Department of Veterans Affairs
Office of Inspector General

Healthcare Inspection

A Review of Facility Capabilities Where Veterans Received Complex Surgical Care

Report No. 10-02302-225 **July 14, 2011**

VA Office of Inspector General
Washington, DC 20420

To Report Suspected Wrongdoing in VA Programs and Operations:
Telephone: 1-800-488-8244
E-Mail: vaoighotline@va.gov
(Hotline Information: http://www.va.gov/oig/contacts/hotline.asp)

Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections conducted a retrospective review to characterize where seven complex and intermediate surgical procedures were performed at Veterans Health Administration (VHA) facilities and at non-VHA facilities through fee basis arrangements prior to VHA's release of Directive 2010-018, *Facility Infrastructure Requirements To Perform Standard, Intermediate, Or Complex Surgical Procedures,* on May 6, 2010.

We identified high-risk surgeries performed at VHA facilities and at non-VHA facilities through fee basis arrangements during the 2nd and 3rd quarters of fiscal year 2010. We then compared VHA facility infrastructure designations (standard, intermediate, or complex) to the selected surgical procedures performed at each facility and determined whether facilities had the infrastructure to support complex surgical procedures. To evaluate the infrastructure of fee basis facilities, we reviewed trauma level and cancer center designations.

We also performed medical record reviews to determine the outcomes of patients whose procedures were performed at VHA facilities with infrastructure designations less complex than would have been required by the Directive had they been performed after the Directive's effective date.

We found that VHA facilities had appropriate infrastructure to support surgeries performed. Although some surgeries were performed at VHA facilities with designations of lower complexity than required by the Directive, these surgeries were performed prior to publication of the Directive, and we identified no adverse patient outcomes clearly attributable to facility infrastructure. We also found that VHA referred complex surgeries to non-VHA facilities with sufficient capabilities to support the surgeries performed. Although these facilities did not have the same criteria in place as VHA facilities for infrastructure complexity designation, they met similar requirements through trauma level and specialty designations.

DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington, DC 20420

TO: Under Secretary for Health

SUBJECT: Healthcare Inspection – A Review of Facility Capabilities Where Veterans Received Complex Surgical Care

Purpose

The VA Office of Inspector (OIG) General Office of Healthcare Inspections conducted a retrospective review to characterize where selected complex and intermediate surgical procedures were performed at VHA facilities and at non-VHA facilities through fee basis arrangements prior to VHA's release of Directive 2010-018, *Facility Infrastructure Requirements To Perform Standard, Intermediate, Or Complex Surgical Procedures* (Directive) on May 6, 2010. The review provides an independent analysis of where select complex surgical procedures were performed within the VHA and by fee-for-service providers prior to publication of the Directive.

Background

In 2007, the National Surgical Quality Improvement Program (NSQIP)[1] identified an increase in surgical mortality at a VHA medical center. A subsequent OIG review concluded that, independent of physician expertise, availability of support services might limit where certain operations should be performed.[2]

OIG recommended that the Under Secretary for Health develop and implement a mechanism to ensure that each facility's diagnostic and therapeutic interventions are appropriate to the facility's capabilities. Consequently, the Under Secretary established a working group to analyze infrastructure and surgical procedures performed at VHA facilities.

[1] In 2009, NSQIP combined with a related cardiac surgery program to form the VA Surgical Quality Improvement Program (VASQIP).
[2] *Healthcare Inspection – Quality of Care Issues, Marion VA Medical Center, Marion, Illinois,* Report No. 07-03386-65, January 28, 2008.

The Directive, which resulted from the group's analysis and recommendations, became effective in May 2010. It established an Operative Complexity Matrix (OCM) and assigned complexity levels (standard, intermediate, or complex) to each procedure identified by Current Procedure Terminology (CPT) codes. The Directive also includes a Procedure Infrastructure Matrix (PIM), which establishes the infrastructure requirements to perform standard, intermediate, or complex procedures at a VHA facility (see Appendixes B–I, Tables 1–10).

Researchers have evaluated various approaches for decreasing surgical mortality. These include limiting complex procedures to high-volume facilities,[3] prospective monitoring of risk-adjusted outcomes,[4] and prompt recognition and management of complications once they occur.[5] In general, research findings endorse the need for sufficient perioperative support services (infrastructure).

Scope and Methodology

We identified the following high-risk surgeries performed at VHA facilities and at non-VHA facilities through fee basis arrangements during the 2nd and 3rd quarters of fiscal year 2010 (the review period). These surgeries are considered high-risk because they are associated with an increased risk for complications or death. The Directive designates these surgeries as intermediate or complex.

- aortic aneurysm surgery (inclusive of thoracic and abdominal)[6]
- colectomy (removal of all or a part of the large intestine)
- craniotomy (removal of part of the skull to expose the brain)
- esophagectomy (removal of all or part of the esophagus, part of the upper gastrointestinal tract)
- open heart surgery
- pancreatectomy (removal of all or part of the pancreas)
- pneumonectomy (removal of all or part of a lung)

[3] Sonneday CJ, Birkmeyer, JD. A tale of two provinces: Regionalization of pancreatic surgery in Ontario and Quebec. Ann Surg Oncol. 2010; 17:2535-6.
[4] Khuri SF, Henderson, WG. The case against volume as a measure of quality of surgical care. World Journal of Surgery. 2005; 29:1222-9.
[5] Dimick JB, Osborne NH, Hall, BL, Clifford YK, Birkmeyer JD. Risk adjustment for comparing hospital quality with surgery: How many variables are needed? J Am Coll Surg. 2010;210:503-8.
[6] This surgery involves the removal of a weakened portion of blood vessel (aneurysm), which is then replaced by a man-made graft.

We then compared VHA facility infrastructure designations (standard, intermediate, or complex)[7] to the surgical procedures performed at each facility during the review period (see Appendix J, Table 11).

We also reviewed the outcomes of patients whose procedures were performed at VHA facilities with infrastructure designations less complex than would have been required by the Directive had they been performed after the Directive's effective date. For example, we reviewed the outcomes of complex surgical procedures performed at intermediate and standard facilities.

To evaluate the infrastructures of fee basis facilities, we obtained trauma level[8] designations from state health department websites, and cancer center designations from the National Cancer Institute and the American College of Surgeons.

We conducted the inspection in accordance with the *Quality Standards for Inspection and Evaluation* published by the Council of the Inspectors General on Integrity and Efficiency.

Findings

VHA Facilities[9]

Aortic Aneurysm Surgery

VHA physicians performed 46 complex aortic aneurysm procedures during the review period. All but one of these were performed at complex facilities. The remaining procedure was performed at an intermediate Midwest facility. We did not identify adverse patient outcomes.

VHA physicians performed 368 intermediate aortic aneurysm procedures during the review period. All the procedures were performed at complex or intermediate facilities.

Colectomy

VHA physicians performed 1,178 intermediate colectomy procedures during the review period. All but 10 were performed at complex or intermediate facilities. Of these 10 colectomy procedures:

[7] Patient Care Services: VA Medical Centers Designated for Surgical Complexity http://www.patientcare.va.gov/20100518a1.asp (accessed November 12, 2010)
[8] Hospital trauma designations are determined by individual state law provisions. Trauma capabilities are identified by Level: Level-I (Level-1) being the highest, to Level-III (Level-3) being the lowest (some states have five designated levels, in which case Level-V (Level-5) is the lowest).
[9] See Appendixes B–I, Tables 1–10. For purposes of clarity, VHA Directive 2010-018, *Facility Infrastructure Requirements To Perform Standard, Intermediate, Or Complex Surgical Procedures* (Directive) was used as a point of reference. The Directive was not implemented until May 6, 2010.

- All were performed prior to publication of the Directive.
- One was performed at an East Coast facility, with no identified adverse outcomes.
- Four were performed at a Southern facility. Three of the four patients had no adverse outcomes. The fourth patient was an 82 year old with diabetes, obesity, and renal insufficiency who died eight days after surgery. We identified no aspects of the care provided which could be clearly attributed to the facility's infrastructure.
- Five were performed at a Northwest facility. Four of the five patients had no adverse outcomes. The fifth patient developed a deep vein thrombosis and a slow gastrointestinal bleed 2 weeks after surgery. We did not attribute this patient's surgical complications to the facility's infrastructure.

Craniotomy

VHA physicians performed 237 complex craniotomy procedures during the review period. All but one were performed at complex facilities. The remaining procedure was performed at an intermediate facility on the East Coast. This procedure, performed by an ophthalmologist, was a transcranial[10] exploration of an orbit (eye socket). We identified no adverse outcomes.

Esophagectomy

VHA physicians performed 54 complex and 6 intermediate esophagectomy procedures during the review period. All the procedures were performed at complex facilities.

Open Heart Surgery

VHA physicians performed 1,608 complex open heart procedures during the review period. All the procedures were performed at complex facilities.

Pancreatectomy

VHA physicians performed 34 complex and 25 intermediate pancreatectomy procedures during the review period. All the procedures were performed at complex facilities.

Pneumonectomy

VHA physicians performed four complex pneumonectomy procedures during the review period. All but one were performed at complex facilities. The remaining procedure was

[10] Transcranial is a surgical approach through the cranium (skull).

performed at a Mid-Atlantic intermediate facility prior to publication of the Directive. We identified no adverse outcomes.

VHA physicians performed 97 intermediate pneumonectomy procedures during the review period. Ninety-one of the procedures were performed at complex facilities and six were performed at intermediate facilities. We identified no adverse outcomes.

Fee Basis Facilities

If a service cannot be provided in a timely manner due to capability, capacity, or accessibility, the service may, with approval, be provided outside of the VA through fee basis,[11] which is governed by Federal law. However, fee basis care is not an entitlement program or a permanent treatment option.[12,13]

We examined the characteristics of facilities performing esophagectomy, pancreatectomy, and pneumonectomy procedures. We reviewed each case to determine if the infrastructure provided by the fee basis provider was comparable or exceeded required VHA infrastructure (see Appendix K, Table 12).

Trauma designations are given to facilities that meet requirements of government or other authorized entities.[14] Level I designation requires around-the-clock availability of surgeons in addition to emergency care, respiratory therapy, diagnostic imaging, and laboratory and blood-component services.

The National Cancer Institute designates 66 cancer centers as "state-of-the-art cancer research and patient care facilities."[15] The American College of Surgeons Commission on Cancer grants accreditation "to those facilities that have voluntarily committed to provide the best in cancer diagnosis and treatment and are able to comply with their established standards."[16]

Esophagectomy

VHA approved nine complex or intermediate fee basis esophagectomies. All were referred to a Level I trauma-designated facility or cancer center.

Pancreatectomy

[11] VHA Directive 2008-056, *VHA Consult Policy*, September 16, 2008.
[12] National Fee Program Office, http://www.nonvacare.va.gov, accessed February 16, 2011.
[13] OIG Office of Audits & Evaluation (2010, August 18), *Veterans Health Administration: Audit of Non-VA Inpatient Fee Care Program*, Report No. 09-03408-227.
[14] American College of Surgeons: Trauma Programs, http://www.facs.org/trauma.verified.html, accessed February 2, 2011.
[15] http://cancercenters.cancer.gov/cancer_centers, accessed May 9, 2011.
[16] American College of Surgeons: Cancer Program Accreditation, http://www.facs.org/cancerprogram, accessed May 9, 2011.

VHA approved 14 complex or intermediate fee basis pancreatectomies. All but one were referred to a Level I or II trauma-designated facility or a cancer center. The remaining patient presented to a local hospital emergency department and required emergency surgery.

Pneumonectomy

VHA approved eight complex or intermediate fee basis pneumonectomies. Six of these patients were referred to a Level I trauma facility and one to a cancer center. The remaining patient was referred to a regional hospital. The hospital was not a designated trauma or cancer center; however, it did have thoracic surgeons on staff and complex surgeries, such as open heart surgeries, were performed there. We identified no adverse outcomes.

Conclusions

This review found that in response to OIG's 2008 recommendation to the Under Secretary for Health, VHA has successfully implemented a mechanism to ensure that each facility's diagnostic and therapeutic interventions are appropriate to the facility's capabilities.

The complex surgeries identified for this review were supported by the infrastructure at VHA facilities. Although some surgeries were performed at VHA facilities with designations of lower complexity than required by the Directive, these surgeries were performed prior to publication of the Directive, and we identified no adverse patient outcomes clearly attributable to facility infrastructure.

VHA referred complex surgeries to non-VHA facilities with infrastructures that supported the complexity of the surgeries performed. Although these facilities did not have the same criteria in place as VHA facilities for infrastructure complexity designation, they met similar requirements through trauma level and specialty designations.

Comments

The Under Secretary for Health agreed with our findings. We made no recommendations and plan no further actions.

(original signed by:)

JOHN D. DAIGH, JR., M.D.
Assistant Inspector General for
Healthcare Inspections

Appendix A

Under Secretary for Health Comments

Department of Veterans Affairs **Memorandum**

Date: June 24, 2011

From: Under Secretary for Health (10)

Subject: **OIG Draft Report: Review of Facility Capabilities Where Veterans Received Complex Surgical Care (VAIQ 7118631)**

To: Assistant Inspector General for Healthcare Inspections (54)

1. I have reviewed the Office of Inspector General (OIG) draft report, and I concur with its findings. I am pleased to learn that OIG's analysis confirms that the Veterans Health Administration (VHA) is providing complex surgical care within facilities with adequate resources and competence. This report indicates that VHA has successfully implemented a mechanism to ensure that each facility's diagnostic and therapeutic interventions are appropriate to each facility's capabilities as was recommended in a 2008 OIG report recommendation.

2. In response to the 2008 OIG report recommendation, VHA conducted detailed analyses of facility infrastructure and surgical procedures performed in each VHA Surgical Program. VHA's analyses concluded that any gaps between surgical complexity and infrastructure requirements were resolved prior to the publication of VHA Directive 2010-018, *Facility Infrastructure Requirements to Perform Standard Intermediate, or Complex Surgical Procedures*. This report confirms VHA's conclusions.

3. Per policy, VHA monitors all surgical procedures performed and identifies any procedure performed in a facility which exceeds the infrastructure complexity designation. The National Surgery Office reports all surgical procedures performed beyond facility complexity designation through the VA Surgical Quality Improvement Program thereby ensuring ongoing policy compliance.

4. Thank you for the opportunity to review the draft. If you have any questions, please contact Linda H. Lutes, Director, Management Review Service (10A4A4) at (202) 461-7014.

Robert A. Petzel, M.D.

Appendix B

Tables 1–10 are summaries of VHA Directive 2010-018, *Facility Infrastructure Requirements to Perform Standard, Intermediate, or Complex Surgical Procedures,* with each section designated as a separate table.

Table 1. Perioperative Diagnostic Evaluation Requirements.

	Standard	Intermediate	Complex
EKG: In-house weekdays dayshift, available on-call 24 hours a day, 7 days a week, 365 days a year (24/7) within 30 minutes	X		
EKG: In house 24/7.		X	X
Basic Laboratory: (includes in house weekdays dayshift, available on call 24/7 within 30 minutes)	X		
Basic Laboratory: In-house 24/7.		X	
Basic Radiology: (includes in house weekday dayshift, available on call 24/7 within 30 minutes).	X		
Basic Radiology: In-house 24/7		X	X
Cardiac Stress Testing: Available in-house during day tour, may be through fee or contract.		X	X
Pulmonary Function Test (PFT) Studies: Available in-house during day tour, may be through fee or contract.		X	X
Computerized Tomography (CT) Scan: In-house weekdays dayshift, on-call 24/7 within 30 minutes		X	X
Vascular Ultrasound: In-house weekdays dayshift		X	X
Radiology Interpretation: In-house weekdays dayshift, on-call 24/7 within 30 minutes		X	X
Magnetic Resonance Imaging (MRI) and Magnetic Resonance Angiography (MRA): In-house weekday dayshift, on-call24/7 within 30 minutes if necessary for specialized programs.			X
Interventional Cardiology: To be provided 24/7 within 30 minutes, if necessary, for specialized programs.		X	X
Vascular Interventional Radiology: To be provided 24/7 in-house or by fee or contract within 60 minutes.		X	X
Non-vascular Interventional Radiology: To be provided 24/7 in-house or by fee or contract within 60 minutes**.**			X
Interventional Neuroradiology: In-house or written plan and/or policy for fee or contract, 24/7 within 60 minutes.			X

Appendix C

Table 2. Perioperative Consultation Requirements.

	Standard	Intermediate	Complex
Preoperative Medical Consultation: (elective) In-house weekdays dayshift; **(emergency)** In-house weekday dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person	**X**	**X**	**X**
Postoperative Medical Consultation: In-house weekdays dayshift, available on call 24/7 within 15 minutes by phone or 60 minutes in person	**X**	**X**	**X**
Specialty Consultants: Cardiology, Pulmonary Gastroenterology, Hematology, Infectious Disease, Interventional Radiology, Nephrology, Neurology, Orthopedic Surgery, Pathology, Thoracic Surgery, Urology, Vascular Surgery within 15 minutes by phone and 60 minutes in person. For specialty services, such as PFT's and cardiac catheterization provided by fee or contract, the patient may be seen either on-site or off-site		**X**	
Specialty Consultants: The following consultants must be available 24/7 within 15 minutes by phone or 60 minutes in person: Cardiology, Gastroenterology, Hematology, Infectious Disease, Interventional Radiology, Nephrology, Neurology, Orthopedic Surgery, Otolaryngology, Pathology, Pulmonary, Thoracic Surgery, Urology, Vascular Surgery on staff;			**X**
Cardiovascular Surgeon, Interventional Neuroradiologist, Neurosurgeon as indicated by approved clinical programs; on staff or by fee or contact, availably within 15 minutes by phone or 60 minutes in person.			**X**
Anesthesia Preoperative Assessment: In-house weekdays dayshift, available on call 24/7 within 15 minutes by phone or 60 minutes in person may be provided by Certified Registered Nurse Anesthetist (CRNA) or mid-level provider.	X	**X**	**X**

Appendix D

Table 3. Surgeon Staffing Requirements.

	Standard	Intermediate	Complex
General Surgeon: One Full-time Equivalent (FTE) employee, who may be provided by contract.	**X**		
General Surgeon: There must be a two or more FTE employees who may be provided by contract.		**X**	
General Surgeon: There must be a three or more FTE who may be provided by contract.			**X**
Specialty Surgeons: Variable depending upon in-house clinical services offered	**X**	**X**	**X**
Surgical Assistant: Available 24/7 on call within 60 minutes	**X**	**X**	**X**
Call Schedule: Formal General Surgery and Specialty Service Call Schedule, availability 24/7 within 60 minutes. The call schedule must incorporate only board certified or board eligible surgeons.		**X**	**X**
Inpatient Coverage: Written plan or policy for the availability of a qualified surgeon 24/7 on-call within 60 minutes. Service may be provided by fee or contract at the facility.	**X**		
Inpatient Coverage: There must be coverage by surgical staff, resident, or fellow 24/7 within 15 minutes by phone or 60 minutes in person.		**X**	
Inpatient Coverage: There must be a dedicated in-patient coverage in-house available 24/7, which may be provided by resident, fellow, hospitalist, critical care specialist, or mid-level provider without responsibility to another institution (cannot be provided by physician assigned to the Emergency Department or the Medical Officer of the Day).			**X**

Appendix E

Table 4. Operating Room (OR) Staffing and Equipment Requirements.

	Standard	Intermediate	Complex
Staffing: There must be a minimum of staffing to include a circulating Registered Nurse (RN) and scrub technician or RN. A policy or protocol defining training and competencies consistent with the Association of Operating Room Nurses (AORN) and the Association of Surgical Technicians (AST) must be maintained.	X	X	X
Staff competencies for specialty specific surgery.		X	**X**
A plan or policy for staffing based upon procedural complexity.		X	**X**
A plan or policy for supplemental staffing for intraoperative emergencies		X	X
Instrument Sets: There must be a duplication of all major instrument sets including one vascular set available for emergency purpose.	X	X	X
Equipment required in each OR: There must be an anesthesia machine; the OR must have the capability for basic physiological monitoring including EKG, end-tidal Carbon Dioxide (CO2), and an electrocautery unit.	X	X	X
Equipment required for the OR Area: There must be a code cart and defibrillator, flash sterilizer, and intraoperative c-arm.	X	X	X
Equipment required in each OR: Includes monitoring equipment for central venous pressure, and arterial pressure		X	X
Equipment required for the OR Area: Must include a cell saver.		X	X
Coverage: Nursing and operating room must be available 24/7 within 60 minutes.	X	X	X
Radiology: There must be a technician available for intraoperative radiology in-house weekdays dayshift, on-call 24/7 within 60 minutes.	X	X	X

Table 5. Anesthesia Requirements.

	Standard	Intermediate	Complex
Provider: There must be an Anesthesiologist, or CRNA available for all cases 24/7 within 60 minutes	X	X	X
Chief of Anesthesia: The anesthesia service must be managed by a board certified or board eligible anesthesiologist.		X	X
Assistance: Written plan or policy for physician provider skilled in airway management as necessary.	X	X	X
Coverage: In-house weekday dayshift, on-call 24/7 within 60 minutes.	X	X	X

Table 6. Post Anesthesia Care Unit (PACU) Requirements.

	Standard	Intermediate	Complex
Area: There must be a designated PACU or equivalent; local policy may require specific specialty procedures or after-hours care to be directly transferred to the Intensive Care Unit (ICU).	X	X	X
Staffing: Minimum staffing of two licensed providers with a 1:1 provider-to-patient ratio as required, consistent with the American Society of PeriAnesthesia Nursing (ASPAN) guidelines.	X	X	X
Staffing Outside the PACU: There must be a RN with demonstrated competencies available when the patient is recovered outside the PACU, consistent with ASPAN guidelines.	X	X	X
Competencies for Recovery of Specialty Patients: There must be specific competencies for recovery of specialty patients as indicated.		X	X
Skills: There must be ventilator management, and management of physiologic monitoring.		X	X
Discharge Guidelines: Patients must be discharged from the PACU based upon defined protocol.	X	X	X

Table 7. Intensive Care (ICU) Requirements.

	Standard	Intermediate	Complex
ICU Level: Level 4 or Level 3 without intensivist (for explanation of Levels see Web site at: http://chestjournal.chestpubs.org/content/132/5/1455.full.pdf+html).	X		
ICU Level: Level 2 o4 Level 3 with intensivist (for explanation of Levels see Web site at: http://chestjournal.chestpubs.org/content/132/5/1455.full.lpdf+html).		X	
ICU Level: Level 1 or Level 2 (for explanation of Levels see website at: http://chestjournal.chestpubs.org/content/132/5/1455/full.pdf+html).			X
Medical Co-management of Surgical Patients: There must be a written policy or plan for co-management 24/7.		X	X

Table 8. Ward Staffing and Equipment Requirements.

	Standard	Intermediate	Complex
Nurse competencies must be in alignment with the types of surgical procedures being performed.	X	X	X
Specialty specific competencies must be defined.		X	X
Monitored Beds (EKGS): Capability and defined criteria for the use of beds remotely monitored by EKG.	X	X	X
Monitored Beds (Pulse Oximetry): Capability and defined criteria for the use of beds remotely monitored by pulse oximetry.	X	X	X

Table 9. Requirements for Support Services.

	Standard	Intermediate	Complex
Respiratory Therapy: In-house weekday dayshift, on-call 24/7 within 60 minutes, service must be provided by a credentialed respiratory therapist.	X		
Respiratory Therapy: In-house 24/7; service must be provided by a credentialed respiratory therapist.		X	X
Pharmacy: Pharmacy services in-house 12 hours a day within 15 minutes by telephone and 60 minutes on site.	X		
Pharmacy: Pharmacy services in-house 16 hours a day; on-call or available within 15 minutes by telephone and 60 minutes on site.		X	X
Pharmacy: Pharmacy services in-house 24/7, clinical pharmacy services can be available off tour on-call within 15 minutes by telephone and 60 minutes on site.			X
Blood Bank: There must be packed red blood cells, fresh frozen plasma and platelets available within 60 minutes weekday dayshift.	X		
Blood Bank: There must be packed red blood cells, fresh frozen plasma, and platelets available within 60 minutes 24/7.		X	X
Physical Therapy: In-house weekday's dayshift.	X		
Physical Therapy: In-house weekday dayshift; weekends if necessary for specialty specific recovery.		X	X
Dialysis: In-house weekdays dayshift; it must be available on-call 24/7 within 6 hours		X	X
Pathology: There must be capacity for frozen section studies in-house weekdays dayshift; on-call 24/7 within 60 minutes.		X	X
Biomedical Engineering: In-house weekday dayshift.		X	X

Appendix I

Table 10. Sterile Processing and Distribution (SPD) Requirements.

	Standard	Intermediate	Complex
Availability: There must be a re-processing capability on-site or immediately available appropriate sterile instrument sets should be on-site for all scheduled procedures	X		
Availability: There must be processing onsite; personnel in-house weekdays dayshift; on-call 24/7, or materials available within 15 minutes by written policy or protocol		X	X
Equipment: There must be a flash sterilizer available 24/7 with competent personnel.	X	X	X

Appendix J

VHA Facilities

Table 11. The number and complexity of surgeries performed at VHA facilities and the complexity of the infrastructure where they were performed.

Infrastructure Complexity	Operative Complexity	
AORTIC ANEURYSM SURGERY		
	Complex	**Intermediate**
Complex	**45**	**345**
Intermediate	**1**	**23**
COLECTOMY		
	Complex	**Intermediate**
Complex	**0**	**879**
Intermediate	**0**	**289**
Standard	**0**	**10**
CRANIOTOMY		
	Complex	**Intermediate**
Complex	**236**	**0**
Intermediate	**1**	**0**
ESOPHAGECTOMY		
	Complex	**Intermediate**
Complex	**54**	**6**
Intermediate	**0**	**0**
OPEN HEART SURGERY		
	Complex	**Intermediate**
Complex	**1,608**	**0**
Intermediate	**0**	**0**
PANCREATECTOMY		
	Complex	**Intermediate**
Complex	**34**	**25**
Intermediate	**0**	**0**
PNEUMONECTOMY		
	Complex	**Intermediate**
Complex	**3**	**91**
Intermediate	**1**	**6**

Appendix K

Fee Based Facilities

Table 12. The number of complex or intermediate surgical procedures referred for fee based care with an assessment of the fee base infrastructure complexity.

Fee Based Facility Designation	ESOPHAGECTOMY	PANCREATECTOMY	PNEUMONECTOMY
Level I Trauma	9	9	6
Level II Trauma	0	1	0
NCI Cancer Center	0	3	0
American College of Surgeons (ACS) Cancer Center	0	0	1
Community Hospital	0	1	0
Regional Hospital	0	0	1

Appendix L

OIG Contact and Staff Acknowledgments

OIG Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
Acknowledgments	Ann Ver Linden, RN, Team Leader Laura Dulcie, BS Matt Frazier, MPH Stephanie Hensel, RN, JD Jerome Herbers, MD Clarissa Reynolds, MBA Virginia Solana, RN

Appendix M

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
General Counsel
Under Secretary for Health (10)
Veterans Integrated Service Network Directors (1–23)

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
House Committee on Oversight and Government Reform
Senate Committee on Veterans' Affairs
Senate Appropriations Subcommittee on Military Construction, Veterans Affairs, and Related Agencies
Senate Committee on Homeland Security and Governmental Affairs
National Veterans Service Organizations
Government Accountability Office
Office of Management and Budget

This report is available at http://www.va.gov/oig/publications/reports-list.asp.