TEXT INTEGRATION UTILITIES (TIU) & AUTHORIZATION/SUBSCRIPTION UTILITY (ASU)

INSTALLATION GUIDE

Version 1.0

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Department of Veterans Affairs
Technical Service
Computerized Patient Record System Product Line

Revision History

Patch TIU*1*234 Disallow general edit of signed docs	Page 33	Jan 2008	REDACTED
Patch TIU*1*220 Edit expected cosigner	Page 33	Dec 2006	REDACTED

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INTRODUCTION

Purpose of Package:
Text Integration Utilities (TIU) is a collection of software tools that manage clinical documents in a standardized way. They allow clinicians and other users to view, enter, edit, sign, and print different kinds of documents from a single program.

The initial release of TIU includes Discharge Summary and Progress Notes. TIU replaces the previous versions of these DHCP packages and incorporates all of their functionality.

Intended Audience for this Manual:
The *Text Integration Utilities Installation Guide* provides VAMC IRM Services with the technical information necessary to properly install the TIU package.

See the *TIU Implementation Guide* for pre-installation steps and post-installation set-up instructions

Related Manuals
Text Integration Utilities (TIU) Implementation and Training Guide
Text Integration Utilities (TIU) Technical Manual
Text Integration Utilities (TIU) Clinical Coordinator & User Manual
Text Integration Utilities (TIU) Quick Reference Guide
Authorization/Subscription (ASU) Technical Manual

Preliminary Considerations

Π Namespaces

Text Integration Utilities : TIU
Authorization/Subscription Utility: USR

Π Software Requirements

The following packages and patches must be installed before TIU:

Package	Minimum Version
Adverse Reaction Tracking (ART)	4.0
Health Summary (recommended)	2.7
Incomplete Record Tracking (IRT), if you plan to interface with it	5.3
Kernel	8.0
Patient Care Encounter (PCE)	1.0
Patient Information Management System (PIMS)	5.3
VA FileMan	21
Visit Tracking	2.0
	Patch
Incomplete Record Tracking (IRT)	DG*5.3*112
List Manager	VALM *1*1
Order Entry/Results Reporting (OE/RR)	OR*2.5*51
Progress Notes	GMRP*2.5*44 GMRP*2.5*47
XQOR (Unwinder)	XU*8.0*56

Π Resource Requirements

Be sure to place ^TIU on a database volume with LOTS of space to grow. You can calculate the disk space required using the following formula:

Component	Resource Requirements
Progress Notes	1.6K per Note
Discharge Summary	8.1K per Summary
Visit Tracking	100 bytes per record

Total disk requirement=(# of Progress Notes X 1.5KB/note) + (# of Discharge Summaries X 8KB/summary)+(# visits X 100 bytes).

NOTE: You will also see growth in the encounter file.

Π Global Instructions

The file list on the next page shows the globals that are installed.

- *Alpha cluster configuration (DSM)*: The TIU global ^TIU and ASU global ^USR **must** be placed and protected on the proper volume set using the %GLOMAN utility.

- *OPEN M*: Use the GUI system utility to create and change the globals and their attributes.

- On DSM/VMS and OPEN M/NT systems, the globals should be defined as follows for the install:

	System	World	Group	UCI/USER
DSM	RWP	RWP	RWP	RWP
OPEN M	RWD	RWD	RWD	RWD

Journaling

System	During Installation	During Conversion	After Conversion
DSM/VMS **OPEN M/NT** **MSM/NT**	Leave journaling enabled	Disable journaling *only* on the ^TIU global. Leave journaling enabled on all other globals, including ^GMR	Re-enable

☞ **NOTE**: Sites using Kernel Part 3 (optional) must set user access to these files. See the *TIU Security Guide* (in the *TIU Technical Manual*) for specific information.

Π TIU and ASU Files

TIU Files

File Name	File #	Global	Data
TIU Document	8925	^TIU(8925	
TIU Document Definition	8925.1	^TIU(8925.1	Yes
TIU Upload Buffer	8925.2	^TIU(8925.2	
TIU Upload Error Definition	8925.3	^TIU(8925.3	Yes
TIU Upload Log	8925.4	^TIU(8925.4	
TIU Audit Trail	8925.5	^TIU(8925.5	
TIU Status	8925.6	^TIU(8925.6	Yes
TIU Multiple Signature	8925.7	^TIU(8925.7	
TIU Search Categories	8925.8	^TIU(8925.8	Yes
TIU Problem Link	8925.9	^TIU(8925.9	
TIU External Data Link File	8925.91	^TIU(8925.91	
TIU Print Parameters	8925.93	^TIU(8925.93	
TIU Division Print Parameters	8925.94	^TIU(8925.94	
TIU Document Parameters	8925.95	^TIU(8925.95	Yes
TIU Conversions	8925.97	^TIU(8925.97	Yes
TIU Personal Document Type List	8925.98	^TIU(8925.98	
TIU Parameters	8925.99	^TIU(8925.99	
TIU Personal Preferences	8926	^TIU(8926	

ASU Files

File Name	File #	Global	Data
USR CLASS	8930	^USR(8930	Yes
USR AUTHORIZATION/SUBSCR	8930.1	^USR(8930.1	Yes
USR ROLE	8930.2	^USR(8930.2	Yes
USR CLASS MEMBERSHIP	8930.3	^USR(8930.3	
USR SEARCH CATEGORIES	8930.4	^USR(8930.4	Yes
USR RECORD STATUS	8930.6	^USR(8930.6	Yes
USR ACTION	8930.8	^USR(8930.8	Yes

Π Routines Installed

ASU Routines

USRAEDT	USRCLASS	USRCLST	USRECLST	USRIL
USRL	USRLA	USRLM	USRLS	USRM
USRMEMBR	USRMLST	USRNTEG	USRPOST	USRPRE
USRPROV	USRRUL	USRRUL1	USRRULA	USRULST
USRUM	USRUMMBR			

TIU Routines

TIUADD	TIUALRT	TIUAPIOK	TIUAUDIT	TIUBPEDT
TIUBR	TIUBRWS	TIUCHLP	TIUCNSLT	TIUDD
TIUDD0	TIUDD01	TIUDD8	TIUDD98	TIUDEV
TIUDIRH	TIUDIRT	TIUDPEDT	TIUDSCNV	TIUEDI1
TIUEDI2	TIUEDIH	TIUEDIM	TIUEDIT	TIUEDITR
TIUELST	TIUENV	TIUEPRNT	TIUFA	TIUFA1
TIUFC	TIUFC1	TIUFD	TIUFD1	TIUFD2
TIUFD3	TIUFD4	TIUFH	TIUFH1	TIUFHA
TIUFHA1	TIUFHA2	TIUFHA3	TIUFHA4	TIUFHA5
TIUFHA6	TIUFHLP	TIUFHLP1	TIUFJ	TIUFL
TIUFL1	TIUFLA	TIUFLA1	TIUFLD	TIUFLD1
TIUFLF	TIUFLF1	TIUFLF2	TIUFLF3	TIUFLF4
TIUFLF5	TIUFLF6	TIUFLF7	TIUFLF8	TIUFLJ
TIUFLJ1	TIUFLLM	TIUFLLM1	TIUFLLM2	TIUFLLM3
TIUFLT	TIUFLX	TIUFPR	TIUFT	TIUFT1
TIUFX	TIUFXHL1	TIUFXHLX	TIUHELP	TIUIL
TIUIL1	TIUIL10	TIUIL2	TIUIL3	TIUIL4
TIUIL5	TIUIL6	TIUIL7	TIUIL8	TIUIL9
TIULA	TIULA1	TIULA2	TIULA3	TIULA4
TIULAB	TIULADR	TIULAPI	TIULAPIC	TIULAPIS
TIULC	TIULC1	TIULD	TIULE	TIULEXP
TIULF	TIULG	TIULIP	TIULM	TIULMED
TIULO	TIULO1	TIULP	TIULP1	TIULQ
TIULQ2	TIULS	TIULS1	TIULV	TIULX
TIUMOVE	TIUNTEG	TIUNTEG0	TIUPD	TIUPEDSP
TIUPEFIX	TIUPEVN1	TIUPEVNT	TIUPL	TIUPLST
TIUPNAPI	TIUPNCV	TIUPNCV1	TIUPNCV2	TIUPNCV3
TIUPNCV4	TIUPNCV5	TIUPNCV6	TIUPNCV7	TIUPNCV8
TIUPNCVX	TIUPOST	TIUPRD	TIUPRDS	TIUPRDS1
TIUPRDS2	TIUPREF	TIUPRPN	TIUPRPN1	TIUPRPN2
TIUPRPN3	TIUPRPN4	TIUPRPN5	TIUPRPN6	TIUPRPN7
TIUPUTC	TIUPUTD	TIUPUTPN	TIUPUTU	TIUPXAP1
TIUPXAP2	TIUPXAPC	TIUPXAPI	TIUPXAPS	TIUR
TIURA	TIURA1	TIURB	TIURB1	TIURC
TIURD	TIURD1	TIURE	TIURH	TIURL
TIURM	TIURMH	TIUROR	TIURORL	TIURP
TIURPN	TIURPTTL	TIURS	TIURS1	TIURT
TIURTITH	TIURTITL	TIUSRV	TIUSRV1	TIUSRVA
TIUSRVD	TIUSRVE	TIUSRVG	TIUSRVL	TIUSRVL1
TIUSRVLC	TIUSRVLL	TIUSRVLO	TIUSRVLV	TIUSRVP
TIUSRVP1	TIUSRVR	TIUSRVR1	TIUT	TIUTHLP
TIUTSK	TIUU	TIUUPEDT	TIUUPLD	TIUVISIT
TIUVSIT				

Π Post-Installation Routine

A post-installation routine (^USRPOST), part of the KIDS build, installs a number of list templates used by ASU to create User Classes.

SRCFULL or CODEFUL Errors on DSM Systems

On DSM Systems, the compilation of the Input Template TIU ENTER/EDIT PROGRESS NOTE during the KIDS Installation of TIU may result in a MUMPS error, <SRCFULL>, when VA FileMan builds the resulting routines in the TIUEPN* namespace. If this occurs, try invoking DSM with a larger SOURCE BUFFER size (e.g., 30000), and Restart the Kids Installation, which should then run to completion. This results from the excessive size (i.e., ~10,500 bytes) to which ^DIEZ compiles the routines for this particular Input Template.

+NOTE: You don't need to modify the default source buffer or partition size using ^SYSGEN; temporarily increasing the source buffer size for the partition in which TIU is being installed should be sufficient.

You may observe another MUMPS error, <CODEFUL> in the TIUEPN routines, when users attempt to enter Progress Notes. If this should occur, try using ^DIEZ to re-compile the input template, as shown below:

```
> D ^DIEZ
Maximum routine size on this computer (in bytes):(2400-5000):5000//4000

Select INPUT TEMPLATE: TIU ENTER/EDIT PROGRESS NOTE    FILE
#8925^TIUEPN
 Input Template currently compiled under namespace ^TIUEPN.
UNCOMPILE the Input Template? NO// <Enter>
Routine Name: TIUEPN// <Enter>
     Note that ^TIUEPN is already in the routine directory.

Should the compilation run now? y  YES

Compiling TIU ENTER/EDIT PROGRESS NOTE Input Template of File 8925..
'TIUEPN' ROUTINE FILED..
'TIUEPN1' ROUTINE FILED....
'TIUEPN2' ROUTINE FILED..
'TIUEPN3' ROUTINE FILED...
'TIUEPN4' ROUTINE FILED...
'TIUEPN5' ROUTINE FILED...
'TIUEPN6' ROUTINE FILED...
'TIUEPN7' ROUTINE FILED...
'TIUEPN8' ROUTINE FILED....
'TIUEPN9' ROUTINE FILED...
'TIUEPN10' ROUTINE FILED.
>
```

If the <CODEFUL> error persists, use ^DIEZ to "uncompile" the template:

```
> D ^DIEZ
Maximum routine size on this computer (in bytes):(2400-5000):5000//4000
Select INPUT TEMPLATE: TIU ENTER/EDIT PROGRESS NOTE    FILE
#8925^TIUEPN
 Input Template currently compiled under namespace ^TIUEPN.
```

```
UNCOMPILE the Input Template? NO// <ENTER>

Input Template is now uncompiled.
```

INSTALLATION

1 Back up all systems

TIU's direct impact on **V*IST*A** functions outside of its namespace are minimal, but if you can, it's probably wise to do a full back-up within one day of an installation of this magnitude. Users can remain on the system. It is not necessary to disable log-ins during this install process or to install during off-hours, as the impact on the system is minimal.

2 Estimated Installation Time

It takes approximately six minutes each to install TIU and ASU on either Open M or DSM systems. However, the Progress Notes and Discharge Summary conversions take much longer, depending on the number of notes and summaries at your site. Notes convert at the rate of approximately 2300 notes per hour, depending on the length of the notes.

3 Install TIU/ASU first in a training or test account

We recommend that you install TIU/ASU first in a training or test account. Install the required post-install patches (GMRA*4*6, GMTS*2.7*12, GMRP*2.5*45) *after* the installation *and after* the Progress Notes and Discharge Summary conversions—just before cut-over to TIU. These patches and other set-up instructions are described in the *TIU Implementation Guide.* Make sure all of the set-up works as intended and that your users are familiar with the changes before you install TIU into production.

4 Load the distribution for ASU V1.0

Select the option Kernel Installation and Distribution System, XPD MAIN. Choose the Installation option, followed by the option to Load the distribution from ASU1_0.KID, as shown below:

```
>D ^XUP
Setting up programmer environment
Access Code: [your code]
Terminal Type set to: C-VT320
Select OPTION NAME: XPD MAIN       Kernel Installation & Distribution System
          Edits and Distribution ...
          Utilities ...
          Installation ...
Select Kernel Installation & Distribution System Option: INstallation
   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution
Select Installation Option: LOad a Distribution

Enter a Host File:ASU1_0.KID

KIDS Distribution saved on Jun 20, 1997@13:47:55
Comment: AUTHORIZATION/SUBSCRIPTION (ASU) v1.0 (6/20/97)

This Distribution contains Transport Globals for the following
Package(s):
     AUTHORIZATION/SUBSCRIPTION 1.0

Want to Continue with Load? YES// <Enter>
Loading Distribution...

Want to RUN the Environment Check Routine? YES// <Enter>
   AUTHORIZATION/SUBSCRIPTION 1.0
Will first run the Environment Check Routine, USRPRE

** CHECKING DHCP ENVIRONMENT **

Everything looks fine!

Use INSTALL NAME: AUTHORIZATION/SUBSCRIPTION 1.0 to install this
Distribution..
```

5 Verify Checksums in the transport global

Run the option *Verify Checksums in Transport Global* to verify that all routines have the correct checksum. If there are any discrepancies, do not run the Install Package(s) option. Instead, run the Unload a Distribution option to remove the Transport Global from your system. Call your IRM Field Office and report the problem.

```
   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution

Select Installation Option: 2  Verify Checksums in Transport Global
Select INSTALL NAME: AUTHORIZATION/SUBSCRIPTION 1.0       Loaded from
Distribution  6/20/97@16:37:15
=> AUTHORIZATION/SUBSCRIPTION (ASU) v1.0 (6/20/97) ;Created on Jun 20,
1
DEVICE: HOME//   ANYWHERE

PACKAGE: AUTHORIZATION/SUBSCRIPTION 1.0 Jun 20, 1997 4:38 pm      PAGE
1
-------------------------------------------------------------------------
-



   22 Routine checked, 0 failed.
```

6 Install ASU V1.0

The dialogue you see on your screen won't look exactly like the example below, as the KIDS process doesn't allow an exact screen capture.

ASU Installation Example

```
Select Installation Option: INstall Package(s)
Select INSTALL NAME: AUTHORIZATION/SUBSCRIPTION 1.0          Loaded
from Distribution  6/20/97@16:37:15
  => AUTHORIZATION/SUBSCRIPTION (ASU) v1.0 (6/20/97)  ;Created on
Jun 20, 1

This Distribution was loaded on Jun 20, 1997@16:37:15 with header of
AUTHORIZATION/SUBSCRIPTION (ASU) v1.0 (6/20/97)  ;Created on Jun 20,
1997@13:47:55
It consisted of the following Install(s):
AUTHORIZATION/SUBSCRIPTION 1.0

   AUTHORIZATION/SUBSCRIPTION 1.0
Will first run the Environment Check Routine, USRPRE

** CHECKING DHCP ENVIRONMENT **

Everything looks fine!

Install Questions for AUTHORIZATION/SUBSCRIPTION 1.0

Incoming Files:

   8930      USR CLASS  (including data)

   8930.1    USR AUTHORIZATION/SUBSCRIPTION  (including data)

   8930.2    USR ROLE  (including data)

   8930.3    USR CLASS MEMBERSHIP

   8930.4    USR SEARCH CATEGORIES  (including data)

   8930.6    USR RECORD STATUS  (including data)

   8930.8    USR ACTION  (including data)

Want to DISABLE Scheduled Options, Menu Options, and Protocols?
YES// NO

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME// <device of your choice>
```

ASU Installation Print

```
Select OPTION NAME: XPD MAIN       Kernel Installation & Distribution System
          Edits and Distribution ...
          Utilities ...
          Installation ...
Select Kernel Installation & Distribution System Option: Utilities
          Build File Print
          Install File Print
          Convert Loaded Package for Redistribution
          Display Patches for a Package
          Purge Build or Install Files
          Rollup Patches into a Build
          Update Routine File
          Verify a Build
          Verify Package Integrity

Select Utilities Option: Install File Print
Select INSTALL NAME: AUTHORIZATION/SUBSCRIPTION 1.0

INSTALL and BUILD FILES for AUTHORIZATION/SUBSCRIPTION 1.0 and TEXT
INTEGRATION UTILITIES 1.0:

PACKAGE: AUTHORIZATION/SUBSCRIPTION 1.0   Jun 20, 1997 5:23 pm    PAGE
1
                                                COMPLETED
ELAPSED
-------------------------------------------------------------------------
-
STATUS: Install Completed           DATE LOADED: JUN 20, 1997@16:37:15
INSTALLED BY: REDACTED
NATIONAL PACKAGE: AUTHORIZATION/SUBSCRIPTION

INSTALL STARTED: JUN 20, 1997@16:40:01     16:40:30             0:00:29

ROUTINES:                                  16:40:02             0:00:01

FILES:
USR CLASS                                  16:40:04             0:00:02
USR AUTHORIZATION/SUBSCRIPTION             16:40:05             0:00:01
USR ROLE                                   16:40:05
USR CLASS MEMBERSHIP                       16:40:06             0:00:01
USR SEARCH CATEGORIES                      16:40:06
USR RECORD STATUS                          16:40:06
USR ACTION                                 16:40:07             0:00:01

INPUT TEMPLATE                             16:40:19             0:00:12
PROTOCOL                                   16:40:25             0:00:06
OPTION                                     16:40:28             0:00:03

POST-INIT CHECK POINTS:
XPD POSTINSTALL STARTED                    16:40:29             0:00:01
XPD POSTINSTALL COMPLETED                  16:40:29

INSTALL QUESTION PROMPT
ANSWER
```

```
XPZ1   Want to DISABLE Scheduled Options, Menu Options, and Protocols
NO
MESSAGES:
```

ASU Installation Print, cont'd

```
 Install Started for AUTHORIZATION/SUBSCRIPTION 1.0 :
               Jun 20, 1997@16:40:01

 Installing Routines:
               Jun 20, 1997@16:40:02

 Installing Data Dictionaries:
               Jun 20, 1997@16:40:07

 Installing Data:
               Jun 20, 1997@16:40:19

 Installing PACKAGE COMPONENTS:

 Installing INPUT TEMPLATE

 Installing PROTOCOL

 Installing OPTION
               Jun 20, 1997@16:40:28

 Running Post-Install Routine: ^USRPOST

'USR DEFINE CLASSES' List Template...
  Filed.

'USR LIST MEMBERSHIP BY CLASS' List Template...
  Filed.

'USR LIST MEMBERSHIP BY USER' List Template...
  Filed.

'USR RULE BROWSER' List Template...
  Filed.

 Updating Routine file...

 Updating KIDS files...

 AUTHORIZATION/SUBSCRIPTION 1.0 Installed.
               Jun 20, 1997@16:40:30
Install Started for AUTHORIZATION/SUBSCRIPTION 1.0 :
               Jun 20, 1997@16:40:01

 Installing Routines:.....................
               Jun 20, 1997@16:40:02

 Installing Data Dictionaries: ........
               Jun 20, 1997@16:40:07

 Installing Data: ....
               Jun 20, 1997@16:40:19

 Installing PACKAGE COMPONENTS:
```

```
Installing INPUT TEMPLATE.....

Installing PROTOCOL..........
```

ASU Installation Print, cont'd

```
  Located in the USR (AUTHORIZATION/SUBSCRIPTION) namespace..
  Located in the USR (AUTHORIZATION/SUBSCRIPTION) namespace..
  Located in the USR (AUTHORIZATION/SUBSCRIPTION) namespace..
  .
  .
  .
  Located in the USR (AUTHORIZATION/SUBSCRIPTION) namespace..

 Installing OPTION........
               Jun 20, 1997@16:40:28

 Running Post-Install Routine: ^USRPOST.

'USR DEFINE CLASSES' List Template...
  Filed.

'USR LIST MEMBERSHIP BY CLASS' List Template...
  Filed.

'USR LIST MEMBERSHIP BY USER' List Template...
  Filed.

'USR RULE BROWSER' List Template...
  Filed.

 Updating Routine file......

 Updating KIDS files.......

 AUTHORIZATION/SUBSCRIPTION 1.0 Installed.
               Jun 20, 1997@16:40:30

Install Message sent #2642638
```

7 Load the TIU distribution

Install the TIU package from the distribution by choosing the Install Name **TIU1_0.KID** as shown below. *If the installations abort, run the Unload a Distribution option to remove the Transport Global from your system. Call your IRM Field Office and report the problem.*

TIU Load a Distribution Example

```
> D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT320
Select OPTION NAME: XPD MAIN       Kernel Installation & Distribution System
          Edits and Distribution ...
          Utilities ...
          Installation ...
Select Kernel Installation & Distribution System Option: INstallation
   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution


You have PENDING ALERTS
          Enter  "VA   VIEW ALERTS     to review alerts

Select Installation Option: Load a Distribution
Enter a Host File: BETA:TIU1_0.KID

KIDS Distribution saved on Jun 20, 1997@12:35:55
Comment: TEXT INTEGRATION UTILITIES (TIU) v1.0 (6/20/97)

This Distribution contains Transport Globals for the following
Package(s):
     TEXT INTEGRATION UTILITIES 1.0

Want to Continue with Load? YES//
Loading Distribution...

Want to RUN the Environment Check Routine? YES//
   TEXT INTEGRATION UTILITIES 1.0
Will first run the Environment Check Routine, TIUENV

** CHECKING DHCP ENVIRONMENT **

Everything looks fine!

Use INSTALL NAME: TEXT INTEGRATION UTILITIES 1.0 to install this
Distribution.
```

8 Verify Checksums in the transport global

Run the option *Verify Checksums in Transport Global* to verify that all routines have the correct checksum. If there are any discrepancies, do not run the Install Package(s) option. Instead, run the Unload a Distribution option to remove the Transport Global from your system. Call your IRM Field Office and report the problem.

```
   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution

Select Installation Option: 2  Verify Checksums in Transport Global
Select INSTALL NAME: TEXT INTEGRATION UTILITIES 1.0          Loaded
from Distribution  6/20/97@16:44:05
     => TEXT INTEGRATION UTILITIES (TIU) v1.0 (6/20/97)  ;Created on
Jun 20, 1
DEVICE: HOME//   ANYWHERE

PACKAGE:TEXT INTEGRATION UTILITIES 1.0 Jun 20, 1997 4:44 pm    PAGE
1
-------------------------------------------------------------------
-



   211 Routines checked, 0 failed.
```

9 (optional) Print, Compare, and Backup Transport Globals

Run the next three options on the KIDS Installation menu, if desired.

```
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
```

10 Install TIU

TIU Installation Example

```
Select Installation Option: INstall Package(s)
Select INSTALL NAME: TEXT INTEGRATION UTILITIES 1.0          Loaded
from Distribution  6/20/97@16:44:05
  => TEXT INTEGRATION UTILITIES (TIU) v1.0 (6/20/97)  ;Created on
Jun 20, 1997

This Distribution was loaded on Jun 20, 1997@16:44:05 with header of
TEXT INTEGRATION UTILITIES (TIU) v1.0 (6/20/97)  ;Created on Jun 20,
1997@12:35:55
It consisted of the following Install(s):
TEXT INTEGRATION UTILITIES 1.0

   TEXT INTEGRATION UTILITIES 1.0
Will first run the Environment Check Routine, TIUENV

** CHECKING DHCP ENVIRONMENT **

Everything looks fine!

Install Questions for TEXT INTEGRATION UTILITIES 1.0

Incoming Files:

   8925      TIU DOCUMENT

   8925.1    TIU DOCUMENT DEFINITION  (including data)

   8925.2    TIU UPLOAD BUFFER

   8925.3    TIU UPLOAD ERROR DEFINITION  (including data)

   8925.4    TIU UPLOAD LOG

   8925.5    TIU AUDIT TRAIL

   8925.6    TIU STATUS  (including data)

   8925.7    TIU MULTIPLE SIGNATURE

   8925.8    TIU SEARCH CATEGORIES  (including data)

   8925.9    TIU PROBLEM LINK

   8925.91   TIU EXTERNAL DATA LINK

   8925.93   TIU PRINT PARAMETERS

   8925.94   TIU DIVISION PRINT PARAMETERS

   8925.95   TIU DOCUMENT PARAMETERS  (including data)
```

```
8925.97   TIU CONVERSIONS  (including data)
```

TIU Installation, cont'd

```
   8925.98    TIU PERSONAL DOCUMENT TYPE LIST

   8925.99    TIU PARAMETERS

   8926       TIU PERSONAL PREFERENCES

Want to DISABLE Scheduled Options, Menu Options, and Protocols?
YES// NO

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME// <device of your choice>
```

11 Print results of the installation process

Use the KIDS Install File Print option if you'd like to print out the results of the installation process.

TIU Installation Print-out Example

```
PACKAGE: TEXT INTEGRATION UTILITIES 1.0     Jun 20, 1997 5:25 pm      PAGE 1
                                             COMPLETED           ELAPSED
-------------------------------------------------------------------------------
STATUS: Install Completed                 DATE LOADED: JUN 20, 1997@16:44:05
INSTALLED BY: REDACTED
NATIONAL PACKAGE: TEXT INTEGRATION UTILITIES

INSTALL STARTED: JUN 20, 1997@16:45:52       16:48:32             0:02:40
ROUTINES:                                    16:46:06             0:00:14
FILES:
TIU DOCUMENT                                 16:46:30             0:00:24
TIU DOCUMENT DEFINITION                      16:46:35             0:00:05
TIU UPLOAD BUFFER                            16:46:36             0:00:01
TIU UPLOAD ERROR DEFINITION                  16:46:36
TIU UPLOAD LOG                               16:46:37             0:00:01
TIU AUDIT TRAIL                              16:46:37
TIU STATUS                                   16:46:38             0:00:01
TIU MULTIPLE SIGNATURE                       16:46:38
TIU SEARCH CATEGORIES                        16:46:38
TIU PROBLEM LINK                             16:46:39             0:00:01
TIU EXTERNAL DATA LINK                       16:46:40             0:00:01
TIU PRINT PARAMETERS                         16:46:40
TIU DIVISION PRINT PARAMETERS                16:46:40
TIU DOCUMENT PARAMETERS                      16:46:41             0:00:01
TIU CONVERSIONS                              16:46:41
TIU PERSONAL DOCUMENT TYPE LIST              16:46:42             0:00:01
TIU PARAMETERS                               16:46:43             0:00:01
```

TIU Installation Print, cont'd

```
TIU PERSONAL PREFERENCES                    16:46:44          0:00:01

BULLETIN                                    16:46:49          0:00:05
SECURITY KEY                                16:46:50          0:00:01
FUNCTION                                    16:46:50
PRINT TEMPLATE                              16:46:54          0:00:04
INPUT TEMPLATE                              16:47:03          0:00:09
DIALOG                                      16:47:04          0:00:01
PROTOCOL                                    16:47:37          0:00:33
REMOTE PROCEDURE                            16:47:39          0:00:02
OPTION                                      16:48:16          0:00:37

POST-INIT CHECK POINTS:
XPD POSTINSTALL STARTED                     16:48:21          0:00:05
XPD POSTINSTALL COMPLETED                   16:48:21

INSTALL QUESTION PROMPT                                          ANSWER

XPZ1   Want to DISABLE Scheduled Options, Menu Options, and Protocols NO
MESSAGES:
Install Started for TEXT INTEGRATION UTILITIES 1.0 :
               Jun 20, 1997@16:45:52

 Installing
Routines:.................................................
Jun 20, 1997@16:46:06

 Installing Data Dictionaries: ...................
               Jun 20, 1997@16:46:44

 Installing Data:
               Jun 20, 1997@16:46:48

 Installing PACKAGE COMPONENTS:

 Installing BULLETIN.....

 Installing SECURITY KEY..

 Installing FUNCTION....

 Installing PRINT TEMPLATE......

 Installing INPUT TEMPLATE.............

 Installing DIALOG......

 Installing PROTOCOL...
  Located in the TIU (TEXT INTEGRATION UTILITIES) namespace..
  Located in the TIU (TEXT INTEGRATION UTILITIES) namespace.
  .
  .
  .
  Located in the TIU (TEXT INTEGRATION UTILITIES) namespace..

 Installing REMOTE PROCEDURE.........................
```

```
 Installing
OPTION.....................................................
.....................................
               Jun 20, 1997@16:48:16
```

TIU Installation Print-out, cont'd

```
 Running Post-Install Routine: ^TIUPOST.

'TIU BROWSE FOR CLINICIAN' List Template...
  Filed.

'TIU BROWSE FOR MGR' List Template...
  Filed.

'TIU BROWSE FOR MRT' List Template...
  Filed.

'TIU BROWSE FOR READ ONLY' List Template...
  Filed.

'TIU CHANGE TITLE' List Template...
  Filed.

'TIU COMPLETE NOTES' List Template...
  Filed.

'TIU COPY DOCUMENT' List Template...
  Filed.

'TIU DISPLAY AUDIT TRAIL' List Template...
  Filed.

'TIU DISPLAY FILING EVENT' List Template...
  Filed.

'TIU EDIT ADDENDUM' List Template...
  Filed.

'TIU LINK TO PROBLEM' List Template...
  Filed.

'TIU OE/RR REVIEW PN' List Template...
  Filed.

'TIU REASSIGN' List Template...
  Filed.

'TIU REVIEW BY PATIENT & TITLE' List Template...
  Filed.

'TIU REVIEW BY TITLE' List Template...
  Filed.

'TIU REVIEW DS CLINICIAN' List Template...
  Filed.

'TIU REVIEW DS MGR' List Template...
  Filed.

'TIU REVIEW DS MRT' List Template...
  Filed.
```

```
'TIU REVIEW FILING ERRORS' List Template...
  Filed.
```

TIU Installation Print-out, cont'd

```
'TIU REVIEW FILING EVENTS' List Template...
  Filed.

'TIU REVIEW PN CLINICIAN' List Template...
  Filed.

'TIU REVIEW PN MGR' List Template...
  Filed.

'TIU REVIEW PN MRT' List Template...
  Filed.

'TIU REVIEW SCREEN CLINICIAN' List Template...
  Filed.

'TIU REVIEW SCREEN DS UNSIGNED' List Template...
  Filed.

'TIU REVIEW SCREEN MGR' List Template...
  Filed.

'TIU REVIEW SCREEN MRT' List Template...
  Filed.

'TIU REVIEW SCREEN PN UNSIGNED' List Template...
  Filed.

'TIU REVIEW SCREEN READ ONLY' List Template...
  Filed.

'TIU SEARCH LIST MGR' List Template...
  Filed.

'TIU SEARCH LIST MRT' List Template...
  Filed.

'TIU SEND BACK' List Template...
  Filed.

'TIU SIGN ON CHART' List Template...
  Filed.

'TIU SIGN/COSIGN' List Template...
  Filed.

'TIU VERIFY' List Template...
  Filed.

'TIUFA SORT DDEFS CLIN' List Template...
  Filed.

'TIUFA SORT DDEFS MGR' List Template...
  Filed.

'TIUFC CREATE DDEFS MGR' List Template...
```

```
 Filed.
'TIUFD DISPLAY CLIN' List Template...
 Filed.
```

TIU Installation Print-out, cont'd

```
'TIUFD DISPLAY MGR' List Template...
  Filed.

'TIUFD DISPLAY VIEW' List Template...
  Filed.

'TIUFDJ DISPLAY OBJECT MGR' List Template...
  Filed.

'TIUFH EDIT DDEFS CLIN' List Template...
  Filed.

'TIUFH EDIT DDEFS MGR' List Template...
  Filed.

'TIUFJ OBJECTS CLIN' List Template...
  Filed.

'TIUFJ OBJECTS MGR' List Template...
  Filed.

'TIUFT ITEMS ADD/EDIT/VIEW MGR' List Template...
  Filed.

'TIUFT ITEMS EDIT/VIEW CLIN' List Template...
  Filed.

'TIUFT ITEMS VIEW MGR/CLIN' List Template...
  Filed.

'TIUFX BOILERPLATE TEXT' List Template...
  Filed.

'TIUFX BOILERPLATE TEXT VIEW' List Template...
  Filed.

*** COMPILING HIDDEN PROTOCOL MENUS ***
TIU HIDDEN ACTIONS.
TIU HIDDEN ACTIONS ADVANCED.
TIU HIDDEN ACTIONS OE/RR.
TIU HIDDEN ACTIONS BROWSE.

 Updating Routine file....

 The following Routines were created during this install:
     TIUXRC
     TIUXRC1
     TIUXRC2
     TIUXRC3
     TIUXRC4
     TIUXRC5
     TIUXRC6
     TIUXRC7
     TIUXRC8
```

```
TIUEDS
TIUEDS1
TIUEDS2
```

TIU Installation Print-out, cont'd

```
     TIUEDS3
     TIUEDS4
     TIUEDS5
     TIUEDS6
     TIUEPN
     TIUEPN1
     TIUEPN2
     TIUEPN3
     TIUEPN4
     TIUEPN5
     TIUEPN6
     TIUEPN7
     TIUEPN8
     TIUPREL
     TIUSTA
     TIUSTT
     TIUSTS..

Updating KIDS files.......

TEXT INTEGRATION UTILITIES 1.0 Installed.
              Jun 20, 1997@16:48:32
```

12 Verify that TIU*, USR*, and supporting routines were moved to appropriate systems

Verify that TIU* and USR* routines were moved to appropriate systems, according to your local configurations.

13 (Optional) Print a list of package components

Use the KIDS Build File Print option if you would like a complete listing of package components (e.g., routines and options) exported with this software. You will need to print each build exported with TIU.

14 Create a new Resource Device

After Installing ASU and TIU v1.0, create a new Resource Device called TIU/PXAPI RESOURCE using the option XUDEVEDITRES, as shown below:

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT320

You have 4 new messages.
Select OPTION NAME: XUDEVEDITRES       Resource Device Edit
Resource Device Edit

Select Resource Device: TIU/PXAPI RESOURCE
  Are you adding 'TIU/PXAPI RESOURCE' as a new DEVICE? No// Y  (Yes)
   DEVICE LOCATION OF TERMINAL: NA
   DEVICE $I: TIU/PXAPI RESOURCE
   DEVICE VOLUME SET(CPU): <Enter>
   DEVICE TYPE: RES  RESOURCES
NAME: TIU/PXAPI RESOURCE// <Enter>
$I: TIU/PXAPI RESOURCE// <Enter>
VOLUME SET(CPU): <Enter>
RESOURCE SLOTS: 1// 10

Select Resource Device:
> h
```

NOTE: It is critical that both the name and $I for this device be entered exactly as shown. The number of slots is site configurable. If you find that there are frequently tasks waiting for the TIU/PXAPI RESOURCE device (by checking ^ZTMON), you may wish to increase the number of slots. At West Palm Beach, where approximately 3000 documents per day are entered into the system, ten slots have been found to be adequate.

15 See the TIU Implementation Guide for set-up instructions

The Implementation Guide is intended for Clinical Coordinators or IRMS staff who are assigned to implement and/or maintain TIU and ASU. The guide contains help in the following areas:

- Converting from Progress Notes 2.5 and Discharge Summary 1.0
- Setting up User Classes, Business Rules, Document Definitions, site parameters, and menus
- Using the upload process for other reports (with storage outside TIU)
- Troubleshooting TIU and ASU

RELEASE NOTES

Features of TIU

a. Integration

The initial release of Text Integration Utilities (TIU) Version 1.0 includes Discharge Summary and Progress Notes. Consult Reports will be added when the Computerized Patient Record System (CPRS) is released. TIU has also been designed to meet the needs of other clinical applications that address document handling. Upload of ASCII formatted documents into **V*IST*A**, which in the past has only been possible for Discharge Summaries, is now available for many kinds of documents (including Progress Notes).

Standardized and common user interface
Clinicians can go through the same program to enter, review, and sign Discharge Summaries, Progress Notes, and other clinical documents through TIU.

Database
Clinicians and management can search for and retrieve clinical documents more efficiently because documents reside in a single location within the database. This is also a benefit for other uses such as Incomplete Record Tracking, quality management, results reporting, order checking, research, etc.

Improved Management of Documents—Document Definition Hierarchy
In connection with Authorization/Subscription Utility (ASU), a hospital can set up policies and practices for determining who is responsible or has the privilege for performing various actions on required VHA documents.

TIU has a consistent file structure for defining elements and parameters of a document. It allows

- Entry, edit, deletion, printing, and viewing of document definition
- Shared components
- Ownership (personal or class) of document definitions
- "Locking" of National Standard document definitions
- Boilerplate Text functionality
- Objects such as "PATIENT AGE" which can be embedded in boilerplate text

Release Notes, cont'd

b. More Links to Other Packages.
TIU provides more interfaces for Discharge Summary and Progress Notes with such applications as Health Summary, Problem List, Patient Care Encounter/Visit Tracking, and Incomplete Record Tracking, and will also interface with the Computerized Patient Record System (CPRS) when it is released.

Changes to Progress Notes and Discharge Summary

Although Text Integration Utilities is a new package, it incorporates and modifies functionality of Progress Notes 2.5 and Discharge Summaries 1.0. Changes that users and managers will see to these packages are noted below. When appropriate, a relevant E3R is listed.

New Functionality for Clinical Coordinators & IRM

1. The set of Progress Notes Types released with GMRP 2.5 will no longer be used by TIU. It has been replaced by the Document Hierarchy which gives the site more flexibility in designing and implementing progress notes for their users.

2. Specialized menus are available to assist various user populations. For example, there is a menu for Management Information Service as well as one for Medical Records Technician.

3. A TIU Maintenance Menu has been created to assist IRM and Clinical Coordinator personnel with individualizing the software for use by the site and by the user.

4. Sites are now able to upload progress notes into VISTA.

5. Sites can create and store boilerplates/templates for a variety of notes and consults.

Technical Changes

1. All clinical documents entered by through TIU are stored in ^TIU(8925, TIU Document File. This includes progress notes.

2. A single set of software routines is used to process clinical documents.

New Functionality for Clinicians, Nurses, and HIMS users

Progress Notes

New menus and options
- MAS Progress Note Print Menu
- Integrated menu for Clinicians
- Document Definition Menu for Clinicians
- Ability to go through the OE/RR Clinician Menu (in OE/RR 2.5 or CPRS 1.0) menus to review, sign, or add progress notes
- Ability to see more views of progress notes, for an individual patient or across patients

Printing
- Users can set print formats (**E3R 2550)**
- Outputs for both inpatients and outpatients(**E3R 3304)**
- Discharge patient outputs. (**E3R 3305**)
- New progress notes report (**E3R 4870**)
- Default printing (**E3R 4933**)
- Unsigned notes lists (**E3R 4968**)
- Print notes for author/title (**E3R 6525**)
- Separate page option on print by title (**E3R 7407**)
- Additional configuration for "print by author" (**E3R 7036)**
- Print division associated with hospital location (**E3R 8350**)
- Separate in/outpatient batch prints (**E3R 8457**)

Copy—the new Copy functionality lets you:
- Copy an existing note to an amended progress note (**E3R 4307)**
- Copy group notes (**E3R 4647)**
- Copy an outpatient note and use it for an inpatient note (when an outpatient is admitted). (**E3R 7433**)
- Copy boilerplate text and objects
- Copy components

New types of notes
- Ability to create a new type of formatted note (**E3R 4571**)
- Telephone contact format (**E3R 4599**)
- For Patients with two-levels of care (**E3R 3306**)
- Titles with menus (**E3R 4983**)
- Ability to set up new types (**E3R 5383**)

New Functionality for Clinicians, Nurses, and HIIMS users, cont'd

Signing

- Multiple cosigners (**E3R 5792**)
- Lock review/print options with security key (**E3R 5953**)
- Co-signer allowed to edit note (**E3R 6180**)
- Modify cosigner comment (**E3R 7274**)
- Signature block text (**E3R 6549**)
- VA alert for unsigned notes (**E3R 6961**)
- Signature title (**E3R 7023**)
- Editing of title and location in unsigned note (**E3R 7310**)
- Addition of co-signer's name (**E3R 7519**)
- Modified patient/author display for co-sign options (**E3R 7522**)
- Ability to look up unsigned progress notes by patient (**E3R 8704**)
- Modified co-sign progress note(s) by author option (**E3R 9038**)
- Editing of progress note by co-signer before signing (**E3R 5172**)

Other

- Expanded title to maximum length (**E3R 6266**)
- Patient location field (**E3R 6279**)
- Changed views of progress notes through OE/RR (**E3R 6321**)
- Function to create templates/boilerplates (**E3R 6477**)
- Confidentiality of progress notes (**E3R 6478**)
- Ability to bring other packages' data into progress notes (**E3R 6515**)
- Ability to restrict access to notes (**E3R 6925**,)
- Added location field to review option (**E3R 7146**)
- Can look up signed notes for by title (**E3R 7260**)
- Ability to edit header information (**E3R 7618**)
- Additional progress note sorting capabilities (**E3R 7851**)
- Added prompt for additional titles of progress note (**E3R 7906**)
- Transcriptionist name display (**E3R 8263**)
- Late entries marked as such (**E3R 5209**)

Discharge Summary

New or changed functionality for Clinicians and HIMS users

New features

- Ability to review Progress Notes, Discharge Summary, and other documents from the same screen
- Boilerplate functionality—ability to use templates with embedded objects (pulling data from other VISTA packages, such as Lab, Dietetics, Radiology, etc.)
- Added verify/unverify to Discharge Summary Manager Menu (browse) (E3R #6963)
- Ability to upload two admissions on the same day
- Added copying functionality (E3R #6912)
- Added configurable options for Attending physicians' leave (E3R #7390)
- Personal preferences options which allow default patient lists and other default selections, to speed up the entry process

Additions/Changes to the Discharge Summary Form

- Current admission listed first in Discharge Summary Enter/edit options (E3R #5637)
- Added a D/C date field (E3R #4941)
- Added DOB on the Discharge Summary form (E3R #8454)
- Added Transcription date (E3R #8776)
- Transcriptionist ID modification (E3R #5287)
- Initials for transcription ID (E3R #5623)
- Fixed Discharge summary ward ID (E3R #4594)
- Added Transcriptionist name field (E3R #5267)
- Added identification of interim summaries
- Report format uses VA form (E3R #6185)
- Added signature date (E3R #6601)

Alerts

- Differentiate alerts (E3R #6194)
- View alerts to show work type (E3R #6094)
- Separate alerts for each work type (E3R #6095)

New or changed functionality for Clinicians and HIMS users, cont'd

Signing/Cosigning

- Signed on chart signature date (E3R #6677)
- Date of signature (E3R #5753)
- Signature blocks on addenda (E3R #8676)
- New parameters for signature blocks (E3R #8679)
- Amend signature blocks (E3R #8680)
- Optional electronic signature (E3R #6149)

Addenda

- Allows replacement of original note with addendum (E3R #5779)
- Allows promotion of addenda to originals (E3R #8774)
- Allows page breaks when printing addenda (E3R #8775)

Progress Note E3Rs Resolved By Text Integration Utilities

E3R #	Description
2550	Allow user to set print format
3151	Option to move notes
3304	In/out pt. Outputs
3305	Discharge patient outputs
3306	Patients with two-levels of care.
4307	Copy existing note to an amended progress note
4583	Additional options for co-signature set-up
4571	Ability to create a new type of formatted note
4599	Telephone contact format
4647	Copy group notes
4870	Progress note report
4933	Default printing
4968	Unsigned notes lists
4983	Titles with menus
5172	Editing of Progress Note by co-signer before sealing
5209	Late entries should be marked as such
5383	Need to be able to set up new types
5592	Focus type
5733	H&P The Text Integration Utility (TIU) will allow sites to format Progress Notes such as the History & Physical Note.
5792	Multiple cosigners
5953	Lock review/print options with security key
5988	Inactive wards/notes
6174	Allocation error when listing unsigned notes
6180	Co-signer allowed to edit note?
6234	Do not allow signature if ____ present in note.
6251	Enter a note through consult/request tracking
6266	Expand title to maximum
6279	Patient location field
6321	Change view of progress notes through OE/RR
6477	Function to create templates
6478	Confidentiality of progress notes integration utilities v1.0 and authorization/subscription utilities v1.0.software in support of this security need will be developed in a subsequent patch to both releases.
6502	Need stable electronic signature block title
6515	Moving other packages into progress notes
6525	Print notes for author/title
6549	Signature block text
6890	Memory
6925	Ability to restrict access to notes The structure required to support this request will be released with text integration utilities v1.0 and authorization/subscription utilities v1.0. The software to implement this function will be released in subsequent patches
6961.	VA alert for unsigned notes

E3R #	Description
7023	Signature title
7036	Additional configuration for 'print by author'
7146	Add location field to review option
7260	Auto-retrieve signed notes for lookup by title
7274	Modify cosigner comment default
7310	Add editing of title and location in unsigned note
7407	Include separate page option on print by title
7433	Copy outpatient note and use inpatient.
7519	Addition of co-signers name
7522	Modify patient/author display for co-sign options
7551	DISCHARGE PLANNING ENHANCEMENT Unable to address this E3R due to lack of information. A Discharge Planning document may be developed and supported under Text Integration Utilities
7575	Add 'buffer' saving to Progress Notes
7618	Edit header info.
7652	Refile option
7809	Option for specifying co-signature desired
7851	ADDITIONAL PROGRESS NOTE SORT A wide variety of sorting actions is available in Text Integration Utilities. V1.0. The requested sort is supported.
7906	Prompt for additional titles: title of progress note
8263	Transcriptionist name display
8274	Transcriptionist exiting note
8350	Print division associated with hospital location
8457	Separate in/outpatient batch prints
8704	Unsigned progress notes by pt
9038	Modify co-sign progress note(s) by author option
10724	Ability to boilerplate addenda
11334	Concurrence & Comment prompts for interdiciplinary signer
11536	View notes by title
11560	Multi-seclected dcoument, multiple author
11881	Verification when moving documents
11895	Linking progress notes together
11898	Historical encounter
11926	Personal preference parameter
11964	TIU new visits to create unsheduled visit
12089	Search action for browsing notes, reports
12128	Templated addendums
12133	Add sort to notes tab: Notes by service
12792	Suspense status key to clarify meaning (partially in that it now displays suspended medications now display as active)
13234	Sort notes by type rather than by author
13436	Discharge summary alerts
13527	Identified signers not getting to view alters
13590	Limits to TIU titles for consult completion
13842	Unsigned progress note alert to signer & cosigner together

E3R #	Description
13560	Electronic signature of operation reports
14142	Combine search categories
14192	Sorting/access ease
14738	TIU/ASU to recognize (2) types of edit
15215	Security violation
15828	Health Summary and PCE components into TIU objects
15908	TIU Alerts for additional signers are confusing
16020	Nesting TIU template fields
16045	2nd alert for unsigned or uncosigned TIU documents
16078	Forward unsigned notes to service chief
16496	Improve additional signer functionality for surrogates
17062	Expected cosigner can be changed without audit
17281	Alerts mechanism defined in for the document definition
17292	Alert recipient by document type
17784	Unsigned document alert to cosigner when the author is gone
17785	Ability to generate an alert for a third party signer
19386	Allow editing of expected cosigner

Discharge Summaries E3Rs Resolved by TIU

E3R Number	Description
4594	Fix Discharge summary ward ID
4941	Add a DC date field
5287	Transcriptionist ID modification
5528	Identify interim summaries
5623	Initials for transcription ID
5637	List current admission first in Discharge Summary Enter/edit options
5779	Replace original with addendum
5833	Need ability to upload for 2 admissions on same day
6094	View alerts to show work type
6095	Separate alerts for each work type
6149	Optional electronic signature
6185	Use VA form for report format
6194	Differentiate alerts
6601	Add signature date
6677	Signed on chart signature date
6753	Date signed
6912	Copy function
6963	Add verify/unverify to Discharge Summary Manager Menu (browse)
7390	Add configurable options for attending MD leave
8454	DOB on the discharge summary form
8676	Signature blocks on addenda
8680	Amend signature blocks
8774	Allow promotion of addenda to originals
8775	Page breaks when printing addenda
8776	Transcription date