# SURGERY

## USER MANUAL

Version 3.0
July 1993

(Revised December 2010)

Department of Veterans Affairs
Office of Enterprise Development

# Revision History

Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. If the Revised Pages column lists "All," replace the existing manual with the reissued manual. If the Revised Pages column lists individual entries (e.g., 25, 32), either update the existing manual with the Change Pages Document or print the entire new manual.

| Date | Revised Pages | Patch Number | Description |
|---|---|---|---|
| 12/10 | i-iib, 372, 376, 449-450, 458, 467-468, 468b, 471-474, 474a-474b, 479, 479a, 482, 486, 486a, 522c-522d | SR*3*174 | Updated the data entry options for the non-cardiac and cardiac risk management sections; these options have been changed to match the software. For more details, see the *Annual Surgery Updates – VASQIP 2010 Release Notes*.<br>REDACTED |
| 11/08 | vii-viii, 527-556 | SR*3*167 | New chapter added for transplant assessments. Changed Glossary to Chapter 10, and renumbered the Index.<br>REDACTED |
| 04/08 | iii-iv, vi, 160, 165, 168, 171-172, 296-298, 443, 447, 449-450, 459, 471-473, 479-479a, 482, 486-486a, 489, 491, 493- 495, 497, 499, 501-502a, 502c, 502d-502h, 513-517, 522c-522d, 529, 534 | SR*3*166 | Updated the data entry options for the non-cardiac and cardiac risk management sections; these options have been changed to match the software. For more details, see the *Surgery NSQIP-CICSP Enhancements 2008 Release Notes*.<br>REDACTED |
| 11/07 | 479-479a, 486a | SR*3*164 | Updated the *Resource Data Enter/Edit* and the *Print a Surgery Risk Assessment* options to reflect the new cardiac field for CT Surgery Consult Date.<br>REDACTED |
| 09/07 | 125, 371, 375, 382 | SR*3*163 | Updated the Service Classification section regarding environmental indicators, unrelated to this patch. Updated the Quarterly Report to reflect updates to the numbers and names of specific specialties in the NATIONAL SURGICAL SPECIALTY file.<br>REDACTED |
| 06/07 | 35, 210, 212b | SR*3*159 | Updated screens to reflect change of the environmental indicator "Environmental Contaminant" to "SWAC" (e.g., SouthWest Asia).<br>REDACTED |

| Date | Revised Pages | Patch Number | Description |
|---|---|---|---|
| 06/07 | 176-180, 180a, 184c-d, 327c-d, 372, 375-376, 446, 449-450, 452-453, 455-456, 458, 461, 468, 470, 472, 479-479a, 482-484, 486a, 489, 491, 493, 495, 497, 499, 501, 502a-d, 504-506, 509-512, 519 | SR*3*160 | Updated the data entry options for the non-cardiac and cardiac risk management sections; these options have been changed to match the software. For more details, see the *Surgery NSQIP-CICSP Enhancements 2007 Release Notes.*<br>Updated data entry screens to match software; changes are unrelated to this patch.<br>REDACTED |
| 11/06 | 10-12, 14, 21-22, 139-141, 145-150, 152, 219, 438 | SR*3*157 | Updated data entry options to display new fields for collecting sterility information for the Prosthesis Installed field; updated the Nurse Intraoperative Report section with these required new fields. For more details, see the *Surgery-Tracking Prosthesis Items Release Notes*.<br>Updated data entry screens to match software; changes are unrelated to this patch.<br>REDACTED |
| 08/06 | 6-9, 14, 109-112, 122-124, 141-149, 151-152, 176, 178-180, 180a-b, 181-184, 184a-d, 185-186, 218-219, 326-327, 327a-d, 328-329, 373, 377, 449-450, 452-456, 459, 461-462, 467-468, 468b, 469-470, 470a, 473-474, 474a-474b, 475, 477, 481-486, 486a-b, 489-502, 502a-b, 503-504, 509-512 | SR*3*153 | Updated the data entry options for the non-cardiac and cardiac risk management sections; these options have been changed to match the software.<br>Updated data entry options to incorporate renamed/new Hair Removal documentation fields. Updated the Nurse Intraoperative Report and Quarterly Report to include these fields.<br>For more details, see the *Surgery NSQIP/CICSP Enhancements 2006 Release Notes.*<br>REDACTED |
| 06/06 | 28-32, 40-50, 64-80, 101-102 | SR*3*144 | Updated options to reflect new required fields (Attending Surgeon and Principal Preoperative Diagnosis) for creating a surgery case.<br>REDACTED |
| 06/06 | vi, 34-35, 125, 210, 212b, 522a-b | SR*3*152 | Updated Service Classification screen example to display new PROJ 112/SHAD prompt.<br>This patch will prevent the PRIN PRE-OP ICD DIAGNOSIS CODE field of the Surgery file from being sent to the Patient Care Encounter (PCE) package.<br>Added the new Alert Coder Regarding Coding Issues option to the Surgery Risk Assessment Menu option.<br>REDACTED |

| Date | Revised Pages | Patch Number | Description |
|---|---|---|---|
| 04/06 | 445, 464a-b, 465, 480a-b | SR*3*146 | Added the new *Alert Coder Regarding Coding Issues* option to the Assessing Surgical Risk chapter.<br>REDACTED |
| 04/06 | 6-8, 29, 31-32, 37-38, 40, 43-44, 46-48, 50, 52, 65-67, 71-73, 75-77, 79, 100, 102, 109-112, 117-120, 122-123, 125-127, 189-191, 195b, 209-212, 212a-h, 219a, 224-231, 238-242, 273-277, 311-313, 315-317, 369, 379- 392, 410, 449-464, 467-468, 468a-b, 469-470, 470a, 471-474, 474a-b, 475-479, 479a-b, 480, 483-484, 489-502, 507, 519 | SR*3*142 | Updated the data entry screens to reflect renaming of the Planned Principal CPT Code field and the Principal Pre-op ICD Diagnosis Code field. Updated the *Update/Verify Procedure/Diagnosis Coding* option to reflect new functionality. Updated Risk Assessment options to remove CPT codes from headers of cases displayed. Updated reports related to the coding option to reflect final CPT codes.<br>For more specific information on changes, see the *Patient Financial Services System (PFSS) – Surgery Release Notes* for this patch.<br>REDACTED |
| 10/05 | 9, 109-110, 144, 151, 218 | SR*3*147 | Updated data entry screens to reflect renaming of the Preop Shave By field to Preop Hair Clipping By field.<br>REDACTED |
| 08/05 | 10, 14, 99-100, 114, 119-120, 124, 153-154, 162-164, 164a-b, 190, 192, 209-212f, 238-242 | SR*3*119 | Updated the Anesthesia Data Entry Menu section (and other data entry options) to reflect new functionality for entering multiple start and end times for anesthesia. Updated examples for Referring Physician updates (e.g., capability to automatically look up physician by name). Updated the PCE Filing Status Report section.<br>REDACTED |
| 08/04 | iv-vi, 187-189, 195, 195a-195b, 196, 207-208, 219a-b, 527-528 | SR*3*132 | Updated the Table of Contents and Index to reflect added options. Added the new *Non-OR Procedure Information* option and the *Tissue Examination Report* option (unrelated to this patch) to the Non-OR Procedures section. |
| 08/04 | 31, 43, 46, 66, 71-72, 75-76, 311 | SR*3*127 | Updated screen captures to display new text for ICD-9 and CPT codes. |

| Date | Revised Pages | Patch Number | Description |
|---|---|---|---|
| 08/04 | vi, 441, 443, 445-456, 458-459, 461 463, 465, 467-468, 468a-b, 469-470, 470a-b, 471, 473-474, 474a-b, 474-479, 479a-b, 480-486, 486a-b, 519, 531-534 | SR*3*125 | Updated the Table of Contents and Index. Clarified the location of the national centers for NSQIP and CICSP. Updated the data entry options for the non-cardiac and cardiac risk management sections; these options have been changed to match the software and new options have been added. For an overview of the data entry changes, see the *Surgery NSQIP/CICSP Enhancements 2004 Release Notes.* Added the *Laboratory Test Result (Enter/Edit)* option and the *Outcome Information (Enter/Edit)* option to the *Cardiac Risk Assessment Information (Enter/Edit)* menu section. Changed the name of the *Cardiac Procedures Requiring CPB (Enter/Edit*) option to *Cardiac Procedures Operative Data (Enter/Edit)* option. Removed the *Update Operations as Unrelated/Related to Death* option from the *Surgery Risk Assessment Menu*. |
| 08/04 | 6-10, 14, 103, 105-107, 109-112, 114-120, 122-124, 141-152, 218-219, 284-287, 324, 370-377 | SR*3*129 | Updated examples to include the new levels for the Attending Code (or Resident Supervision). Also updated examples to include the new fields for ensuring Correct Surgery. For specific options affected by each of these updates, please see the *Resident Supervision/Ensuring Correct Surgery Phase II Release Notes.* |
| 04/04 | All | SR*3*100 | All pages were updated to reflect the most recent Clinical Ancillary Local Documentation Standards and the changes resulting from the Surgery Electronic Signature for Operative Reports project, SR*3*100. For more information about the specific changes, see the patch description or the *Surgery Electronic Signature for Operative Reports Release Notes*. |

SUMMARY REPORT - SURGICAL SERVICE PAGE
VERSION 3.0 1

Hospital: MAYBERRY, NC
Station Number: 999
For Dates: JUN 01, 2004 to: JUN 30, 2004

| | Total Cases | % of Total |
|---|---|---|
| Surgical Cases | 315 | 100.0 |
| Major Procedures | 203 | 64.4 |
| ASA Class (1) | 10 | 4.9 |
| ASA Class (2) | 70 | 34.5 |
| ASA Class (3) | 120 | 59.1 |
| ASA Class (4) | 3 | 1.5 |
| ASA Class (5) | 0 | 0.0 |
| ASA Class (6) | 0 | 0.0 |
| Postoperative Deaths | 2 | 0.6 |
| Ambulatory: 0 | | |
| Postoperative Occurrences | 18 | 5.7 |
| Ambulatory Procedures | 201 | 63.8 |
| Admitted Within 14 Days: 0 | | |
| Invasive Diagnostic: 1 | | |
| Inpatient Procedures | 114 | 36.2 |
| Emergency Procedures | 14 | 4.4 |
| Age>60 Years | 141 | 44.8 |

SPECIALTY PROCEDURES

| | PATIENTS | CASES | MAJOR | MINOR | ---DEATHS--- TOTAL | % |
|---|---|---|---|---|---|---|
| 48 CARDIAC SURGERY | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 49 TRANSPLANTATION | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 50 GENERAL SURGERY | 63 | 64 | 54 | 10 | 1 | 1.6 |
| 51 OB/GYN | 7 | 7 | 7 | 0 | 0 | 0.0 |
| 52 NEUROSURGERY | 12 | 14 | 13 | 1 | 0 | 0.0 |
| 53 OPHTHALMOLOGY | 57 | 59 | 0 | 59 | 0 | 0.0 |
| 54 ORTHOPEDICS | 53 | 56 | 46 | 10 | 0 | 0.0 |
| 55 EAR, NOSE, THROAT (ENT) | 35 | 35 | 32 | 3 | 0 | 0.0 |
| 56 PLASTIC SURGERY | 8 | 8 | 4 | 4 | 0 | 0.0 |
| 57 PROCTOLOGY | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 58 THORACIC SURGERY | 3 | 3 | 3 | 0 | 0 | 0.0 |
| 59 UROLOGY | 19 | 20 | 20 | 0 | 0 | 0.0 |
| 60 ORAL SURGERY | 1 | 1 | 1 | 0 | 0 | 0.0 |
| 61 PODIATRY | 25 | 25 | 3 | 22 | 0 | 0.0 |
| 62 PERIPHERAL VASCULAR | 21 | 23 | 20 | 3 | 1 | 4.3 |
| 78 ANESTHESIOLOGY | 0 | 0 | 0 | 0 | 0 | 0.0 |

LEVEL OF RESIDENT SUPERVISION (%)

| | MAJOR | MINOR |
|---|---|---|
| Level A | 0.0 | 100.0 |
| Level B | 66.7 | 0.0 |
| Level C | 0.0 | 0.0 |
| Level D | 0.0 | 0.0 |
| Level E | 33.3 | 0.0 |
| Level F | 0.0 | 0.0 |
| Level Not Entered | 0.0 | 0.0 |

Hospital: MAYBERRY, NC
Station Number: 999
For Dates: JUN 01, 2004 to: JUN 30, 2004

INDEX PROCEDURES

| | CASES | DEATHS | CASES WITH OCCURRENCES |
|---|---|---|---|
| Inguinal Hernia | 13 | 0 | 0 |
| Cholecystectomy | 3 | 0 | 0 |
| Coronary Artery Bypass | 0 | 0 | 0 |
| Colon Resection (L & R) | 5 | 0 | 1 |
| Fem-Pop Bypass | 2 | 0 | 1 |
| Pulmonary Lobectomy | 0 | 0 | 0 |
| Hip Replacement | | | |
| - Elective | 7 | 0 | 2 |
| - Acute Fracture | 0 | 0 | 0 |
| TURP | 0 | 0 | 0 |
| Laryngectomy | 0 | 0 | 0 |
| Craniotomy | 0 | 0 | 0 |
| Intraoccular Lens | 44 | 0 | 0 |

PERIOPERATIVE OCCURRENCE CATEGORIES

| Wound Occurrences | Total |
|---|---|
| A. Superficial Incisional SSI | 6 |
| B. Deep Incisional SSI | 0 |
| C. Wound Disruption | 0 |
| D. Organ/Space SSI | 0 |
| E. Other | 0 |

| CNS Occurrences | Total |
|---|---|
| A. CVA/Stroke | 0 |
| B. Coma >24 Hours | 0 |
| C. Peripheral Nerve Injury | 1 |
| D. Other | 0 |

| Cardiac Occurrences | Total |
|---|---|
| A. Cardiac Arrest Req. CPR | 0 |
| B. Myocardial Infarction | 1 |
| C. Endocarditis | 0 |
| D. Low Cardiac Output >6 Hrs. | 0 |
| E. Mediastinitis | 0 |
| F. Repeat Card Surg Proc | 0 |
| G. New Mech Circulatory Sup | 1 |
| H. Postop Atrial Fibrillation | 0 |
| I. Other | 1 |

| Urinary Occurrences | Total |
|---|---|
| A. Renal Insufficiency | 2 |
| B. Acute Renal Failure | 0 |
| C. Urinary Tract Infection | 2 |
| D. Other | 0 |

| Respiratory Occurrences | Total |
|---|---|
| A. Pneumonia | 7 |
| B. Unplanned Intubation | 3 |
| C. Pulmonary Embolism | 0 |
| D. On Ventilator >48 Hours | 4 |
| E. Tracheostomy | 0 |
| F. Other | 0 |

| Other Occurrences | Total |
|---|---|
| A. Bleeding/Transfusions | 1 |
| B. Graft/Prosthesis/Flap Failure | 0 |
| C. DVT/Thrombophlebitis | 0 |
| D. Systemic Sepsis | 2 |
| E. Reoperation for Bleeding | 0 |
| F. C. difficile Colitis | 2 |
| G. Other | 1 |

Clean Wound Infection Rate: 2.1

QUARTERLY REPORT - SURGICAL SERVICE PAGE
VERSION 3.0 1

Hospital: MAYBERRY, NC Station Number: 999
For Dates: APR 01, 2004 to: JUN 30, 2004 Fiscal Year: 2004

| | Total Cases | % of Total |
|---|---|---|
| Surgical Cases | 1315 | 100.0 |
| Major Procedures | 973 | 74.0 |
| ASA Class (1) | 34 | 3.5 |
| ASA Class (2) | 305 | 31.3 |
| ASA Class (3) | 579 | 59.5 |
| ASA Class (4) | 54 | 5.5 |
| ASA Class (5) | 0 | 0.0 |
| ASA Class (6) | 0 | 0.0 |
| ASA Class (Not Entered) | 1 | 0.1 |
| Postoperative Deaths | 10 | 0.8 |
| Ambulatory: 3 | | |
| Postoperative Occurrences | 17 | 1.3 |
| Ambulatory Procedures | 794 | 60.4 |
| Admitted Within 14 Days: 2 | | |
| Invasive Diagnostic: 146 | | |
| Inpatient Procedures | 521 | 39.6 |
| Emergency Procedures | 45 | 3.4 |
| Age>60 Years | 729 | 55.4 |

SPECIALTY PROCEDURES

| | PATIENTS | CASES | MAJOR | MINOR | ---DEATHS--- TOTAL | % |
|---|---|---|---|---|---|---|
| 48 CARDIAC SURGERY | 40 | 40 | 40 | 0 | 0 | 0.0 |
| 49 TRANSPLANTATION | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 50 GENERAL SURGERY | 140 | 147 | 147 | 0 | 4 | 2.7 |
| 51 OB/GYN | 9 | 9 | 9 | 0 | 0 | 0.0 |
| 52 NEUROSURGERY | 53 | 56 | 56 | 0 | 1 | 1.8 |
| 53 OPHTHALMOLOGY | 186 | 208 | 204 | 4 | 0 | 0.0 |
| 54 ORTHOPEDICS | 156 | 162 | 159 | 3 | 1 | 0.6 |
| 55 EAR, NOSE, THROAT (ENT) | 90 | 95 | 93 | 2 | 0 | 0.0 |
| 56 PLASTIC SURGERY | 40 | 44 | 44 | 0 | 0 | 0.0 |
| 57 PROCTOLOGY | 0 | 0 | 0 | 0 | 0 | 0.0 |
| 58 THORACIC SURGERY | 19 | 22 | 22 | 0 | 0 | 0.0 |
| 59 UROLOGY | 279 | 321 | 102 | 219 | 3 | 0.9 |
| 60 ORAL SURGERY | 14 | 14 | 14 | 0 | 0 | 0.0 |
| 61 PODIATRY | 36 | 42 | 42 | 0 | 0 | 0.0 |
| 62 PERIPHERAL VASCULAR | 39 | 41 | 41 | 0 | 1 | 2.4 |
| 78 ANESTHESIOLOGY | 99 | 114 | 0 | 114 | 0 | 0.0 |

LEVEL OF RESIDENT SUPERVISION (%)

| | MAJOR | MINOR |
|---|---|---|
| Level A | 0.2 | 53.5 |
| Level B | 95.4 | 36.3 |
| Level C | 2.1 | 0.0 |
| Level D | 2.4 | 0.3 |
| Level E | 0.0 | 0.0 |
| Level F | 0.0 | 0.0 |
| Level Not Entered | 0.0 | 9.9 |

Hospital: MAYBERRY, NC Station Number: 999
For Dates: APR 01, 2004 to: JUN 30, 2004 Fiscal Year: 2004

INDEX PROCEDURES

| | CASES | DEATHS | CASES WITH OCCURRENCES |
|---|---|---|---|
| Inguinal Hernia | 31 | 0 | 1 |
| Cholecystectomy | 6 | 0 | 0 |
| Coronary Artery Bypass | 34 | 0 | 2 |
| Colon Resection (L & R) | 8 | 1 | 2 |
| Fem-Pop Bypass | 4 | 0 | 0 |
| Pulmonary Lobectomy | 3 | 0 | 0 |
| Hip Replacement | | | |
| - Elective | 14 | 0 | 0 |
| - Acute Fracture | 2 | 0 | 1 |
| TURP | 21 | 0 | 0 |
| Laryngectomy | 0 | 0 | 0 |
| Craniotomy | 4 | 0 | 0 |
| Intraoccular Lens | 135 | 0 | 0 |

PERIOPERATIVE OCCURRENCE CATEGORIES

| Wound Occurrences | Total |
|---|---|
| A. Superficial Incisional SSI | 9 |
| B. Deep Incisional SSI | 1 |
| C. Wound Disruption | 1 |
| D. Organ/Space SSI | 0 |
| E. Other | 0 |

| CNS Occurrences | Total |
|---|---|
| A. CVA/Stroke | 1 |
| B. Coma >24 Hours | 0 |
| C. Peripheral Nerve Injury | 0 |
| D. Other | 1 |

| Cardiac Occurrences | Total |
|---|---|
| A. Cardiac Arrest Req. CPR | 0 |
| B. Myocardial Infarction | 0 |
| C. Endocarditis | 0 |
| D. Low Cardiac Output >6 Hrs. | 0 |
| E. Mediastinitis | 0 |
| F. Repeat Card Surg Proc | 0 |
| G. New Mech Circulatory Sup | 0 |
| H. Postop Atrial Fibrillation | 0 |
| I. Other | 0 |

| Urinary Occurrences | Total |
|---|---|
| A. Renal Insufficiency | 0 |
| B. Acute Renal Failure | 0 |
| C. Urinary Tract Infection | 2 |
| D. Other | 0 |

| Respiratory Occurrences | Total |
|---|---|
| A. Pneumonia | 4 |
| B. Unplanned Intubation | 2 |
| C. Pulmonary Embolism | 0 |
| D. On Ventilator >48 Hours | 3 |
| E. Tracheostomy | 0 |
| F. Other | 0 |

| Other Occurrences | Total |
|---|---|
| A. Bleeding/Transfusions | 0 |
| B. Graft/Prosthesis/Flap Failure | 0 |
| C. DVT/Thrombophlebitis | 0 |
| D. Systemic Sepsis | 1 |
| E. Reoperation for Bleeding | 0 |
| F. C. difficile Colitis | 1 |
| G. Other | 0 |

Clean Wound Infection Rate: 1.0%

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592                PAGE: 1 OF 2
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------
1. GENERAL:                                3. HEPATOBILIARY:
  A. Height:                                 A. Ascites:
  B. Weight:
  C. Diabetes Mellitus:                    4. GASTROINTESTINAL:
  D. Current Smoker W/I 1 Year:              A. Esophageal Varices:
  E. ETOH > 2 Drinks/Day:
  F. Dyspnea:                              5. CARDIAC:
  G. Preop Sleep Apnea:                      A. CHF Within 1 Month:
  H. DNR Status:                             B. MI Within 6 Months:
  I. Preop Funct Status:                     C. Previous PCI:
                                             D. Previous Cardiac Surgery:
2. PULMONARY:                                E. Angina Within 1 Month:
  A. Ventilator Dependent:                   F. Hypertension Requiring Meds:
  B. History of Severe COPD:
  C. Current Pneumonia:                    6. VASCULAR:
                                             A. Revascularization/Amputation:
                                             B. Rest Pain/Gangrene:
-------------------------------------------------------------------------------------------------------------------
Select Preoperative Information to Edit: 1:3
```

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------


GENERAL: YES
```

```
Patient's Height 65 INCHES//: 62
Patient's Weight 140 POUNDS//: 175
Diabetes Mellitus Requiring Therapy With Oral Agents or Insulin: I INSULIN
Current Smoker: Y  YES
ETOH >2 Drinks Per Day in the Two Weeks Prior to Admission: N NO
Dyspnea: N
     1   NO
     2   NO STUDY
Choose 1-2: 1  NO
Preoperative Sleep Apnea: LEVEL 1 LEVEL 1 - NONE
DNR Status (Y/N): N  NO
Functional Health Status at Evaluation for Surgery: 1 INDEPENDENT

PULMONARY: NO

HEPATOBILIARY: NO
```

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592                PAGE: 1 OF 2
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------
1. GENERAL:                        NO       3. HEPATOBILIARY:                  NO
  A. Height:                    62 INCHES      A. Ascites:                      NO
  B. Weight:                     175 LBS.
  C. Diabetes Mellitus:           INSULIN   4. GASTROINTESTINAL:
  D. Current Smoker W/I 1 Year: YES           A. Esophageal Varices:
  E. ETOH > 2 Drinks/Day:        NO
  F. Dyspnea:                    NO         5. CARDIAC:
  G. Preop Sleep Apnea:         LEVEL 1       A. CHF Within 1 Month:
  H. DNR Status:                 NO           B. MI Within 6 Months:
  I. Preop Funct Status:    INDEPENDENT       C. Previous PCI:
                                              D. Previous Cardiac Surgery:
2. PULMONARY:                      NO         E. Angina Within 1 Month:
  A. Ventilator Dependent:        NO         F. Hypertension Requiring Meds:
  B. History of Severe COPD:      NO
  C. Current Pneumonia:           NO       6. VASCULAR:
                                              A. Revascularization/Amputation:
                                              B. Rest Pain/Gangrene:
-------------------------------------------------------------------------------------------------------------------
Select Preoperative Information to Edit: <Enter>
```

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592                PAGE: 2 OF 2
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------

1. RENAL:                                  3. NUTRITIONAL/IMMUNE/OTHER:
  A. Acute Renal Failure:                    A. Disseminated Cancer:
  B. Currently on Dialysis:                  B. Open Wound:
                                             C. Steroid Use for Chronic Cond.:
2. CENTRAL NERVOUS SYSTEM:                   D. Weight Loss > 10%:
  A. Impaired Sensorium:                     E. Bleeding Disorders:
  B. Coma:                                   F. Transfusion > 4 RBC Units:
  C. Hemiplegia:                             G. Chemotherapy W/I 30 Days:
  D. History of TIAs:                        H. Radiotherapy W/I 90 Days:
  E. CVA/Stroke w. Neuro Deficit:            I. Preoperative Sepsis:
  F. CVA/Stroke w/o Neuro Deficit:           J. Pregnancy:          NOT APPLICABLE
  G. Tumor Involving CNS:
-------------------------------------------------------------------------------------------------------------------
Select Preoperative Information to Edit: 3E
```

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------

History of Bleeding Disorders (Y/N): Y  YES
```

```
SURPATIENT,SIXTY (000-56-7821)        Case #63592                PAGE: 2 OF 2
JUN 23,1998   CHOLEDOCHOTOMY
-------------------------------------------------------------------------------------------------------------------

1. RENAL:                                  3. NUTRITIONAL/IMMUNE/OTHER:
  A. Acute Renal Failure:                    A. Disseminated Cancer:
  B. Currently on Dialysis:                  B. Open Wound:
                                             C. Steroid Use for Chronic Cond.:
2. CENTRAL NERVOUS SYSTEM:                   D. Weight Loss > 10%:
  A. Impaired Sensorium:                     E. Bleeding Disorders:             YES
  B. Coma:                                   F. Transfusion > 4 RBC Units:
  C. Hemiplegia:                             G. Chemotherapy W/I 30 Days:
  D. History of TIAs:                        H. Radiotherapy W/I 90 Days:
  E. CVA/Stroke w. Neuro Deficit:            I. Preoperative Sepsis:
  F. CVA/Stroke w/o Neuro Deficit:           J. Pregnancy:          NOT APPLICABLE
  G. Tumor Involving CNS:
-------------------------------------------------------------------------------------------------------------------
Select Preoperative Information to Edit:
```

## Patient Demographics (Enter/Edit)
## [SROA DEMOGRAPHICS]

The surgical clinical nurse reviewer uses the *Patient Demographics (Enter/Edit)* option to capture patient demographic information from the Patient Information Management System (PIMS) record. The nurse reviewer can also enter, edit, and review this information. The demographic fields captured from PIMS are Race, Ethnicity, Hospital Admission Date, Hospital Discharge Date, Admission/Transfer Date, Discharge/Transfer Date, Observation Admission Date, Observation Discharge Date, and Observation Treating Specialty. With this option, the nurse reviewer can also edit the length of postoperative hospital stay, in/out-patient status, and transfer status.

The Race and Ethnicity information is displayed, but cannot be updated within this or any other Surgery package option.

Example: Entering Patient Demographics

```
Select Non-Cardiac Assessment Information (Enter/Edit) Option: D Patient Demogr
aphics (Enter/Edit)

SURPATIENT,EIGHT (000-37-0555)        Case #264
JUN 7,2005   ARTHROSCOPY, LEFT KNEE
-------------------------------------------------------------------------------------------------------

Enter/Edit Patient Demographic Information

1. Capture Information from PIMS Records
2. Enter, Edit, or Review Information

Select Number: (1-2): 1

Are you sure you want to retrieve information from PIMS records ? YES// <Enter>

...EXCUSE ME, JUST A MOMENT PLEASE...

SURPATIENT,EIGHT (000-37-0555)        Case #264
JUN 7,2005   ARTHROSCOPY, LEFT KNEE
-------------------------------------------------------------------------------------------------------

Enter/Edit Patient Demographic Information

1. Capture Information from PIMS Records
2. Enter, Edit, or Review Information

Select Number: (1-2): 2
```

```
SURPATIENT,EIGHT (000-37-0555)        Case #264
JUN 7,2005   ARTHROSCOPY, LEFT KNEE
-------------------------------------------------------------------------------------------------------------

 1. Transfer Status:
 2. Observation Admission Date/Time:
 3. Observation Discharge Date/Time:
 4. Observation Treating Specialty:
 5. Hospital Admission Date/Time:
 6. Hospital Discharge Date/Time:
 7. Admit/Transfer to Surgical Svc.:
 8. Discharge/Transfer to Chronic Care:
 9. Length of Postop Hospital Stay:
10. In/Out-Patient Status:              INPATIENT
11. Patient's Ethnicity:                UNANSWERED
12. Patient's Race:                     UNANSWERED
13. Date of Death:

-------------------------------------------------------------------------------------------------------------
Select number of item to edit:
```

# Clinical Information (Enter/Edit)
## [SROA CLINICAL INFORMATION]

The *Clinical Information (Enter/Edit)* option is used to enter the clinical information required for a cardiac risk assessment. The software will present one page; at the bottom of the page is a prompt to select one or more items to edit. If the user does not want to edit any items on the page, pressing the **<Enter>** key will advance the user to another option.

### About the "Select Clinical Information to Edit:" Prompt

At the "Select Clinical Information to Edit:" prompt, the user should enter the item number to edit. The user can then enter an **A** for **ALL** to respond to every item on the page, or enter a range of numbers separated by a colon (:) to respond to a range of items.

After the information has been entered or edited, the terminal display screen will clear and present a summary. The summary organizes the information entered and provides another chance to enter or edit data. If assistance is needed while interacting with the software, the user can enter one or two question marks (**??**) to receive on-line help.

**Example: Enter Clinical Information**

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: CLIN Clinical
Information (Enter/Edit)

SURPATIENT,NINETEEN (000-28-7354)        Case #60183                      PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------

 1. Height:                  63 in      14. Number prior heart surgeries:
 2. Weight:                  170 lb     15. Prior heart surgeries:
 3. Diabetes:                           16. Peripheral Vascular Disease:
 4. COPD:                               17. Cerebral Vascular Disease:
 5. FEV1:                               18. Angina (use CCS Class):
 6. Cardiomegaly (X-ray):               19. CHF (use NYHA Class):
 7. Pulmonary Rales:                    20. Current Diuretic Use:
 8. Current Smoker:                     21. Current Digoxin Use:
 9. Active Endocarditis:                22. IV NTG within 48 Hours:
10. Resting ST Depression:              23. Preop Circulatory Device:
11. Functional Status:                  24. Hypertension (Y/N):
12. PCI:                                25. Preop Atrial Fibrillation:
13. Prior MI:

-------------------------------------------------------------------------------
Select Clinical Information to Edit: A
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------------

Patient's Height: 63 INCHES// 76
Patient's Weight: 170 LBS// 210
Diabetes: O  ORAL
History of Severe COPD (Y/N): Y  YES
FEV1 : NS
Cardiomegaly on Chest X-Ray (Y/N): Y  YES
Pulmonary Rales (Y/N): Y  YES
Current Smoker: 2 WITHIN 2 WEEKS OF SURGERY
Active Endocarditis (Y/N): N  NO
Resting ST Depression (Y/N): N  NO
Functional Status: I  INDEPENDENT
PCI: 0  NONE
Prior Myocardial Infarction: 1 LESS THAN OR EQUAL TO 7 DAYS PRIOR TO SURGERY
Number of Prior Heart Surgeries: 1  1
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------------

Prior heart surgeries:

0. None                       3. CABG/Valve
1. CABG-only                  4. Other
2. Valve-only                 5. CABG/Other

Enter your choice(s) separated by commas (0-5): // 2
                                          2 - Valve-only
Peripheral Vascular Disease (Y/N): Y YES
Cerebral Vascular Disease (Y/N): N  NO
Angina (use CCS Functional Class): IV CLASS IV
Congestive Heart Failure (use NYHA Functional Class): II SLIGHT LIMITATION
Current Diuretic Use (Y/N): Y  YES
Current Digoxin Use (Y/N): N  NO
IV NTG within 48 Hours Preceding Surgery (Y/N): Y YES
Preop use of circulatory Device: N  NONE
History of Hypertension (Y/N): Y YES
Preoperative Atrial Fibrillation: N  NO
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------------

 1. Height:                  76 in       14. Number prior heart surgeries: 1
 2. Weight:                  210 lb      15. Prior heart surgeries:  VALVE-ONLY
 3. Diabetes:                ORAL        16. Peripheral Vascular Disease:  YES
 4. COPD:                     YES        17. Cerebral Vascular Disease:    NO
 5. FEV1:                     NS         18. Angina (use CCS Class):       IV
 6. Cardiomegaly (X-ray):     YES        19. CHF (use NYHA Class):         II
 7. Pulmonary Rales:          YES        20. Current Diuretic Use:         YES
 8. Current Smoker: WITHIN 2 WEEKS OF S  21. Current Digoxin Use:          NO
 9. Active Endocarditis:      NO         22. IV NTG within 48 Hours:       YES
10. Resting ST Depression:    NO         23. Preop Circulatory Device:     NONE
11. Functional Status:       INDEPENDENT 24. Hypertension (Y/N):           YES
12. PCI:                     NONE        25. Preop Atrial Fibrillation:    NO
13. Prior MI:            < OR = 7 DAYS

-------------------------------------------------------------------------------------------------------------------
Select Clinical Information to Edit:
```

# Laboratory Test Results (Enter/Edit)
## [SROA LAB-CARDIAC]

The *Laboratory Test Results (Edit/Edit)* option is used to enter or edit preoperative laboratory test results for an individual cardiac risk assessment. The option is divided into the two features listed below. The first feature allows the user to merge (also called "capture" or "load") lab information into the risk assessment from the VistA software. The second feature provides a two-page summary of the lab profile and allows direct editing of the information.

1. Capture Laboratory Information
2. Enter, Edit, or Review Laboratory Test Results

To "capture" preoperative lab data, the user must provide both the date and time the operation began. If this information has already been entered, the system will not prompt for it again.

If assistance is needed while interacting with the software, entering one or two question marks (**??**) allows the user to access the on-line help.

### About the "Select Laboratory Information to Edit:" Prompt

At this prompt the user enters the item number to edit. Entering **A** for **ALL** allows the user to respond to every item on the page, or a range of numbers separated by a colon (:) can be entered to respond to a range of items.

After the information has been entered or edited, the terminal display screen will clear and present a summary. The summary organizes the information entered and provides another chance to enter or edit data.

Example: Enter Laboratory Test Results

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: LAB Laboratory
Test Results (Enter/Edit)
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------

Enter/Edit Laboratory Test Results

1. Capture Laboratory Information
2. Enter, Edit, or Review Laboratory Test Results

Select Number: 1

This selection loads the most recent cardiac lab data for tests performed
preoperatively.

Do you want to automatically load cardiac lab data ? YES// <Enter>

..Searching lab record for latest test data....

Press <RET> to continue  <Enter>
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------

Enter/Edit Laboratory Test Results

1. Capture Laboratory Information
2. Enter, Edit, or Review Laboratory Test Results

Select Number: 2
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
PREOPERATIVE LABORATORY RESULTS
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------

 1. HDL:                     NS
 2. LDL:                    168    (JAN 2004)
 3. Total Cholesterol:      321    (JAN 2004)
 4. Serum Triglyceride:     >70    (JAN 2004)
 5. Serum Potassium:         NS
 6. Serum Bilirubin:         NS
 7. Serum Creatinine:        NS
 8. Serum Albumin:           NS
 9. Hemoglobin:              NS
10. Hemoglobin A1c:          NS
11. BNP:                     NS

-------------------------------------------------------------------------------------------------------------

Select Laboratory Information to Edit: 1
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
PREOPERATIVE LABORATORY RESULTS
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------

HDL (mg/dl): NS// 177
HDL, Date: JAN, 2005  (JAN 2005)
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183                        PAGE: 1
PREOPERATIVE LABORATORY RESULTS
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------

 1. HDL:                    177    (JAN 2005)
 2. LDL:                    168    (JAN 2004)
 3. Total Cholesterol:      321    (JAN 2004)
 4. Serum Triglyceride:     >70    (JAN 2004)
 5. Serum Potassium:         NS
 6. Serum Bilirubin:         NS
 7. Serum Creatinine:        NS
 8. Serum Albumin:           NS
 9. Hemoglobin:              NS
10. Hemoglobin A1c:          NS
11. BNP:                     NS

-------------------------------------------------------------------------------------------------------------

Select Laboratory Information to Edit:
```

# Operative Risk Summary Data (Enter/Edit)
## [SROA CARDIAC OPERATIVE RISK]

The *Operative Risk Summary Data (Enter/Edit)* option is used to enter or edit operative risk summary data for the cardiac surgery risk assessments. This option records the physician's subjective estimate of operative mortality. To avoid bias, this should be completed preoperatively. The software will present one page. At the bottom of the page is a prompt to select one or more items to edit. If the user does not want to edit any of the items, the **<Enter>** key can be pressed to proceed to another option.

### About the "Select Operative Risk Summary Information to Edit:" prompt

At this prompt the user enters the item number to edit. Entering **A** for **ALL** allows the user to respond to every item on the page, or a range of numbers separated by a colon (:) can be entered to respond to a range of items.

**Example: Operative Risk Summary Data**

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: OP Operative Risk Summary Data
(Enter/Edit)

SURPATIENT,NINETEEN (000-28-7354)   Case #60183                        PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
>> Coding Complete <<
-------------------------------------------------------------------------------------------------------------------

 1. Physician's Preoperative Estimate of Operative Mortality: 78%
    A. Date/Time Collected: JUN 17,2005@18:15
 2. ASA Classification:        1-NO DISTURB.
 3. Surgical Priority:
 4. Preoperative Risk Factors: NONE

 5. CPT Codes (view only):     33510
-------------------------------------------------------------------------------------------------------------------

Select Operative Risk Summary Information to Edit: 1:3
```

This information cannot be edited.

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------------------



Physician's Preoperative Estimate of Operative Mortality: 78
         // 32
Date/Time of Estimate of Operative Mortality: JUN 17, 2005@18:15
         // <Enter>
ASA Class: 1-NO DISTURB.// 3  3     3-SEVERE DISTURB.
Cardiac Surgical Priority: ?
     Enter the surgical priority that most accurately reflects the acuity of
     patient's cardiovascular condition at the time of transport to the
     operating room.
     Choose from:
       1        ELECTIVE
       2        URGENT
       3        EMERGENT (ONGOING ISCHEMIA)
       4        EMERGENT (HEMODYNAMIC COMPROMISE)
       5        EMERGENT (ARREST WITH CPR)
Cardiac Surgical Priority: 3 EMERGENT (ONGOING ISCHEMIA)
Date/Time of Cardiac Surgical Priority: JUN 18,2005@13:29 (JUN 18, 2005@13:29)
```

```
SURPATIENT,NINETEEN (000-28-7354)   Case #60183                          PAGE: 1
JUN 18,2005   CORONARY ARTERY BYPASS
>> Coding Complete <<
-------------------------------------------------------------------------------------------------------------------

 1. Physician's Preoperative Estimate of Operative Mortality: 32%
    A. Date/Time Collected:    JUN 18,2005 18:15
 2. ASA Classification:        3-SEVERE DISTURB.
 3. Surgical Priority:         EMERGENT (ONGOING ISCHEMIA)
    A. Date/Time Collected:    JUN 18,2005 13:29
 4. Preoperative Risk Factors: NONE

 5. CPT Codes (view only):     33510


*** NOTE: D/Time of Surgical Priority should be < the D/Time Patient in OR.***

-------------------------------------------------------------------------------------------------------------------

Select Operative Risk Summary Information to Edit:
```

---

The Surgery software performs data checks on the following fields:

The Date/Time Collected field for Physician's Preoperative Estimate of Operative Mortality should be earlier than the Time Pat In OR field. This field is no longer auto-populated.

The Date/Time Collected field for Surgical Priority should be earlier than the Time Pat In OR field. This field is no longer auto-populated.

If the date entered does not conform to the specifications, then the Surgery software displays a warning at the bottom of the screen.

---

# Cardiac Procedures Operative Data (Enter/Edit)
## [SROA CARDIAC PROCEDURES]

The *Cardiac Procedures Operative Data (Enter/Edit)* option is used to enter or edit information related to cardiac procedures requiring cardiopulmonary bypass (CPB). The software will present two pages. At the bottom of the page is a prompt to select one or more items to edit. If the user does not want to edit any items on the page, pressing the **<Enter>** key will advance the user to another option.

### About the "Select Operative Information to Edit:" prompt

At this prompt, the user enters the item number to edit. Entering **A** for **ALL** allows the user to respond to every item on the page, or a range of numbers separated by a colon (:) can be entered to respond to a range of items. You can also use number-letter combinations, such as **11B**, to update a field within a group, such as VSD Repair.

Each prompt at the category level allows for an entry of **YES** or **NO**. If **NO** is entered, each item under that category will automatically be answered **NO**. On the other hand, responding **YES** at the category level allows the user to respond individually to each item under the main category.

Entry of **N** shall allow the user to **Set All to No** for the Cardiac Procedures fields. A verification prompt will follow to ensure that user understands the entry.

Fields that do not have YES/NO responses will be updated as follows.

- Items #1-#5 are numeric and their values will be set to 0.
- Valve Procedures will be set to NONE
- #13 Maze Procedure will be set to NO MAZE PERFORMED

After the information has been entered or edited, the terminal display screen will clear and present a summary. The summary organizes the information entered and provides another chance to enter or edit data.

**Example: Enter Cardiac Procedures Operative Data**

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: CARD Cardiac Pr
ocedures Operative Data (Enter/Edit)

SURPATIENT,NINETEEN (000-28-7354)   Case #60183                    PAGE: 1 OF 2
JUN 18,2005   CORONARY ARTERY BYPASS
------------------------------------------------------------------------------------------------------------------------
Cardiac surgical procedures with or without cardiopulmonary bypass
CABG distal anastomoses:                13. Maze procedure:
 1. Number with vein:                   14. ASD repair:
 2. Number with IMA:                    15. VSD repair:
 3. Number with Radial Artery:          16. Myectomy for IHSS:
 4. Number with Other Artery:           17. Myxoma resection:
 5. Number with Other Conduit:          18. Other tumor resection:
                                        19. Cardiac transplant:
 6.  LV Aneurysmectomy:                 20. Great Vessel Repair:
 7.  Bridge to transplant/Device:       21. Endovascular Repair:
 8. TMR:                                22. Other cardiac procedures:

 9. Aortic Valve Procedure:
10. Mitral Valve Procedure:
11. Tricuspid Valve Procedure:
12. Pulmonary Valve Procedure:
------------------------------------------------------------------------------------------------------------------------
Select Cardiac Procedures Operative Information to Edit: A
```

```
SURPATIENT,NINETEEN (000-28-7354)        Case #60183
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------------------------------

CABG Distal Anastomoses with Vein: 1
CABG Distal Anastomoses with IMA: 1
Number with Radial Artery: 0
Number with Other Artery: 1
CABG Distal Anastomoses with Other Conduit: 1
LV Aneurysmectomy (Y/N): N  NO
Device for bridge to cardiac transplant / Destination therapy: ??
        CICSP Definition (2006):
        Indicate if patient received a mechanical support device
        (excluding IABP) as a bridge to cardiac transplant during the same
        admission as the transplant procedure; or patient received the device
        as destination therapy (does not intend to have a cardiac transplant),
        either with or without placing the patient on cardiopulmonary bypass.

     Choose  from:
       Y        YES
       N        NO
Device for bridge to cardiac transplant / Destination therapy: N NO
Transmyocardial Laser Revascularization: N  NO
Aortic Valve Procedure: ??
        VASQIP Definition (2010):
        Indicate if the patient had an aortic valve replacement (either the
        native or a prosthetic valve) or a repair (on the native valve to
        relieve stenosis and/or correct regurgitation -annuloplasty,
        commissurotomy, etc.); performed with or without additional
        procedure(s); either with or without placing the patient on
        cardiopulmonary bypass. (If a repair was attempted, but a replacement
        occurred, indicate the details of the replacement valve.) Indicate
        the one most appropriate procedure:
          * None
          * Mechanical Valve
          * Stented Bioprosthetic Valve
          * Stentless Bioprosthetic Valve
          * Homograft
          * Primary Valve Repair
          * Primary Valve Repair and Annuloplasty Device
          * Annuloplasty Device alone
          * Autograft Procedure (Ross Procedure)
          * Other

     Choose from:
       N        NONE
       M        MECHANICAL
       S        STENTED BIOPROSTHETIC
       B        STENTLESS BIOPROSTHETIC
       H        HOMOGRAFT
       PR       PRIMARY REPAIR
       PA       PRIMARY REPAIR & ANNULOPLASTY DEVICE
       AN       ANNULOPLASTY DEVICE ALONE
       AU       AUTOGRAFT (ROSS)
       O        OTHER
Aortic Valve Procedure: PR PRIMARY REPAIR
Mitral Valve Procedure: N  NONE
Tricuspid Valve Procedure: N NONE
Pulmonary Valve Procedure: N NONE
Maze Procedure: N NO MAZE PERFORMED
ASD Repair (Y/N): N  NO
VSD Repair (Y/N): N NO
Myectomy for IHSS (Y/N): N NO
Myxoma Resection (Y/N): N  NO
Other Tumor Resection (Y/N): N NO
Cardiac Transplant (Y/N): N NO
Great Vessel Repair (Y/N): N NO
Endovascular Repair of Aorta: N  NO
Other Cardiac Procedures (Y/N): N  NO
```

```
SURPATIENT,NINETEEN (000-28-7354)       Case #60183                 PAGE: 1 of 2
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------
Cardiac surgical procedures with or without cardiopulmonary bypass
CABG distal anastomoses:                13. Maze procedure: NO MAZE PERFORMED
 1. Number with vein:            1      14. ASD repair:               NO
 2. Number with IMA:             1      15. VSD repair:               NO
 3. Number with Radial Artery:   0      16. Myectomy for IHSS:        NO
 4. Number with Other Artery:    1      17. Myxoma resection:         NO
 5. Number with Other Conduit:   1      18. Other tumor resection:    NO
                                        19. Cardiac transplant:       NO
 6. LV Aneurysmectomy:           NO     20. Great Vessel Repair:      NO
 7. Bridge to transplant/Device: NO     21. Endovascular Repair:      NO
 8. TMR:                         NO     22. Other cardiac procedures: NO

 9. Aortic Valve Procedure:      PRIMARY REPAIR
10. Mitral Valve Procedure:      NONE
11. Tricuspid Valve Procedure:   NONE
12. Pulmonary Valve Procedure:   NONE
-------------------------------------------------------------------------------
Select Operative Information to Edit: <Enter>
```

```
SURPATIENT,NINETEEN (000-28-7354)      Case #60183                 PAGE: 2 of 2
JUN 18,2005   CORONARY ARTERY BYPASS
-------------------------------------------------------------------------------
Indicate other cardiac procedures only if done with cardiopulmonary bypass
-------------------------------------------------------------------------------

 1. Foreign Body Removal:
 2. Pericardiectomy:

Other Operative Data details:
---------------------------------------------
 3. Total CPB Time:
 4. Total Ischemic Time:
 5. Incision Type:
 6. Convert Off Pump to CPB:  N/A (began on-pump/ stayed on-pump)
-------------------------------------------------------------------------------

Select Operative Information to Edit:
```

# Outcome Information (Enter/Edit)
## [SROA CARDIAC-OUTCOMES]

This option is used to enter or edit outcome information for cardiac procedures.

**Example: Enter Outcome Information**

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: OUT Outcome Inf
ormation (Enter/Edit)

SURPATIENT,TWENTY (000-45-4886)     Case #238                          PAGE: 1
OUTCOMES INFORMATION
FEB 10,2004   CABG
-------------------------------------------------------------------------------------------------------------------

0. Operative Death:                NO

Perioperative (30 day) Occurrences:

1. Perioperative MI:               NO      8. Repeat cardiac surg procedure:  NO
2. Endocarditis:                   NO      9. Tracheostomy:                   YES
3. Renal failure require dialysis: NO     10. Repeat ventilator w/in 30 days: YES
4. Mediastinitis:                  YES    11. Stroke:                        NO
5. Cardiac arrest requiring CPR:   YES    12. Coma >= 24 hr:                 NO
6. Reoperation for bleeding:       NO     13. New Mech Circ Support:         YES
7. On ventilator >= 48 hr:         NO     14. Postop Atrial Fibrillation:    NO

-------------------------------------------------------------------------------------------------------------------

Select Outcomes Information to Edit: 8
Repeat Cardiac Surgical Procedure (Y/N): NO// Y YES
Cardiopulmonary Bypass Status: ?

Enter NONE, ON BYPASS, or OFF BYPASS.
0        None
1        On-bypass
2        Off-bypass


Cardiopulmonary Bypass Status: 1  On-bypass
```

```
SURPATIENT,TWENTY (000-45-4886)     Case #238                          PAGE: 1
OUTCOMES INFORMATION
FEB 10,2004   CABG
-------------------------------------------------------------------------------------------------------------------

0. Operative Death:                NO

Perioperative (30 day) Occurrences:

1. Perioperative MI:                NO      8. Repeat cardiac surg procedure:  YES
2. Endocarditis:                    NO      9. Tracheostomy:                   YES
3. Renal failure require dialysis : NO     10. Repeat ventilator w/in 30 days: YES
4. Mediastinitis:                   YES    11. Stroke:                        NO
5. Cardiac arrest requiring CPR:    YES    12. Coma >= 24 hr:                 NO
6. Reoperation for bleeding:        NO     13. New Mech Circ Support:         YES
7. On ventilator >= 48 hr:          NO     14. Postop Atrial Fibrillation:    NO

-------------------------------------------------------------------------------------------------------------------

Select Outcomes Information to Edit:
```

# Resource Data (Enter/Edit)
## [SROA CARDIAC RESOURCE]

The nurse reviewer uses the *Resource Data (Enter/Edit)* option to enter, edit, or review risk assessment and cardiac patient demographic information such as hospital admission, discharge dates, and other information related to the surgical episode.

**Example: Resource Data (Enter/Edit)**

```
Select Cardiac Risk Assessment Information (Enter/Edit) Option: R Resource Data

SURPATIENT,TEN (000-12-3456)        Case #49413
OCT 18,2007   CABG X3 USING LSVG TO OMB,LV EXT. OF RCA,LIMA TO LAD
-------------------------------------------------------------------------------------------------------------

Enter/Edit Patient Resource Data

1. Capture Information from PIMS Records
2. Enter, Edit, or Review Information

Select Number: (1-2): 1

Are you sure you want to retrieve information from PIMS records ? YES// <Enter>

...HMMM, I'M WORKING AS FAST AS I CAN...

SURPATIENT,TEN (000-12-3456)        Case #49413
OCT 18,2007   CABG X3 USING LSVG TO OMB,LV EXT. OF RCA,LIMA TO LAD
-------------------------------------------------------------------------------------------------------------

Enter/Edit Patient Resource Data

1. Capture Information from PIMS Records
2. Enter, Edit, or Review Information

Select Number: (1-2): 2

SURPATIENT,TEN (000-12-3456)        Case #49413
OCT 18,2007   CABG X3 USING LSVG TO OMB,LV EXT. OF RCA,LIMA TO LAD
-------------------------------------------------------------------------------------------------------------

 1. Hospital Admission Date:           FEB 11, 2007@15:39
 2. Hospital Discharge Date:           FEB 16, 2007@13:44
 3. Cardiac Catheterization Date:
 4. Time Patient In OR:                FEB 12, 2007@06:30
 5. Date/Time Operation Began:         FEB 12, 2007@06:40
 6. Date/Time Operation Ended:         FEB 12, 2007@08:30
 7. Time Patient Out OR:               FEB 12, 2007@08:40
 8. Date/Time Patient Extubated:
 9. Date/Time Discharged from ICU:     FEB 16, 2007@13:44
10. Homeless:                          NO
11. Surg Performed at Non-VA Facility: NO
12. Resource Data Comments:
13. Employment Status Preoperatively: EMPLOYED PART TIME

Select Resource Information to Edit:
```

```
Employment Status Preoperatively: EMPLOYED FULL TIME// ?
     Enter the patient's employment status preoperatively.
     Choose from:
       1        EMPLOYED FULL TIME
       2        EMPLOYED PART TIME
       3        NOT EMPLOYED
       4        SELF EMPLOYED
       5        RETIRED
       6        ACTIVE MILITARY DUTY
       9        UNKNOWN
Employment Status Preoperatively: 3 NOT EMPLOYED
```

```
SURPATIENT,TEN (000-12-3456)        Case #49413
OCT 18,2007   CABG X3 USING LSVG TO OMB,LV EXT. OF RCA,LIMA TO LAD
------------------------------------------------------------------------------------------------------------------------

 1. Hospital Admission Date:           FEB 11, 2007@15:39
 2. Hospital Discharge Date:           FEB 16, 2007@13:44
 3. Cardiac Catheterization Date:
 4. Time Patient In OR:                FEB 12, 2007@06:30
 5. Date/Time Operation Began:         FEB 12, 2007@06:40
 6. Date/Time Operation Ended:         FEB 12, 2007@08:30
 7. Time Patient Out OR:               FEB 12, 2007@08:40
 8. Date/Time Patient Extubated:
 9. Date/Time Discharged from ICU:     FEB 16, 2007@13:44
10. Homeless:                          NO
11. Surg Performed at Non-VA Facility: NO
12. Resource Data Comments:
13. Employment Status Preoperatively: NOT EMPLOYED

------------------------------------------------------------------------------------------------------------------------

Select Resource Information to Edit:
```

---

The Surgery software performs data checks on the following fields:

The Date/Time Patient Extubated field should be later than the Time Patient Out OR field, and earlier than the Date/Time Discharged from ICU field.

The Date/Time Discharged from ICU field should be later than the Date/Time Patient Extubated field, and equal to or earlier than the Hospital Discharge Date field.

If the date entered does not conform to the specifications, then the Surgery software displays a warning at the bottom of the screen.

---

# Print a Surgery Risk Assessment
## [SROA PRINT ASSESSMENT]

The *Print a Surgery Risk Assessment* option prints an entire Surgery Risk Assessment Report for an individual patient. This report can be displayed temporarily on a screen. As the report fills the screen, the user will be prompted to press the **<Enter>** key to go to the next page. A permanent record can be made by copying the report to a printer. When using a printer, the report is formatted slightly differently from the way it displays on the terminal.

Example 1: Print Surgery Risk Assessment for a Non-Cardiac Case

```
Select Surgery Risk Assessment Menu Option: P  Print a Surgery Risk Assessment

Do you want to batch print assessments for a specific date range ? NO//  <Enter>


Select Patient: SURPATIENT,FORTY         05-07-23     000777777     NO     NSC VET
ERAN

SURPATIENT,FORTY  000-77-7777

1. 02-10-04   * CABG (INCOMPLETE)

2. 01-09-06   APPENDECTOMY (COMPLETED)


Select Surgical Case: 2

Print the Completed Assessment on which Device: [Select Print Device]
```

*printout follows*

```
VA NON-CARDIAC RISK ASSESSMENT             Assessment: 236          PAGE 1
FOR SURPATIENT,FORTY 000-77-7777 (COMPLETED)
================================================================================

Medical Center: ALBANY
Age:            81                      Operation Date:    JAN 09, 2006
Sex:            MALE                    Ethnicity: NOT HISPANIC OR LATINO
                                        Race:      AMERICAN INDIAN OR ALASKA
                                                   NATIVE, NATIVE HAWAIIAN OR
                                                   OTHER PACIFIC ISLANDER, WHITE
Transfer Status: NOT TRANSFERRED
Observation Admission Date:                    NA
Observation Discharge Date:                    NA
Observation Treating Specialty:                NA
Hospital Admission Date:                       JAN 7,2006   11:15
Hospital Discharge Date:                       JAN 12,2006  10:30
Admitted/Transferred to Surgical Service:  JAN  7,2006  11:15
Discharged/Transferred to Chronic Care: JAN 12,2006 10:30 In/Out-
Patient Status:                                INPATIENT
--------------------------------------------------------------------------------

                          PREOPERATIVE INFORMATION


ENERAL:                       NO        HEPATOBILIARY:                  NO
Height:                    70 INCHES    Ascites:                        NO
Weight:                    180 LBS.
Diabetes Mellitus:            NO        GASTROINTESTINAL:               NO
Current Smoker W/I 1 Year:    NO        Esophageal Varices:             NO
ETOH > 2 Drinks/Day:          NO
Dyspnea:                      NO        CARDIAC:                        NO
Preop Sleep Apnea:          LEVEL 1     CHF Within 1 Month:             NO
DNR Status:                   NO        MI Within 6 Months:             NO
Preop Funct Status:       INDEPENDENT   Previous PCI:                   NO
                                        Previous Cardiac Surgery:       NO
PULMONARY:                    NO      Angina Within 1 Month:            NO
Ventilator Dependent:        NO       Hypertension Requiring Meds:      NO
History of Severe COPD:  NO
Current Pneumonia:            NO        VASCULAR:                       NO
                                        Revascularization/Amputation:   NO
                                        Rest Pain/Gangrene:             NO

RENAL:                        YES       NUTRITIONAL/IMMUNE/OTHER:       YES
Acute Renal Failure:          NO        Disseminated Cancer:            NO
Currently on Dialysis:        NO        Open Wound:                     NO
                                        Steroid Use for Chronic Cond.:  NO
CENTRAL NERVOUS SYSTEM:       YES       Weight Loss > 10%:              NO
Impaired Sensorium:           NO        Bleeding Disorders:             NO
Coma:                         NO        Transfusion > 4 RBC Units:      NO
Hemiplegia:                   NO        Chemotherapy W/I 30 Days:       NO
History of TIAs:              NO        Radiotherapy W/I 90 Days:       NO
CVA/Stroke w. Neuro Deficit:  YES       Preoperative Sepsis:           NONE
CVA/Stroke w/o Neuro Deficit: NO        Pregnancy:           NOT APPLICABLE
Tumor Involving CNS:          NO


                       OPERATION DATE/TIMES INFORMATION

               Patient in Room (PIR): JAN 9,2006  07:25
   Procedure/Surgery Start Time (PST): JAN 9,2006  07:25
        Procedure/Surgery Finish (PF): JAN 9,2006  08:00
            Patient Out of Room (POR): JAN 9,2006  08:10
                Anesthesia Start (AS): JAN 9,2006  07:15
              Anesthesia Finish (AF): JAN 9,2006  08:08
         Discharge from PACU (DPACU): JAN 9,2006  09:15
```

Example 2: Print Surgery Risk Assessment for a Cardiac Case

```
Select Surgery Risk Assessment Menu Option: P  Print a Surgery Risk Assessment

Do you want to batch print assessments for a specific date range ? NO//  <Enter>


Select Patient: R9922 SURPATIENT,NINE          12-19-51     000345555     NO     SC
 VETERAN

SURPATIENT,NINE  000-34-5555

1. 07-01-06   * CABG X3 (1A,2V), ARTERIAL GRAFTING (TRANSMITTED)

2. 03-27-05   INGUINAL HERNIA (TRANSMITTED)

3. 07-03-04   PULMONARY LOBECTOMY (TRANSMITTED)


Select Surgical Case: Select Surgical Case: 1

Print the Completed Assessment on which Device: [Select Print Device]
```

*printout follows*

```
VA CONTINUOUS IMPROVEMENT IN CARDIAC SURGERY PROGRAM (CICSP/CICSP-X)

================================================================================
I. IDENTIFYING DATA
Patient: SURPATIENT,NINE  000-34-5555      Case #: 238         Fac./Div. #: 500
Surgery Date: 07/01/06   Address: Anyplace Way
Phone: NS/Unknown        Zip Code: 33445-1234        Date of Birth: 12/19/51
================================================================================
II. CLINICAL DATA
Gender:                   MALE          Prior MI:         < OR = 7 DAYS OF SURG
Age:                      56            # of prior heart surgeries:        1
Height:                   76 in         Prior heart surgeries:       Valve-only
Weight:                   210 lb        Peripheral Vascular Disease:       YES
Diabetes:                 ORAL          Cerebral Vascular Disease:         NO
COPD:                     YES           Angina (use CCS Class):            IV
FEV1:                     NS            CHF (use NYHA Class):              II
Cardiomegaly (X-ray):     YES           Current Diuretic Use:              YES
Pulmonary Rales:          YES           Current Digoxin Use:               NO
Current Smoker: WITHIN 2 WEEKS OF SURG IV NTG 48 Hours Preceding Surgery: YES
Active Endocarditis:      NO            Preop Circulatory Device:         NONE
Resting ST Depression:    NO            Hypertension:                      YES
Functional Status:        INDEPENDENT   Preoperative Atrial Fibrillation: NO
PCI:                              None

III. DETAILED LABORATORY INFO - PREOPERATIVE VALUES
Creatinine:        mg/dl (NS)            T.  Cholesterol:  mg/dl   (NS)
Hemoglobin:        mg/dl (NS)            HDL:                mg/dl (NS)
Albumin:           g/dl  (NS)            LDL:                mg/dl (NS)
Triglyceride:      mg/dl (NS)            Hemoglobin    A1c:    %    (NS)
Potassium:         mg/L  (NS)            BNP:                mg/dl (NS)
T. Bilirubin: mg/dl (NS)

IV. CARDIAC CATHETERIZATION AND ANGIOGRAPHIC DATA
Cardiac Catheterization Date: 06/28/06
Procedure:                 NS            Native Coronaries:
LVEDP:                     NS            Left Main Stenosis:            NS
Aortic Systolic Pressure:  NS            LAD Stenosis:                  NS
                                         Right  Coronary  Stenosis:     NS
For patients having right heart cath:    Circumflex Stenosis:           NS
PA Systolic Pressure:  NS
PAW Mean Pressure:         NS            If a Re-do, indicate stenosis
                                             in graft to:
                                         LAD:                           NS
                                         Right coronary (include PDA): NS
                                         Circumflex:                    NS
--------------------------------------------------------------------------------------------------------------
LV Contraction Grade (from contrast or radionuclide angiogram or 2D Echo):
       Grade     Ejection Fraction Range           Definition
        NO LV STUDY
--------------------------------------------------------------------------------------------------------------
Mitral Regurgitation:     NS
Aortic stenosis:          NS

V. OPERATIVE RISK SUMMARY DATA
     Physician's Preoperative
       Estimate of Operative Mortality: NS               07/28/06 15:30)
     ASA Classification:           3-SEVERE DISTURB.
     Surgical Priority:            ELECTIVE              07/28/06 15:31)
     Principal CPT Code:           33517
     Other Procedures CPT Codes:   33510
     Preoperative Risk Factors:
```

```
SURPATIENT,NINE  000-34-5555
================================================================================
 VI. OPERATIVE DATA
Cardiac surgical procedures with or without cardiopulmonary bypass
CABG distal anastomoses:                Maze procedure:      NO MAZE PERFORMED
  Number with Vein:              1      ASD repair:                          NO
  Number with IMA:               1      VSD repair:                          NO
  Number with Radial Artery:     0      Myectomy for IHSS:                   NO
  Number with Other Artery:      1      Myxoma resection:                    NO
  Number with Other Conduit:     1      Other tumor resection:               NO
LV Aneurysmectomy:               NO     Cardiac transplant:                  NO
Bridge to transplant/Device:     NO     Great Vessel Repair:                 NO
TMR:                             NO     Endovascular Repair:                 NO
                                        Other Cardiac procedure(s):          NO
Aortic Valve Procedure:          PRIMARY REPAIR
Mitral    Valve    Procedure:    NONE
Tricuspid   Valve   Procedure:   NONE
Pulmonary Valve Procedure:       NONE
* Other Cardiac procedures (Specify):

Indicate other cardiac procedures only if done with cardiopulmonary bypass
Foreign body removal:            YES
Pericardiectomy:                 YES

Other Operative Data details
Total CPB Time:     85 min               Total Ischemic Time: 60 min
Incision Type:           FULL STERNOTOMY
Conversion Off Pump to CPB: N/A (began on-pump/ stayed on-pump)

VII. OUTCOMES
Operative Death:  NO                      Date of Death:

Perioperative (30 day) Occurrences:
  Perioperative MI:                NO    Repeat cardiac Surg procedure:  YES
  Endocarditis:                    NO    Tracheostomy:                   YES
  Renal Failure Requiring Dialysis: NO   Ventilator supp within 30 days: YES
  Mediastinitis:                   YES   Stroke/CVA:                     NO
  Cardiac Arrest Requiring CPR:    YES   Coma > or = 24 Hours:           NO
  Reoperation for Bleeding:        NO    New Mech Circulatory Support:   YES
  On ventilator > or = 48 hr:      NO    Postop Atrial Fibrillation:     NO

VIII. RESOURCE DATA
Hospital Admission Date:                      06/30/06 06:05
Hospital Discharge Date:                      07/10/06 08:50
Time Patient In  OR:     07/10/06 10:00      Operation Began: 07/01/06 10:10
Operation Ended:         07/10/06 12:30      Time Patient Out OR: 07/01/06 12:20
Date and Time Patient Extubated:              07/10/06 13:13
     Postop Intubation Hrs: +1.9
Date and Time Patient Discharged from ICU:    07/10/06 08:00
Patient is Homeless:                          NS
Cardiac Surg Performed at Non-VA Facility:    UNKNOWN
Resource Data Comments:
================================================================================
IX. SOCIOECONOMIC, ETHNICITY, AND RACE
 Employment Status Preoperatively:     SELF EMPLOYED
 Ethnicity:                            NOT HISPANIC OR LATINO
 Race Category(ies):                   AMERICAN INDIAN OR ALASKA NATIVE,
                                       NATIVE HAWAIIAN OR OTHER PACIFIC
                                       ISLANDER, WHITE

X. DETAILED DISCHARGE INFORMATION
   Discharge ICD-9 Codes: 414.01 V70.7 433.10 285.1 412. 307.9  427.31

Type of Disposition: TRANSFER
Place of Disposition: HOME-BASED PRIMARY CARE (HBPC)
Primary care or referral VAMC identification code: 526
Follow-up VAMC identification code: 526

 *** End of report for SURPATIENT,NINE 000-34-5555 assessment #238 ***
```

*(This page included for two-sided copying.)*

# Risk Model Lab Test
## [SROA LAB TEST EDIT]

In order to assist the nurse reviewer, in the *Surgery Risk Assessment Menu* is the *Risk Model Lab Test (Enter/Edit)* option, which allows the nurse to map NSQIP-CICSP data in the RISK MODEL LAB TEST file (#139.2). The option synonym is ERM.

```
Risk Model Lab Test (Enter/Edit)
Select Surgery Risk Assessment Menu Option: Risk Model Lab Test (Enter/Edit)




           Risk Model Lab Test (Enter/Edit)

 Select item to edit from list below:

 1. ALBUMIN                      14. INR
 2. ALKALINE PHOSPHATASE         15. LDL
 3. ANION GAP                    16. PLATELET COUNT
 4. B-TYPE NATRIURETIC PEPTIDE 17. POTASSIUM
 5. BUN                          18. PT
 6. CHOLESTEROL                  19. PTT
 7. CPK                          20. SGOT
 8. CPK-MB                       21. SODIUM
 9. CREATININE                   22. TOTAL BILIRUBIN
10. HDL                          23. TRIGLYCERIDE
11. HEMATOCRIT                   24. TROPONIN I
12. HEMOGLOBIN                   25. TROPONIN T
13. HEMOGLOBIN A1C               26. WHITE BLOOD COUNT

Enter number (1-25): 6
```

```
           Risk Model Lab Test (Enter/Edit)


                Test Name: CHOLESTEROL

  Laboratory Data Name(s): NONE ENTERED

                 Specimen: SERUM


Do you want to edit this test ? NO// YES

Select LABORATORY DATA NAME: CHOLESTEROL
     1   CHOLESTEROL
     2   CHOLESTEROL CRYSTALS
CHOOSE 1-2: 1  CHOLESTEROL
Select LABORATORY DATA NAME: <Enter>
Specimen: SERUM// <Enter>
```

```
                    Risk Model Lab Test (Enter/Edit)

 Select item to edit from list below:

 1. ALBUMIN                      14. INR
 2. ALKALINE PHOSPHATASE         15. LDL
 3. ANION GAP                    16. PLATELET COUNT
 4. B-TYPE NATRIURETIC PEPTIDE 17. POTASSIUM
 5. BUN                          18. PT
 6. CHOLESTEROL                  19. PTT
 7. CPK                          20. SGOT
 8. CPK-MB                       21. SODIUM
 9. CREATININE                   22. TOTAL BILIRUBIN
10. HDL                          23. TRIGLYCERIDE
11. HEMATOCRIT                   24. TROPONIN I
12. HEMOGLOBIN                   25. TROPONIN T
13. HEMOGLOBIN A1C               26. WHITE BLOOD COUNT

Enter number (1-26):
```