff/LIM)
Date: _____

Signature:
_____
(BB Medical Director)
Date: _____
Date/time Implemented in Production: _____

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Patient	P-DA	[LRDELOG]	Remove an accession	Data editing						
Patient	P-DT	[LRBLPT]	Blood trans-fusion results	Data entry						
Patient	P-ET	[LRBLPET]	Enter test data	Data entry						
Patient	P-PR	[LRBLPER]	Previous records	Data entry (historic ONLY!)						
Patient	P-RS-CR	[LRBLPCS]	Blood component requests	Data entry						
Patient	P-RS-US	[LRBLPIC]	Select units for patients	Data entry						
Patient	P-RS-XM	[LRBLPX]	Enter crossmatch results	Data entry						
Patient	P-SI	[LRBLPSI]	Special instructions	Data entry/ editing						
Patient	P-SL	[LRBLPLOGIN]	Specimen log-in	Data entry						
Patient	P-TA	[LRADDTOACC]	Add tests to a given accession	Data editing						
Patient	P-TD	[LRTSTOUT]	Delete test from an accession	Data editing						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Patient	P-Tl	[LRBLTTW]	Test worklist	Form generation						
Patient	P-WL	[LRUW]	Accession area worklist	Form generation						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

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Date: _____

Signature: _____
(BB Medical Director)
Date: _____
Date/time Implemented in Production: _____

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Inquiries	Q-DI	[LRBLQSDD]	Single donor demo graphic information	Data inquiry only						
Inquiries	Q-OR	[LROS]	Order/test status	Data inquiry only						
Inquiries	Q-PA	[LRUPT]	Show list of accessions for a patient	Data inquiry only						
Inquiries	Q-PH	[LRBLPH]	Patient Medication List	Data inquiry only						
Inquiries	Q-PR	[LRBLQDR]	Patient blood bank record	Data inquiry only						
Inquiries	Q-SD	[LRBLQSD]	Single donor information	Data inquiry only						
Inquiries	Q-ST	[LRBLQST]	Single unit status	Data inquiry only						
Inquiries	Q-SU	[LRBLIPSD]	Single unit information - display	Data inquiry only						
Inquiries	Q-UA	[LRBLQPR]	Units assigned/ components requested	Data inquiry only						
Inquiries	Q-VT	[LREV]	Test description information	Data inquiry only						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Ward	W-PO	[LRUPT]	Show list of accessions for a patient	Data inquiry only						
Ward	W-PR	[LRBLQ DR]	Patient blood bank record	Data inquiry only						
Ward	W-TI	[LREV]	Test description information	Data inquiry only						
Ward	W-UA	[LRBLQP R]	Units assigned/ components requested	Data inquiry only						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

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Signature: _____ (BB Supervisor)
Date: _____

Signature: _____ (IRM staff/LIM)
Date: _____

Signature: _____
(BB Medical Director)
Date: _____
Date/time Implemented in Production: _____

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Reports	R-AR	[LRBLPR]	Patient antibody report (short list)	Report generation						
Reports	R-BR-1	[LRBLPADD]	Add BB patient(s) to report queue	Data entry						
Reports	R-BR-2	[LRBLPDELETE]	Delete BB report print queue	Data/ editing						
Reports	R-BR-3	[LRBLPPRINT]	Print single BB patient report	Report generation						
Reports	R-BR-4	[LRBLPPRINT]	Print all BB patient reports on print queue	Report generation						
Reports	R-BR-5	[LRBLCN]	Blood bank consultation reports	Report generation						
Reports	R-CT	[LRBLILA]	Unit CAUTION tag labels	Caution tag label generation						
Reports	R-CV	[LRBLICV]	CMV antibody status report	Report generation						
Reports	R-DR-CD	[LRBLDCD]	Collection disposition report	Report generation						
Reports	R-DR-DR-DA	[LRBLDDA]	Gallon donor report	Report generation						
Reports	R-DR-DR-DD	[LRBLDDR]	Donor deferral report	Report generation						
Reports	R-DR-DR-DL	[LRBLDPL]	List of donors by last attempt date	Report generation						
Reports	R-DR-DR-DS	[LRBLDSC]	Donor scheduling report	Report generation						
Reports	R-DR-DR-ED	[LRBLDEDR]	Emergency donor report	Report generation						
Reports	R-DR-DR-FD	[LRBLDFD]	First time blood donors	Report generation						

Report continues on the next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Reports	R-DR-DR-GA	[LRBLDGA]	Group affiliation report	Report generation						
Reports	R-DR-DR-GD	[LRBLDGDR]	Group donation report	Report generation						
Reports	R-DR-DR-MC	[LRBLDMC]	Mobile (collection site) report	Report generation						
Reports	R-DR-DR-ML	[LRBLDMR]	Donor monthly/ holiday recall list	Report generation						
Reports	R-DR-DR-PC	[LRBLDPCR]	Patient credits from blood donations	Report generation						
Reports	R-DR-DR-PL	[LRBLDAP]	Apheresis donor list	Report generation						
Reports	R-DR-DR-SD	[LRBLDSD]	Donor short draw report	Report generation						
Reports	R-DR-DR-XD	[LRBLDL]	Donor lists/label/ letters	Report generation						
Reports	R-DR-DS	[LRBLDTRS]	Donor unit supplemental testing prooflist	Report generation						
Reports	R-DR-DT	[LRBLDTR]	Donor unit testing prooflist	Report generation						
Reports	R-DR-PD	[LRBLDPD]	Permanent donor deferral report	Report generation						
Reports	R-DR-PR	[LRBLDPRR]	Blood product rejection report	Report generation						
Reports	R-IS-DU	[LRBLIDU]	Disposition not transfused	Report generation						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Reports	R-IS-SU-SD	[LRBLIPSD]	Single unit information-display	Report generation						
Reports	R-IS-SU-SP	[LRBLIPSP]	Single unit information-print	Report generation						
Reports	R-IS-UA	[LRBLRUA]	Units available (indate/no disposition)	Report generation						
Reports	R-IS-UN	[LRBLRUN]	Units with no disposition	Report generation						
Reports	R-IS-UX	[LRBLIX]	Units on Xmatch by date/time xmatched	Report generation						
Reports	R-IT-IN	[LRBLRIN]	Supplier invoices (inventory)	Report generation						
Reports	R-IT-IS	[LRBLRIS]	Special typing charges (inventory)	Report generation						
Reports	R-IT-IT	[LRBLRIT]	Supplier transactions (inventory)	Report generation						
Reports	R-PL	[LRBLPAL]	Patient accession list	Report generation						
Reports	R-TR	[LRBLTA]	Transfusion reaction count	Report generation						
Reports	R-UP	[LRBLIPH]	Phenotyped units available	Report generation						
Reports	R-UR-AA	[LRBLAA]	Crossmatch/ Trans-fusions by Specialty/ Physician	Report generation						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Reports	R-UR-AR	[LRBLJB]	Autologous disposition report	Report generation						
Reports	R-UR-CT	[LRBLRCT]	Crossmatch: transfusion report	Report generation						
Reports	R-UR-IS	[LRBLIRB]	Unit issue book entries	Report generation						
Reports	R-UR-IT	[LRBLPRIT]	Inappro-priate transfusion requests report	Report generation						
Reports	R-UR-PT	[LRBLPIT]	Prolonged transfusion times	Report generation						
Reports	R-UR-RS	[LRBLJUT]	Transfused RBC for treating specialty	Report generation						
Reports	R-UR-TH	[LRBLPCH]	Patient transfusions & hematology results	Report generation						
Reports	R-UR-TR	[LRBLITR]	Transfusion data report	Report generation						
Reports	R-UR-TS	[LRBLITS]	Transfusion statistics by specialty	Report generation						
Reports	R-UR-TX	[LRBLTXA]	Transfusion followup tests	Report generation						
Reports	R-WK-AD	[LRBLA]	Blood Bank Administra-tive Data	Report generation						
Reports	R-WK-CR	[LRBLDCR]	Component preparation report	Report generation						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT	MENU	OPTION	MENU	OPTION	Limited	ACCEPTABILITY OF TEST CASES				
AREA	ABBREV	NAME	NAME	DESCRIP-TION	Access?	Normal	Except	Bound	Stress	Invalid
Reports	R-WK-CT	[LRUPACT]	Test counts by treating specialty	Report generation						
Reports	R-WK-IR	[LRBLC]	Inventory ABO/Rh counts	Report generation						
Reports	R-WK-TC	[LRBLRTC]	Test counts by location	Report generation						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

___ I approve implementation of the software effective _____.

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Comments:

Signature: _____ (BB Supervisor)
Date: _____

Signature: _____ (IRM staff/LIM)
Date: _____

Signature: _____
(BB Medical Director)
Date: _____
Date/time Implemented in Production: _____

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Supervi-sor	S-DO	[LRCEN DEL]	Delete entire order or individual tests	Data editing						
Supervi-sor	S-ED-DC	[LRBLD A]	Donor collection/d eferral edit	Data entry/ editing						
Supervi-sor	S-ED-DD	[LRBLDE F]	Permanent deferral/ special comments	Data entry/ editing						
Supervi-sor	S-ED-DE	[LRBLDE DIT]	Blood donor group/type edit	Data entry/ editing						
Supervi-sor	S-ED-DH	[LRBLSE H]	Edit donor history questions	Form content definition						
Supervi-sor	S-ED-DL	[LRBLDL T]	Enter/edit donor letters	Letter content definition						
Supervi-sor	S-ED-DP	[LRBLDC X]	Edit donor consent	Form content definition						
Supervi-sor	S-EF-AA	[LRBLSN O]	Edit corre-sponding antigen/ antibody	File setup & software control						
Supervi-sor	S-EF-BD	[LRBLSE F]	Edit blood bank descrip-tions file	File setup & software control						
Supervi-sor	S-EF-BP	[LRBLSE B]	Edit blood product file	File setup & software control						
Supervi-sor	S-EF-BU	[LRBLSE U]	Edit blood bank utility file	File setup & software control						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Supervi-sor	S-EF-LL	[LRBLSLL]	Edit lab letter file	Consultation letter content definition						
Supervi-sor	S-EF-MS	[LRBLSMS]	Maximum surgical blood order edit	File setup & software control						
Supervi-sor	S-EF-SP	[LRBLSSP]	Edit blood bank site parameters	Edit template setup & software control						
Supervi-sor	S-EF-UE	[AJERPME]	User group manual edit	Report content						
Supervi-sor	S-EF-UM	[AJERPUM]	Print a user group manual	Report generation						
Supervi-sor	S-EI-DI	[LRBLSED]	Edit unit disposition fields	Data entry/ editing						
Supervi-sor	S-EI-FR	[LRBLSEE]	Free autologous/ directed donor units	Data entry (i.e., change in unit status						
Supervi-sor	S-EI-LI	[LRBLSEL]	Edit unit log-in	Data editing						
Supervi-sor	S-EI-PI	[LRBLSEC]	Edit unit-patient fields	Data entry/ editing						
Supervi-sor	S-EI-PP	[LRBLJM]	Edit pooled blood product	Data entry/ editing						
Supervi-sor	S-EP-LD	[LRDLST]	Tests for display on patient look-up	Software control						
Supervi-sor	S-EP-PE	[LRBLPEDIT]	Patient ABO/Rh edit	Data entry/ editing						
Supervi-sor	S-EP-PP	[LRBLSPP]	Edit patient previous transfusion record	Data entry/ editing						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Supervi-sor	S-EP-TH	[LRBLSET]	Tests for inclusion in trans-fusion report	Software control						
Supervi-sor	S-EP-TR	[LRBLPTXR]	Unknown unit trans-fusion reaction	Data entry/ editing						
Supervi-sor	S-EP-TX	[LRBLTX]	Tests for trans-fusion follow-up	Software control						
Supervi-sor	S-FD	[LRUFILE]	Outline for one or more files	Report generation						
Supervi-sor	S-II	[LRBLII]	Blood bank inventory integrity report	Integrity check/ Report generation						
Supervi-sor	S-LL	[LRBLSF]	Edit number of lines in a label	Form/ label format control						
Supervi-sor	S-SR-AD	[LRBLAD]	Print data change audits	Report generation						
Supervi-sor	S-SR-AP	[LRBLPAB]	Atibodies by patient	Report generation						
Supervi-sor	S-SR-AR	[LRBLPRA]	Patient antibody report (long list)	Report generation						
Supervi-sor	S-SR-CD	[LRBLDCU]	Cumula-tive donations and awards	Calcula-tions & Report generation						
Supervi-sor	S-SR-DA	[LRBLDAWARD]	Acknowl-edge donor award by deletion	Data editing						

Report continues on next page...

Tracking of Test Case Testing for Version 5.2, Blood Bank Module, DHCP Laboratory Package Software

FUNCT AREA	MENU ABBREV	OPTION NAME	MENU NAME	OPTION DESCRIP-TION	Limited Access?	ACCEPTABILITY OF TEST CASES				
						Normal	Except	Bound	Stress	Invalid
Supervi-sor	S-SR-PL	[LRBLSDPL]	Delete a user's patient list	Data editing						
Supervi-sor	S-SR-PU	[LRBLRUF]	Print units with final disposition	Report generation						
Supervi-sor	S-SR-PX	[LRBLDEX]	Print ex-donors	Report generation						
Supervi-sor	S-SR-RA	[LRBLAR]	Remove audit data changes	Data deletion						
Supervi-sor	S-SR-RI	[LRBLSRI]	Remove inappro-priate trans-fusion requests	Data deletion						
Supervi-sor	S-SR-RU	[LRBLSER]	Remove units with final disposi-tion	File entry deletion						
Supervi-sor	S-SR-RX	[LRBLDK]	Remove ex-donors	File entry deletion						
Supervi-sor	S-SR-VD	[LRBLVAL]	Blood bank validation document-ation	Data entry						

Based on a review of the actual observations from the testing of both the control functions and the routine operations AND the record of any unusual occurrences, bugs and deviations from the Blood Bank User Manual (all of which are documented separately), I concur with the acceptability of the test cases as noted above.

___ I approve implementation of the software effective _____.

___ I do NOT approve implementation until necessary corrective action is taken.

Comments:

Signature: _____ (BB Supervisor)
Date: _____

Signature: _____ (IRM staff/LIM)
Date: _____

Signature: _____
(BB Medical Director)
Date: _____
Date/time Implemented in Production: _____

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