FACILITY INFRASTRUCTURE REQUIREMENTS TO PERFORM STANDARD, INTERMEDIATE, OR COMPLEX SURGICAL PROCEDURES

1. PURPOSE: This Veterans Health Administration (VHA) Directive is intended to establish policy and guidance regarding the infrastructure requirements for VHA facilities providing in-house surgical services in relationship to the complexity of surgical procedures being performed as well as the method for monitoring compliance.

2. BACKGROUND

   a. In the spring of 2008, the Under Secretary for Health established the Operative Complexity and Infrastructure Workgroup.

   b. In October 2008, the Under Secretary for Health approved the recommendations of the Operative Complexity and Infrastructure Workgroup establishing the Procedure Infrastructure Matrix (PIM) and the Operative Complexity Matrix (OCM). The PIM documents the infrastructure requirements for a VHA facility with an inpatient surgical program to be designated as standard, intermediate, or complex. The OCM establishes a complexity assignment of standard, intermediate and complex to all surgical procedures by Current Procedure Terminology (CPT) code.

   c. A detailed analysis of the facility infrastructure and the surgical procedures performed for each of the VHA Surgical Programs was performed. Resolution of any gap in infrastructure identified in relationship to the complexity of the surgical procedures performed, was resolved prior to March 15, 2010.

   d. On or before March 15, 2010, the Veterans Integrated Service Network (VISN) Director notified the Office of the Deputy Under Secretary for Health for Operations and Management and the National Director of Surgery (NDS) of surgical complexity designation for each inpatient VHA Surgical Program located within their respective VISN. This declaration signified that all components of the PIM had been satisfied in relationship to the operative complexity designation for the facility.

3. POLICY: It is VHA policy that each VA medical facility with an inpatient Surgical Program have: (1) surgical complexity designation of either standard, intermediate, or complex based upon the facility infrastructure; and (2) that the scheduled (non-emergent) surgical procedures performed, are not to exceed the infrastructure capabilities of the facility. NOTE: This policy does not interfere with the judgment of the surgeon to perform a surgical procedure beyond the operative complexity designation of the facility, based upon new findings at the time of a planned procedure or in managing an emergency condition where the patient’s best interest is served by care and treatment on-site rather than through transfer to a more complex facility.

THIS VHA DIRECTIVE EXPIRES MAY 31, 2015
4. ACTION

a. **Under Secretary for Health.** The Under Secretary for Health is responsible for designating the operative complexity of each VA medical facility with an inpatient VHA Surgical Program.

b. **National Director of Surgery (NDS).** The NDS is responsible for:

   (1) The content of the PIM (see Attachment A) and the OCM (see Attachment B) and for ensuring that both documents are reviewed on an annual basis. In performing this review, the NDS considers modifications to the CPT codes, the standard of care, the clinical outcomes data from the Veterans Affairs Surgical Quality Improvement Program (VASQIP), the emergence of new technology, and the opinion of Surgical Advisory Boards (SAB).

   (2) Providing timely notification to the Office of the Deputy Under Secretary for Health for Operations and Management and the VISN Chief Surgical Consultants located within the VISN offices of any modification to the PIM or the OCM.

   (3) Providing oversight to the VASQIP, which:

      (a) Monitors all surgical procedures performed by an inpatient VHA Surgical Program by the complexity designation of the facility.

      (b) Reports all surgical procedures performed beyond facility complexity designation.

      (c) Notifies the VISN and the facility whenever a surgical procedure has been performed beyond the operative complexity designation.

   c. **VISN Director.** The VISN Director is responsible for:

      (1) Ensuring that each VA medical facility in the VISN with a Surgical Program has Surgical Complexity Designation based upon analysis of the PIM requirements.

      (2) Providing the Deputy Under Secretary for Health for Operations and Management and the NDS with appropriate notification and documentation of any future request by a VA medical facility to modify the surgical complexity designation consistent with current VHA policy on restructuring VHA clinical programs. **NOTE:** In this manner, an intermediate program adding additional resources may request a complex designation. Alternatively, the loss of key medical staff members may require an intermediate facility to request a change in surgical complexity designation to standard designation.

      (3) Submitting all waiver documentation to the Deputy Under Secretary for Health for Operations and Management and the NDS for concurrence when any component of the PIM is provided outside the VA medical facility. The waiver must include:

         (a) The component of the PIM for which the waiver is requested;
(b) The name of the facility performing the procedure;

(c) The travel distance between the VA medical facility and the facility performing the procedure;

(d) The procedure by which the Veteran patient receives care and treatment;

(e) A copy of either the Memorandum of Understanding or a contractual agreement between the VA medical center and the facility performing the procedure; and

(f) A plan for monitoring and reviewing the quality of care being provided.

(4) Ensuring that all appropriate documentation is submitted and procedures followed, according to current VHA policy, “Restructuring VHA Clinical Programs,” anytime a significant increase or decrease in surgical services is anticipated or realized at any given facility sufficient to result in a change in the facility operative complexity designation.

d. **Facility Director.** The facility Director is responsible for:

(1) Ensuring that the infrastructure requirements for the facility, as identified by the PIM, are accounted for and communicated to the VISN Director;

(2) Ensuring that the VISN Director is notified if, and when, there is a failure to maintain the infrastructure appropriate for the surgical complexity designation of the facility;

(3) Initiating the request for a change in clinical services to the VISN Office according to current VHA policy, “Restructuring VHA Clinical Programs,” anytime the facility infrastructure significantly changes, resulting in a decrease or increase in the surgical services being provided; and

(4) Ensuring that the scope of surgical procedures being performed is within the capabilities of the facility.

e. **Facility Chief of Surgery.** The facility Chief of Surgery is responsible for:

(1) Ensuring that the scheduled (non-emergent) surgical procedures performed by the facility are within the scope of facility operative complexity designation;

(2) A timely review of any surgical procedure performed beyond the facility operative complexity designation; and

(3) Timely notification of the VISN Chief Surgical Consultant within the VISN Office of any concern regarding a Veteran having received or requiring a level of care beyond the operative complexity designation for the facility.

6. FOLLOW-UP RESPONSIBILITY: The National Surgery Office (10NC2), is responsible for the contents of this Directive. Questions may be referred to the National Director of Surgery at 202-461-7148.


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Under Secretary for Health

DISTRIBUTION: E-mailed to the VHA Publications Distribution List 5/10/2010
ATTACHMENT A

PROCEDURE INFRASTRUCTURE MATRIX

Veterans Health Administration (VHA) facilities with an inpatient Surgical Program must have a written plan or policy for the safe and timely transfer of the patient who requires treatment or therapy which the facility is unable to provide or perform. Every effort must be made to medically stabilize the patient prior to transfer, a process which may include the timely performance of a surgical procedure beyond the scope of the facility’s surgical complexity designation.

1. DEFINITIONS

a. Board Eligible. Board eligible implies that a physician has completed a training program approved by the specialty specific Residency Review Committee and is eligible to sit for specialty’s certifying examination. Individuals who are no longer eligible to sit for the certifying examination are not board eligible. **NOTE:** Individuals trained outside the United States may have credentials equivalent to board eligibility, a fact to be considered and evaluated by the facility credentialing and privileging the provider.

b. Intensivist. An intensivist is a physician provider specializing in critical care of the surgical patient; this may include a surgeon, anesthesiologist, cardiologist or pulmonologist.

c. Interventional Cardiology. Interventional Cardiology is the performance of diagnostic and therapeutic interventions by a qualified cardiologist in an accredited cardiac catheterization laboratory.

d. Written Policy or Procedure. A written policy or procedure for a fee or contract procedure should provide for the transfer and placement of the patient in the procedure room at the fee or contract facility within 60 minutes.

2. FACILITY COMPLEXITY DESIGNATION REQUIREMENTS

a. Standard Surgical Complexity. A facility is designated a standard VHA Surgical Program when the following infrastructure is made available:

   (1) Pre-operative and Post-operative Diagnostic Evaluation

   (a) Electrocardiogram (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.

   (b) Basic Laboratory: In-house weekdays dayshift, available on-call 24/7 within 30 minutes.

   (c) Basic Radiology: In-house weekdays dayshift, available on-call 24/7 within 30 minutes.
(2) Pre-operative Risk Assessment and Post-operative Consultation and Services

(a) Pre-operative Medical Consultation (elective): In-house weekdays dayshift.

(b) Pre-operative Medical Consultation (emergency): In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person.

(c) Post-operative Medical Consultation: In-house weekdays dayshift, available on call 24/7 within 15 minutes by phone or 60 minutes in person.

(d) Anesthesia Pre-operative 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.

(3) Surgical Physician Staffing

(a) General Surgeon: One Full-time Equivalent (FTE) employee, who may be provided by contract.

(b) Specialty Surgeons: Variable depending upon the clinical services offered.

(c) Surgical Assistant: Available 24/7 on call within 60 minutes.

(d) 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.

(4) Operating Room (OR)

(a) Staffing: There must be a minimum 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.

(b) Instrument Sets: There must be a duplication of all major instrument sets including one vascular set available for emergency purpose.

(c) 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), an electrocautery unit.

(d) Equipment required for the OR Area: There must be a code cart and defibrillator, flash sterilizer, and intraoperative c-arm.

(e) Coverage: Nursing and operating room must be available 24/7 within 60 minutes.
(f) Radiology: There must be a technician available for intraoperative radiology in-house weekdays dayshift, on-call 24/7 within 60 minutes.

(5) Anesthesia Services

(a) Provider: Anesthesiologist or CRNA.

(b) Assistance: Written plan or policy for physician provider skilled in airway management, as necessary.

(c) Coverage: In-house weekdays dayshift, on-call 24/7 within 60 minutes.

(6) Post Anesthesia Care Unit (PACU)

(a) 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).

(b) Staffing: Minimum staffing of two licensed providers with a 1to1 provider-to-patient ratio as required, consistent with the American Society of PeriAnesthesia Nursing (ASPN) guidelines.

(c) 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.

(d) Discharge Guidelines: Patients must be discharged from the PACU based upon defined protocol.

(7) Intensive Care Unit (ICU). 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 ).

(8) Ward. Nurse competencies must be in alignment with the types of surgical procedures being performed. In addition, there must be:

(a) Monitored Beds (EKG): Capability and defined criteria for the use of beds remotely monitored by EKG.

(b) Monitored Beds (Pulse Oximetry): Capability and defined criteria for the use of beds remotely monitored by pulse oximetry.

(9) Support Services

(a) Respiratory Therapy: In-house weekdays dayshift, on-call 24/7 within 60 minutes, service must be provided by a credentialed respiratory therapist.
(b) **Pharmacy:** Pharmacy services in-house 12 hours a day within 15 minutes by telephone and 60 minutes on site.

(c) **Blood Bank:** There must be packed red blood cells, fresh frozen plasma, and platelets available within 60 minutes weekdays dayshift.

(d) **Physical Therapy:** In-house weekdays dayshift.

(10) **Supply, Processing, and Distribution (SPD)**

(a) **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.

(b) **Equipment:** There must be a flash sterilizer available 24/7 with competent personnel.

b. **Intermediate Surgical Complexity.** A facility is designated an Intermediate VHA Surgical Program when the following infrastructure is made available:

(1) **Pre-operative and Post-operative Diagnostic Evaluation.** There must be:

(a) **EKG:** In-house 24/7 by competent technician or personnel.

(b) **Basic Laboratory:** In-house 24/7, alternative may be point of care testing for basic laboratory studies including complete blood count, electrolytes, and arterial blood gas.

(c) **Basic Radiology:** In-house 24/7.

(d) **Cardiac Stress Testing:** Available in-house during day tour, may be through fee or contract.

(e) **Pulmonary Function Test (PFT) Studies:** Available in-house during day tour, may be through fee or contract.

(f) **Computerized Tomography (CT) Scan:** In-house weekdays dayshift, on-call 24/7 within 30 minutes.

(g) **Vascular Ultrasound:** In-house weekdays dayshift.

(h) **Radiology Interpretation:** In-house weekdays dayshift, on-call 24/7 within 30 minutes.

(i) **Interventional Cardiology:** To be provided 24/7 in-house or by fee or contract within 60 minutes.

(j) **Vascular Interventional Radiology:** To be provided 24/7 in-house or by fee or contract within 60 minutes.
(k) Non-vascular Interventional Radiology: To be provided 24/7 in-house or by fee or contract within 60 minutes.

(2) Pre-operative Risk Assessment and Post-operative Consultation and Services

(a) Pre-operative Medical Consultation (elective): In-house weekdays dayshift.

(b) Pre-operative Medical Consultation (emergency): In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person.

(c) Post-operative Medical Consultation: In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person.

(d) Specialty Consultants: The following specialty consultants must be available 24/7:

1. Cardiology and Pulmonary within 15 minutes by phone and 60 minutes in person. For specialty services, such as PFTs and cardiac catheterization provided by fee or contract, the patient may be seen either on-site or off-site.

2. Gastroenterology, Hematology, Infectious Disease, Interventional Radiology, Nephrology, Neurology, Orthopedic Surgery, Pathology, Thoracic Surgery, Urology, Vascular Surgery within 15 minutes by phone or 60 minutes in person.

(e) Anesthesia Pre-operative Assessment: In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person, may be provided by CRNA or mid-level provider.

(3) Surgical Physician Staffing

(a) General Surgeon: There must be a two or more FTE employees who may be provided by contract.

(b) Specialty Surgeons: Variable depending upon in-house clinical services offered.

(c) Surgical Assistant: Available 24/7 on call within 60 minutes.

(d) 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.

(e) Inpatient Coverage: There must be coverage by surgical staff, resident, or fellow 24/7 within 15 minutes by phone or 60 minutes in person.

(4) Operating Room (OR)

(a) Staffing: There must be:
1. Minimum staffing to include a circulating RN and scrub technician or RN. A policy or protocol defining training and competencies consistent with the AORN and the AST must be maintained at the facility.

2. Staff competencies for specialty specific surgery.

3. A plan or policy for staffing based upon procedural complexity.

4. A plan or policy for supplemental staffing for intraoperative emergencies.

(b) Instrument Sets: There must be a duplication of all major instrument sets, including one vascular set available for emergency purpose.

(c) Equipment Required in each OR: There must be an anesthesia machine, an electrocautery unit, and the OR must have the capability for advanced physiological monitoring, including EKG, end-tidal CO2, central venous pressure, and arterial pressure.

(d) Equipment Required for the OR Area: There must be a code cart and defibrillator, flash sterilizer, cell saver, and intraoperative c-arm.

(e) Coverage: There must be nursing staff and an OR available 24/7 within 60 minutes.

(f) Radiology: There must be a technician available for intraoperative radiology in-house weekdays dayshift, on-call 24/7 within 60 minutes.

(5) Anesthesia Services

(a) Provider: There must be an Anesthesiologist, or CRNA available for all cases 24/7 within 60 minutes.

(b) Chief of Anesthesia: The anesthesia service must be managed by a board certified or board eligible anesthesiologist.

(c) Assistance: There must be a written plan or policy for a physician provider skilled in airway management, as necessary.

(d) Coverage: In-house weekdays dayshift, on-call 24/7 within 60 minutes.

(6) PACU

(a) Area: There must be a designated Post-Anesthesia Recovery Area or equivalent; local policy may require specific specialty procedures or after-hours care to be directly transferred to the ICU.
(b) **Staffing**: There must be a minimum staffing of two licensed providers with a 1 to 1 provider to patient ratio as required, consistent with ASPAN guidelines.

(c) **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.

(d) **Competencies for Recovery of Specialty Patients**: There must be specific competencies for recovery of specialty patients as indicated.

(e) **Skills**: There must be ventilator management, and management of physiologic monitoring.

(f) **Discharge Guidelines**: Patient’s discharge from the PACU must be based upon defined protocol.

(7) **ICU**

(a) **ICU Level**: Level 2 or Level 3 with intensivist (for explanation of Levels see Web site at: [http://chestjournal.chestpubs.org/content/132/5/1455.full.pdf+html](http://chestjournal.chestpubs.org/content/132/5/1455.full.pdf+html)).

(b) **Medical Co-management of Surgical Patients**: There must be a written policy or plan for co-management 24/7.

(8) **Ward.** Nurse competencies must be in alignment with the types of surgical procedures being performed, and specialty specific competencies must be defined. There must be:

(a) **Monitored Beds (EKG)**: Capability and defined criteria for the use of beds remotely monitored by EKG.

(b) **Monitored Beds (Pulse Oximetry)**: Capability and defined criteria for the use of beds remotely monitored by pulse oximetry.

(9) **Support Services**

(a) **Respiratory Therapy**: In-house 24/7; service must be provided by a credentialed respiratory therapist.

(b) **Pharmacy**: Pharmacy services in-house 16 hours a day; on-call or available within 15 minutes by telephone and 60 minutes on site.

(c) **Blood Bank**: There must be packed red blood cells, fresh frozen plasma, and platelets available within 60 minutes 24/7.

(d) **Physical Therapy**: In-house weekdays dayshift; weekends if necessary for specialty specific recovery.
(e) Dialysis: In-house weekdays dayshift; it must be available on-call 24/7 within 6 hours.

(f) Pathology: There must be a capacity for frozen section studies in-house weekdays dayshift; on-call 24/7 within 60 minutes.

(g) Biomedical Engineering: In-house weekdays dayshift.

(10) SPD

(a) Availability: There must be processing on-site; personnel in-house weekdays dayshift; on-call 24/7, or materials available within 15 minutes by written policy or protocol.

(b) Equipment: There must be a flash sterilizer available 24/7 with competent personnel.

c. Complex Surgical Complexity. A facility is designated a Complex VHA Surgical Program when the following infrastructure is made available:

(1) Pre-operative and Post-operative Diagnostic Evaluation

(a) EKG: In-house 24/7 by competent technician or personnel.

(b) Basic Laboratory: In-house 24/7.

(c) Basic Radiology: In-house 24/7.

(d) Cardiac Stress Testing: Available in-house during day tour, may be through fee or contract.

(e) PFT: Available in-house during day tour, may be through fee or contract.

(f) CT Scan: In-house weekdays dayshift, on-call 24/7 within 30 minutes.

(g) Vascular Ultrasound: In-house weekdays dayshift.

(h) Magnetic Resonance Imaging (MRI) and Magnetic Resonance Angiography (MRA): In-house weekdays dayshift, on-call 24/7 within 30 minutes if necessary for specialized programs.

(i) Radiology Interpretation: In-house weekdays dayshift, on-call 24/7 within 30 minutes.

(j) Interventional Cardiology: To be provided 24/7 in-house or by fee or contract within 60 minutes.

(k) Interventional Neuroradiology: In-house or written plan and/or policy for fee or contract, 24/7 within 60 minutes.
(l) **Vascular Interventional Radiology:** To be provided 24/7 in-house or by fee or contract within 60 minutes.

(m) **Non-vascular Interventional Radiology:** To be provided 24/7 in-house or by fee or contract within 60 minutes.

(2) **Pre-operative Risk Assessment and Post-operative Consultation and Services**

(a) **Pre-operative Medical Consultation (elective):** In-house weekdays dayshift.

(b) **Pre-operative Medical Consultation (emergency):** In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person.

(c) **Post-operative Medical Consultation:** In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person.

(d) **Specialty Consultants:** The following specialty consultants must be available 24/7:

1. Cardiology, Gastroenterology, Hematology, Infectious Disease, Interventional Radiology, Nephrology, Neurology, Orthopedic Surgery, Otolaryngology, Pathology, Pulmonary, Thoracic Surgery, Urology, Vascular Surgery on staff; available 24/7 within 15 minutes by phone or 60 minutes in person.

2. Cardiovascular Surgeon, Interventional Neuroradiologist, Neurosurgeon as indicated by approved clinical programs; on staff or by fee or contact, available 24/7 within 15 minutes by phone or 60 minutes in person.

3. There must be a board-certified or board-eligible anesthesiologist in-house weekdays dayshift, available 24/7 within 15 minutes by phone or 60 minutes in person.

(e) **Anesthesia Pre-operative Assessment:** In-house weekdays dayshift, available on-call 24/7 within 15 minutes by phone or 60 minutes in person, may be provided by CRNA or mid-level provider.

(3) **Surgical Physician Staffing**

(a) **General Surgeon:** There must be a three or more FTE who may be provided by contract.

(b) **Specialty Surgeons:** Variable depending upon in-house clinical services offered.

(c) **Surgical Assistant:** Available 24/7 on call within 60 minutes.

(d) **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.
(e) In-patient 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).

(4) Operating Room

(a) Staffing: There must be:

1. Minimum staffing to include a circulating RN and scrub technician or RN. A policy or protocol defining training and competencies consistent with the AORN and the AST must be maintained at the facility.

2. Staff competencies for specialty specific surgery.

3. Plan or policy for staffing based upon procedural complexity.

4. Plan or policy for supplemental staffing for intraoperative emergencies.

(b) Instrument Sets: There must be a duplication of all major instrument sets, including one vascular set available for emergency purpose.

(c) Equipment Required in each OR: There must be an anesthesia machine, an electrocautery unit, and the OR must have the capability for advanced physiological monitoring including EKG, end-tidal CO₂, central venous pressure, and arterial pressure.

(d) Equipment required for the OR Area: There must be a code cart and defibrillator, flash sterilizer, cell saver, and intraoperative c-arm.

(e) Coverage: There must be nursing staff and an OR available 24/7 within 60 minutes.

(f) Radiology: There must be a technician available for intraoperative radiology in-house weekdays dayshift, on-call 24/7 within 60 minutes.

(5) Anesthesia Services

(a) Provider: There must be an anesthesiologist, or CRNA available for all cases 24/7 within 60 minutes.

(b) Chief of Anesthesia: The Anesthesia Service must be managed or supervised by a board-certified or board-eligible anesthesiologist.

(c) Assistance: There must be a written plan or policy for a physician provider skilled in airway management, as necessary.

(d) Coverage: In-house weekdays dayshift, on-call 24/7 within 60 minutes.
(6) **PACU**

(a) **Area:** There must be a presence of designated Post-Anesthesia Recovery Area or equivalent; local policy may require specific specialty procedures or after-hours care to be directly transferred to the ICU.

(b) **Staffing:** There must be a minimum staffing of two licensed providers with a 1 to 1 provider-to-patient ratio as required, consistent with ASPAN guidelines.

(c) **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.

(d) **Competencies for Recovery of Specialty Patients:** There must be specific competencies for recovery of specialty patients as indicated.

(e) **Skills:** There must be ventilator management, and management of physiologic monitoring.

(f) **Discharge Guidelines:** Patient’s discharge from the PACU must be based upon defined protocol.

(7) **ICU**

(a) **ICU Level:** Level 1 or Level 2 (for explanation of Levels see web site at: [http://chestjournal.chestpubs.org/content/132/5/1455.full.pdf+html](http://chestjournal.chestpubs.org/content/132/5/1455.full.pdf+html)).

(b) There must be a pharmacist available in-house to ICU, weekdays dayshift tour.

(c) **Medical Co-management of Surgical Patients:** There must be a written policy or plan for co-management 24/7.

(8) **Ward.** Nurse competencies must be in alignment with the types of surgical procedures being performed, and specialty specific competencies must be defined. There must be:

(c) **Monitored Beds (EKG):** Capability and defined criteria for the use of beds remotely monitored by EKG.

(d) **Monitored Beds (Pulse Oximetry):** Capability and defined criteria for the use of beds remotely monitored by pulse oximetry.

(9) **Support Services**

(a) **Respiratory Therapy:** In-house 24/7, service must be provided by a credentialed respiratory therapist.
(b) **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.

(c) **Blood Bank**: There must be packed red blood cells, fresh frozen plasma, and platelets available within 60 minutes 24/7.

(d) **Physical Therapy**: In-house weekdays dayshift; weekends if necessary for specialty specific recovery.

(e) **Dialysis**: In-house weekdays dayshift; it must be available on-call 24/7 within 6 hours.

(f) **Pathology**: There must be a capacity for frozen section studies in-house weekdays dayshift; on-call 24/7 within 60 minutes.

(g) **Biomedical Engineering**: In-house weekdays dayshift.

(10) **SPD**

(a) **Availability**: There must be processing on-site; personnel in-house weekdays dayshift; on-call 24/7, or materials available within 15 minutes by written policy or protocol.

(b) **Equipment**: There must be a flash sterilizer available 24/7 with competent personnel.
ATTACHMENT B

SURGICAL COMPLEXITY MATRIX

1. The Surgical Complexity Matrix (OCM) is the assignment of each surgery procedure by Current Procedure Terminology (CPT) code to an operative complexity designation of standard, intermediate, or complex. Alternatively, the Veterans Administration Surgical Quality Improvement Program (VASQIP) has made available a Web-based tool, the CPT Look-Up, to allow any individual with Intranet access to identify the complexity assignment for any individual surgical procedure, available at: https://vhadennsqipweb.v19.med.va.gov/NSQIP/Dev/CPTLookup.aspx.

2. To provide a visual framework for classification of surgical procedures to operative complexity category, the following table is included in this document. Note: Only samplings of surgical procedures are identified by surgical specialty.

<table>
<thead>
<tr>
<th>Operative Category</th>
<th>Standard</th>
<th>Intermediate</th>
<th>Complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amputation - Standard</td>
<td>Amputation, upper extremity, arm or forearm or hand; Amputation, lower extremity, above knee or below knee or ankle</td>
<td>Amputation, forequarter or hindquarter; Disarticulation, hip</td>
<td></td>
</tr>
<tr>
<td>Amputation - Intermediate</td>
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</tr>
<tr>
<td>Breast - Standard</td>
<td>Aspiration, cyst; Drainage, abscess; Biopsy or Excision, breast lesion; Mastectomy, radical with implant</td>
<td>Mastectomy, complex; reconstruction with muscle flap; malignancy; Chest wall resection or reconstruction</td>
<td></td>
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<tr>
<td>Breast - Intermediate</td>
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</tr>
<tr>
<td>Cardiac - Complex</td>
<td>Coronary artery bypass; cardiac valve replacement; procedures requiring extracorporeal bypass; cardiac Electro Physiology (EP) procedures</td>
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<td></td>
</tr>
<tr>
<td>Ear, Nose, and Throat (ENT) - Standard</td>
<td>Biopsy, soft tissue lesion or lymph node, head and neck; Biopsy throat; Excision, intranasal polyps or lesions or turbinates; Septoplasty; Repair of nasal defects; Treatment, nasal fractures; Treatment, nosebleeds; Sinus surgery; Nasal or sinus endoscopy with biopsy, polypectomy, debridement; Laryngoscopy with biopsy or foreign body removal; Drainage, biopsy, excision, repair of lip or mouth or tongue or gum or salivary, submaxillary, sublingual glands or external ear; Excision neck cyst; Tonsillectomy; Myringotomy; Tympanoplasty</td>
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<tr>
<td>ENT - Intermediate</td>
<td>Drainage, deep abscess, neck; Excision, soft tissue tumors; Sinus surgery, obliteration or excision; nasal or sinus endoscopy with resection; Laryngoscopy with tumor removal or intervention; Construction of tracheoesophageal fistula for speech prosthesis; cleft lip or palate reconstruction; Oral vestibuloplasty; Partial glossectomy; Uvulopalatopharyngoplasty; Parotidectomy; Esophageal diverticulectomy; Thyroidectomy; Parathyroidectomy; Mastoidectomy; Reconstruction of the external ear; Tympanic membrane repair; Myringoplasty; Cochlear Implant</td>
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<tr>
<td>Operative Category</td>
<td>Standard</td>
<td>Intermediate</td>
<td>Complex</td>
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<tr>
<td>ENT - Complex</td>
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<td>Maxillectomy; Laryngectomy; Tracheal reconstruction; Nasal or oral or pharyngeal or laryngeal resection with radical neck dissection; Pharyngectomy</td>
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<tr>
<td>Eye - Standard</td>
<td>Any procedure except those restricted to 'Eye - intermediate,' requiring Intermediate or Advanced Infrastructure</td>
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<tr>
<td>Eye - Intermediate</td>
<td>Corneal Transplant; Retinal surgery; Exploration, excision, decompression of the orbit</td>
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<tr>
<td>Facial - Standard</td>
<td>Treatment of nasal fracture, closed</td>
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<tr>
<td>Facial - Intermediate</td>
<td>Arthrotomy, Temporomandibular Joint and Muscle Disorders (TMJ); Excision of tumor, benign or malignant, facial bones; Preparation, facial prosthesis; Maxillofacial fixation; Repair or revision or reconstruction, facial bones; Treatment of nasal fracture, open; Treatment of complex fracture, nasal or maxillary or zygomatic arch or orbit, open or closed; Treatment of fracture, palatal or maxillary or mandibular; Arthroscopy, jaw; Complex surgery, nose</td>
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<tr>
<td>Foot - Standard</td>
<td>Incision; Excision; Repair; Revision; Reconstruction; Fracture; Dislocation; Arthrodesis; or Amputation of the foot and ankle</td>
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<tr>
<td>General Surgery (GS) - Standard</td>
<td>Biopsy skin or soft tissue or muscle or nerve or lymph nodes; Gastrostomy, jejunostomy, open or laparoscopic; Appendectomy, open or laparoscopic; Liver biopsy; Cholecystectomy, open or laparoscopic; Diagnostic laparotomy or laparoscopy; Lysis of adhesions, open or laparoscopic; Hernia repair, inguinal or femoral or ventral or umbilical, open or laparoscopic; Drainage, rectal abscess</td>
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<tr>
<td>GS - Intermediate</td>
<td>Complex soft tissue resection; Splenectomy, open or laparoscopic; Retroperitoneal lymph node dissection, open or laparoscopic; Gastroesophageal surgery, subtotal gastric resection, open or laparoscopic; Vagotomy and pyloroplasty; Gastroenterostomy; Small bowel resection, open or laparoscopic; Colectomy, open or laparoscopic; Proctocolectomy; Repair vesicoenteric fistula; Proctectomy; Repair of rectal prolapse; Ablation of liver tumor, open or laparoscopic or percutaneous; Common bile duct exploration; Cholecystoenterostomy; Drainage, pancreatic pseudocyst; Pancreatic cyst-enterostomy; Abdominal exploration; Drainage, abdominal abscess Total gastrectomy; Ileo-anal pull through; Abdominal perineal resection; Proctectomy; Bile duct resection; Adrenalectomy, open or laparoscopic</td>
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<tr>
<td>Operative Category</td>
<td>Standard</td>
<td>Intermediate</td>
<td>Complex</td>
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<tr>
<td>GS - Complex</td>
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<td>Esophagectomy; Hepatectomy; Total Pancreatectomy; Bariatric Surgery, including laparoscopic bands</td>
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<tr>
<td>General Urology (GU) - Standard</td>
<td>Kidney biopsy, percutaneous; Cystoscopy and renal endoscopy; Ureteral endoscopy, procedures or treatment; Lithotripsy; Placement of suprapubic catheter; Urodynamics; Cystoscopy, procedures or treatment; Transurethral resection prostate; Urethral surgery, dilatation or repair or treatment of lesions; Biopsy or excision or repair of penis; Circumcision; Penile prosthesis, placement or removal; Orchiectomy; Biopsy or exploration or removal of the testes, epididymis, scrotum; Vasectomy; Hydrocele, drainage or repair or excision Prostate, biopsy or ultrasound</td>
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<tr>
<td>GU - Intermediate</td>
<td>Exploration or drainage or resection of the kidney, ureter, open or laparoscopic; Kidney biopsy, open; Treatment of kidney stones, open or laparoscopic; Ureterolysis; Urinary diversion; Construction of a neobladder; Cystectomy; Repair of bladder fistula; Complex reconstruction of the urethra; Prostatectomy, open or laparoscopic; Pelvic lymphadenectomy; Penectomy</td>
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<tr>
<td>Gynecology - Standard</td>
<td>Incision and Drainage (I&amp;D) superficial abscess or lesion; Laser or chemical destruction of vulvar lesion; Biopsy or excision vulva; Repair vagina or perineum; Colposcopy or colpotomy; Destruction, vaginal lesion; Vaginal examination, biopsy or excision or destruction of lesion; Examination or treatment of cervix; Cervical dilatation; Endometrial biopsy or ablation; Insertion or removal Intrauteran Device (IUD); Tubal ligation; Salpingo-oophorectomy; Drainage ovarian cyst or abscess; oophorectomy; Repair of vaginal fistula; Removal of cervix; Myomectomy; Hysterectomy, abdominal or vaginal; Surgery, fallopian tube; Laparoscopic hysterectomy or myomectomy; Hysteroscopy; Laparoscopy with adnexal intervention; Repair fallopian tubes</td>
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<tr>
<td>Gynecology - Intermediate</td>
<td>Radical vulvectomy; Vaginectomy; Repair of urethra or bladder or vagina or pelvic floor; Resection of ovarian malignancy</td>
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<tr>
<td>Hand - Standard</td>
<td>Incision; Excision; Repair; Revision; Reconstruction; Fracture; Dislocation; Arthrodesis, forearm or wrist or hand or digits</td>
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<td>Neurosurgery - Complex</td>
<td>Twist drill or burr hole for subdural or extradural hematoma; Cerebral Spinal Fluid (CSF) shunts; Craniectomy or craniotomy for decompression, biopsy, excision; Skull based surgery; Twist drill or burr hole for ventricular access or device implantation or biopsy; Hypophysectomy, craniectomy or transnasal or transseptal; Surgery for aneurysm or arteriovenous malformation or vascular disease; Stereotactic surgery; Implantation of neurostimulator; Neuroendoscopy</td>
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<tr>
<td>Operative Category</td>
<td>Standard</td>
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<td>Complex</td>
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<td>Ortho - Standard</td>
<td>Debridement skin or muscle or bone; Bone Biopsy, open or excisional or percutaneous; Injection, tendon or ligament; Drainage or injection, joint, bursa; Placement or removal, fixation device; Removal, implant or wire or pin or rod (except for long bone implants); Harvest of tendon or cartilage for transplant; I &amp; D, shoulder: Biopsy or excision, soft tissue lesion shoulder; Excision or Curettage, bone lesion or foreign body; Muscle transfer or tenotomy, shoulder; Humerus, nailing or plating or pinning or wiring; Clavicular fracture, closed treatment; Treatment, humerus fracture; Treatment shoulder dislocation, closed; Surgery of the arm or elbow; Surgery of tendons or ligaments, upper extremity; Fractures of the upper extremity; Soft tissue surgery of the hip; Hip dislocation, closed reduction; Soft tissue surgery, thigh; Surgery knee, not including arthroplasty; Curretage, femur; Thigh fracture, closed treatment; Treatment of patellar and knee fracture; Treatment of fracture or dislocation of the leg and ankle; Casting or splint</td>
<td>Arthrotomy, shoulder or clavicle; Claviculectomy; Repair, biceps tendon; Shoulder reconstruction; Clavicular reconstruction; Clavicular fracture, Open Reduction Internal Fixation (ORIF); Shoulder dislocation, ORIF Hip dislocation, ORIF; Thigh fracture, ORIF; Complex tibia or fibula reconstruction; Osteotomy, scapula or humerus or clavical; Shoulder reconstruction; Complex reconstruction, humerus or elbow or radius; Excision tumor or oesctomy, pelvis or hip or thigh; Acetabuloplasty; Hip arthroplasty; Treatment of pelvic fracture; Treatment of thigh fracture; Arthrodesis, hip; Exploration, reconstruction of the knee; Complex reconstruction, leg and ankle; Revisional hip arthroplasty; Revisional knee arthroplasty</td>
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<tr>
<td>Ortho - Intermediate</td>
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<tr>
<td>Plastic or Reconstructive - Intermediate</td>
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<td>Fascia or muscle graft for face nerve palsy; Excision excessive skin or subcutaneous tissue, face or trunk or extremity, including liposuction; Excision coccyx, with or without flap; Treatment pressure ulcer, sacrum or ischium or trochanter by excision or oesctomy or closure, Mohs surgery; Omental flap, intraabdominal or extraabdominal, without microvascular anastomosis; Neurorrhaphy, nerve graft, face or arm or leg</td>
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<tr>
<td>Plastic or Reconstructive - Complex</td>
<td>Replantation, arm or hand or foot or digit; Bone or osteocutaneous graft, with microvascular anastomosis; Jejunal transfer, with microvascular anastomosis; Omental flap, intraabdominal or extraabdominal, with microvascular anastomosis</td>
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<tr>
<td>Proctology - Standard</td>
<td>Treatment of pilonidal cyst, rectal lesion, rectal abscess, anal fissure, hemorrhoids, anal fistula; anoscopy</td>
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<tr>
<td>Operative Category</td>
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<td>Complex</td>
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<tr>
<td>Skin or Subcutaneous Tissue - Standard</td>
<td>Incision, drainage, removal, abscess or pilonidal cyst or foreign body or hematoma; Remove mesh, abdominal wall; Debridement, skin, subcutaneous tissue, muscle, bone; Paring callus; Biopsy, skin lesion; Remove, skin tags; Shave, skin lesions; Excision, skin lesion, benign or malignant; Excision, hidradentiiis, axillary or inquinal or perineal; Excision, skin lesion, benign or malignant; Surgery of the nails or nail bed; Introduction or removal, tissue expanders; Insertion or removal, drug delivery system; Simple or complex or layer closure, wounds; Tissue transfer (Z-plasty, rotation flap, advancement flap); Skin grafts, autografts or allografts or xenograft; Free flaps; Hair transplant; Dermabrasion, chemical peel, simple facial plastic surgery; Removal excessive skin; Destruction lesion, laser or electrosurgery or cryosurgery or chemosurgery; Incision, abscess</td>
<td>Complex debridement; Complex skin grafts, large surface area or head and neck; Skin or deep tissue flaps, face or trunk or arm or leg; Destruction malignant lesion, laser or electrosurgery or cryosurgery or chemosurgery</td>
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<td>Skin or Subcutaneous Tissue - Intermediate</td>
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<td>Spine - Intermediate</td>
<td>Incision or drainage, deep abscess, cervical, thoracic, lumbar spine; Excision or osteotomy, cervical, thoracic, lumbar spine; Spinal fracture, closed or open treatment; Vertebroplasty; Kyphoplasty; Arthrodesis, cervical, thoracic, lumbar spine; Laminectomy for exploration or decompression or excision; Implantation or removal of spinal catheter or neurostimulator</td>
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<td>Spine - Complex</td>
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<td>Complex cervical spine procedures; procedures with open dura</td>
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<td>Thoracic - Standard</td>
<td>Pacemaker insertion; reposition or repair of lead</td>
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<tr>
<td>Thoracic - Intermediate</td>
<td>Pericardiectomy; placement or removal of epicardial pacemaker leads; Exploration, biopsy, excision of chest wall; Repair of pectus or sternal separation; Exploration or biopsy of chest, lung, pleura, open, or thoracoscopic; Pleurodesis; Lobectomy; Thoracoscopy, diagnostic, or therapeutic; Repair of hiatal or paraesophageal hernia, open or thoracoscopic; Esophageal diverticulectomy; Thymectomy; Pneumonectomy</td>
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<tr>
<td>Thoracic - Complex</td>
<td></td>
<td>Completion Pneumonectomy; Sternal debridement; Repair of trachea or bronchus; Esophagectomy</td>
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<td>Tracheostomy - Standard</td>
<td>Unrestricted</td>
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<tr>
<td>Transplant - Complex</td>
<td>Kidney transplant; Liver transplant; Stem cell harvest or transplant; Cardiac transplant; Lung transplant</td>
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<tr>
<td>Operative Category</td>
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<td>Vascular - Intermediate</td>
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<td>Carotid endarterectomy; Carotid subclavian bypass; Upper extremity graft or prosthesis, bypass or interposition; Lower extremity graft or prosthesis, bypass, or interposition; Infrarenal aortic surgery, bypass, or interposition, open or endovascular; Aortic renal or mesenteric, bypass, or interposition; Carotid or peripheral endovascular intervention; Venous surgery</td>
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<tr>
<td>Vascular - Complex</td>
<td></td>
<td></td>
<td>Thoracoabdominal aortic reconstruction; suprarenal aortic reconstruction</td>
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<tr>
<td>Vascular Access</td>
<td>Central venous access; arteriovenous fistula, primary or graft</td>
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