# CHAPTER 440: INPATIENT SURGERY (IPS) AND AMBULATORY SURGERY (AMBS)

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#### 1 PURPOSE AND SCOPE

This chapter outlines space planning criteria for Inpatient and Ambulatory Surgical Services within the Military Health System (MHS). In addition to the Operating Rooms and their support spaces, this chapter includes space planning criteria for the following services:

- A. Pre-Operative Holding
- B. Phase II Recovery
- C. Post-Anesthesia Care / Phase I Recovery

Space planning criteria is also provided for regional anesthesia and acute pain management procedures that could be performed in the Anesthesia Procedure Patient Area.

Prior to surgery, patients may have a pre-surgical exam and testing (Includes lab specimens, EKGs, x-ray, information about the surgery, anesthesia consultation and patient education). It is assumed that this function will occur in the appropriate surgical clinics (Refer to Chapter 311: General and Specialty Surgical Clinics). "Pre-Op" is defined as the function that takes place the day of the surgery. The patient comes to the Surgical Suite, registers, and is prepared for surgery.

Space Planning Criteria for Inpatient Surgical Services, which is surgery performed in the hospital setting, is provided in Functional Areas 1 – 8 of this Space Planning Criteria Chapter in Section 5. Space Planning Criteria for Ambulatory Surgical Services is provided in Functional Areas 9 – 16.

It is important for the programmer / planner to understand that ambulatory surgery is performed in more than one setting. Ambulatory surgeries may be performed in the hospital setting; they may also be performed in Ambulatory Surgery Centers that are located adjacent to the inpatient ORs; and they may be performed in an Ambulatory Surgical Center that is a standalone facility. Some procedures may actually be performed in the outpatient clinic, depending on the concept of operations. If ambulatory surgery is to be performed within the hospital setting, then the space planning criteria for Inpatient Surgery should be used. Otherwise, the programmer/planner should refer to the space planning criteria for Ambulatory Surgery.

If inpatient and ambulatory surgical services are provided in the same facility, every attempt should be made to co-locate services in order to share staff, support and mechanical spaces.

If pediatric surgery is part of the program, these patients must be separated from adults in both the preoperative and postoperative recovery phases; and provisions for parental presence must be accommodated. As well, other requirements will need to be met.

The following special procedure rooms may be co-located with the surgical operating rooms to provide for efficient use of staffing, equipment and space:

- A. Cystoscopy Rooms (Contained within this chapter and also in Chapter 314: Urology. Programmer/Planner must coordinate with Urology Service).
- B. Endoscopy Rooms (Contained within Chapter 315: Specialty Medical Clinics. Programmer/Planner must coordinate with Gastroenterology Service).
- C. Bronchoscopy (Contained within Chapter 316: Cardiology / Pulmonary Services.

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Programmer/Planner must coordinate with Pulmonary Services).

This space planning criteria applies to all Military Medical Treatment Facilities (MTFs). Policies and directives, DoD's Subject Matter Experts (SMEs), established and/or anticipated best practice guidelines / standards, and TRICARE Management Activity (TMA) provides the foundation for the workload based space criteria and Net Square Footages (NSF) for each space. The latest version of DoD's *UFC-4-510-01*, *Appendix B* cites all Room Codes identified in this chapter.

#### 2 DEFINITIONS

- A. <u>Ambulatory Surgery</u>: Ambulatory Surgery refers to surgical or invasive diagnostic procedures performed by qualified providers in an inpatient surgical suite or in the outpatient setting in an Ambulatory Surgery Center (ASC) with pre-procedural and immediate post-procedure care completed on the same day, or observation without hospitalization (less than 24 hours).
- B. <u>Anesthesia Procedure Room</u>: A dedicated space for anesthesia providers to perform regional blocks or line placement prior to surgery. A patient would be transported to this area or room from the Pre-Op area or another area of the hospital if applicable. If this space is authorized, it should be near the ORs but observable by staff working at a nursing station.
- C. <u>Anesthesia Workroom</u>: Room with space for storing and maintaining anesthesia equipment and supplies. Includes a workstation for the anesthesia technician, space for work counter(s) and sink(s) and racks for cylinders.
- D. <u>Bariatrics</u>: Bariatrics is the branch of medicine that deals with the causes, prevention, and treatment of obesity. A bariatric patient is one that is severely obese, overweight by 100 to 200 lbs, or having a body weight of greater than 300 lbs. A Body Mass Index (BMI) of greater than 40 is considered bariatric. FGI Guidelines for Healthcare Facilities provides guidelines for the design of bariatric care units.
- E. <u>Biplane System</u>: Advanced interventional imaging technology. It is capable of covering the full size of the patient's lateral and frontal anatomy simultaneously. Provides real time images which can be processed into 3-D images. Used for a variety of cardiovascular and neurovascular image-guided interventional procedures. The biplane imaging system is physically large because it is made up of two x-ray systems, or two C-arms, rather than the typical single plane system which has one C-arm.
- F. <u>Clean Core (Sterile Core)</u>: Operating rooms are grouped around a clean core. The clean core is used for sterile supply storage. This is the cleanest area of the entire operating suite. Only staff wearing appropriate surgical attire should be allowed in the clean core.
- G. <u>Case Carts</u>: Case Carts are used to bring sterile materials and instruments from the Central Sterile Department to the operating room. A typical case cart contains specific items required for each specific case, including all required surgical instruments and other supplies. After the operation is completed, used items are reloaded onto the cart and sent back to central sterile for decontamination, disposal or reprocessing. Case carts are also supplied and kept in the surgery department for most frequently performed emergency cases.

- H. <u>Clean Utility Room</u>: This room is used for the storage and holding of clean and sterile supplies. Additionally it may provide space to prepare patient care items. Clean linen may be stored in a designated area in the clean utility room if space is not provided in a separate room or in an alcove.
- I. <u>Consult Room</u>: This is a consultation room for family members to meet with physicians or other providers privately and is ideally located near the waiting room.
- J. <u>Control Desk</u>: A space located to permit visual observation of all traffic which enters the operating suite.
- K. <u>Frozen Section Laboratory</u>: This is the area for preparation and examination of frozen tissue sections. The frozen section procedure is performed under a microscope by the surgical pathologist while surgery is taking place. Interpretation is rapid and results are communicated with the surgeon while patient remains on the operating room table.
- L. <u>Full-Time Equivalent (FTE)</u>: A staffing parameter equal to the amount of time assigned to one full time employee. It may be composed of several part-time employees whose total time commitment equals that of a full-time employee. One FTE equals a 40-hour a week workload.
- M. <u>Functional Area</u>: The grouping of rooms and spaces based on their function within a clinical service. Typical Functional Areas are Reception Area, Patient Area, Support Area, Staff and Administrative Area, and Education Area.
- N. <u>General Operating Room</u>: A room designed and equipped to perform a wide variety of operative procedures. This includes most types of surgical procedures but especially those involving administration of anesthesia, multiple personnel, recovery room access, and a fully controlled environment. The General Operating Room may also include endoscopic surgery, which is defined as therapeutic surgical procedures using endoscopic equipment and requiring anesthesia support.
- O. <u>Graduate Medical Education (GME)</u>: After a physician completes 4 years of medical school, they must then complete an internship (also called PGY1 or Post Graduate Year 1) and then a residency (also termed GME or Graduate Medical Education). An internship typically lasts one year, and a residency can last from three to seven years depending on the specialty that is chosen.
- P. <u>Hybrid OR</u>: A hybrid OR integrates the traditional surgical functions of the OR with advanced imaging (CT or MRI) and intervention functions. This is the largest OR in size.
- Q. <u>Immediate Use Sterilization</u>: It is a process designed for the steam sterilization of patient care items for immediate use. Also known as "emergent sterilization" or "flash sterilization". Sterilizers for flash sterilization should be located as close as possible to the operating rooms, preferably in a shared space adjacent to the operating rooms with immediate access from the semi-restricted corridor for service.
- R. <u>Infection Control Risk Assessment (ICRA)</u>: An ICRA is a multidisciplinary, organizational, documented process that considers the medical facility's patient population and mission to reduce the risk of infection based on knowledge about infection, infectious agents, and the care environment, permitting the facility to anticipate potential impact.

S. <u>Inpatient Surgery</u>: Inpatient surgery refers to a surgical procedure performed on a patient who must remain in the medical facility for greater than or equal to 24 hours.

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- T. <u>Input Data Statement</u>: A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD) based on the criteria parameters set forth in this chapter. Input Data Statements could be mission related, based on the project's Concept of Operations; and they could be workload or staffing related, based on projections for the facility.
- U. <u>Negative Pressure Isolation Room</u>: A type of Airborne Infection Isolation Room that is provided for the isolation of patients with airborne contagious diseases such as tuberculosis and is designed to direct air flow from outside corridors and rooms into the patient room, preventing the chance for contaminated air to flow to other parts of a building. An anteroom is not required in an outpatient setting.
- V. <u>Net Square Feet (NSF)</u>: The area of a room or space derived by multiplying measurements of the room or space taken from the inside surface of one wall to the inside surface of the opposite wall.
- W. <u>Net-to-Department Gross Factor (NTDG)</u>: This number, when multiplied by the programmed net square foot (NSF) area, determines the departmental gross square feet (DGSF).

#### X. Office:

- Private Office: Generally speaking, a private office is needed for the supervisory and/or managerial role. It may be justified for a provider or a non-provider, depending upon the nature of their work. Private offices are needed where confidential communication in person or on the telephone takes place. When private offices are justified, they are typically 120 NSF.
- Shared Office: Staff may be assigned to share an office space of 120 NSF, which
  amounts up to 60 NSF per person. This can be a good solution for staff for whom
  a quiet office environment is important for conducting confidential communication
  in person or on the telephone.
- 3. <u>Cubicle</u>: A cubicle is provided in an open room. Managers and other staff with no direct reports as well as part-time, seasonal and job-sharing staff may qualify for a cubicle environment. Cubicle environments can have the benefit of being more open, airy and light, and can make more efficient use of space. Such environments are particularly conducive to team-oriented office groupings. Cubicle environments work best when they contain adequate numbers of conference and small group meeting spaces, for confidential conversations and/or group tasks. A 60 square foot cubicle is the preferred size.
- Y. <u>Patient Discharge Lounge</u>: A quiet, private area for patients to relax while waiting for their transportation after being discharged from the hospital
- Z. <u>Personal Property Lockers</u>: This is a small-sized locker, commonly called purse or cell phone locker, and is generally used to secure purses and smaller valuables. Staff members who do not have an office or cubicle space where they can safely store belongings will be assigned these lockers.
- AA. <u>Phase II Recovery</u>: The patient is transitioned from Phase I recovery to Phase II recovery when intensive nursing care is no longer needed and the patient becomes

- more alert and functional. Phase II allows preparations to be made to progress the patient towards discharge to home. Pre-Op Holding may be part of the Phase II Recovery area to achieve maximum flexibility in managing surgical caseloads. Location of the Phase II recovery area within the Phase I post-anesthesia recovery area is permitted, but the Phase II area must be an identifiably separate and distinct part of the post-anesthesia recovery area.
- BB. <u>Picture Archiving and Communication System (PACS) Viewing Room</u>: A digital radiology reading room that consists of workstations for interpretation.
- CC. <u>Post Anesthesia Care Unit (PACU) / Phase I Recovery</u>: PACU/ Phase I Recovery is an area dedicated to receive patients following general anesthesia, regional anesthesia, or monitored anesthesia care. Phase I requires close monitoring, including airway, ventilator, and hemodynamic support. Patients are generally accommodated in a stretcher bay or cubicle.
- DD. <u>Pre-Operative Holding</u>: This is where the majority of surgical patients are prepared for their surgical procedures under the care of a nurse. In this area, the patient changes into a gown, a nursing assessment is performed and teaching is provided. Belongings will be secured, and an intravenous (I.V.) line may be started. Anesthesiology will interview the patient here and may give intravenous sedation. Patient will be transported from this area to the OR. Pre-Op Holding may be part of the Phase II Recovery area to achieve maximum flexibility in managing surgical caseloads.
- EE. <u>Program for Design (PFD)</u>: A listing of all of the spaces and rooms included within a service and the corresponding net square foot area of each space and room. This listing of spaces and rooms is based on criteria set forth in this chapter and specific information about mission, workload projections and staffing levels authorized.
- FF. Room Efficiency Factor: A factor that provides flexibility in the utilization of a room to account for patient delays, scheduling conflicts, and equipment maintenance. Common factors are in the 80 to 85% range. A room with 80% room efficiency provides a buffer to assume that this room would be available 20% of the time beyond the planned operational practices of the room. This factor may be adjusted based on the actual and/or anticipated operations and processes of the room / department.
- GG. <u>Scrubs Distribution Room</u>: This is a room or area to dispense and receive scrubs. Space may be provided within the locker rooms or directly adjacent to them. This may include an automated scrub management system / automated dispensing and receiving machine.
- HH. <u>Scrub Sink Area</u>: Scrub sinks are used to thoroughly clean and disinfect (i.e., scrub) the hands and arms before surgery or other procedures that require a certain level of cleansing in order to reduce or prevent the transmission of infection to patients. These sinks are typically equipped with several faucets, cold and hot water supply, and soap dispensers; they may include temperature and/or time controls. Surgical scrub sinks are usually operated using automated infrared sensors, knee controls, and/or timers; they are used by surgeons and other medical staff before approaching a designated sterile area (e.g., surgical suite) or patient. The scrub sinks are located in alcoves in the semi-restricted corridor.
- II. SEPS: Acronym for Space and Equipment Planning System, a digital tool developed

by the Department of Defense (DoD) and the Department of Veterans Affairs to generate a Program for Design (PFD) and a Project Room Contents list (PRC) for a DoD healthcare project based on specific information entered in response to Input Data Statements.

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- JJ. <u>Soiled Utility Room</u>: This space provides an area for cleanup of medical equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by central sterile or similar service. It should be accessible from the main corridor.
- KK. <u>Specialty OR</u>: Includes vascular surgery, cardiac surgery, neurosurgery and orthopedic surgery and other surgeries which utilize additional personnel and/or special equipment requiring a larger space.
- LL. <u>Substerile Room</u>: This is a room accessible from the operating room(s) it serves. It may be located between two ORs or a group of adjacent ORs. This room contains a sink, a counter top, and a steam sterilizer for the purpose of immediate use ("flash") sterilization.
- MM. <u>Team Collaboration Room</u>: This space provides staff with an environment conducive to collaboration. Room contains touchdown computer workstations for documentation and a table with chairs to hold meetings.
- NN. <u>Telehealth</u>: The use of technology, such as computers and mobile devices, to manage healthcare remotely. It includes a variety of health care services, including but not limited to online support groups, online health information and self-management tools, email and online communication with health care providers, remote monitoring of vital signs, video or online doctor visits. Depending on the concept of operations for this space, it may be equipped as an exam room or as a consult room with video / camera capability.
- OO. <u>Urology / Cystoscopy OR</u>: Cystoscopy is a procedure performed by a urologic surgeon or urologist and involves the examination of the inside of the urinary tract. It is carried out with a cystoscope (a thin tubular device). Abnormalities can be detected in this manner, and surgical procedures can be performed. Cystoscopy may be performed as an outpatient procedure using local anesthesia or it can be performed in the hospital using regional or general anesthesia. It depends on the type of procedure. Cystoscopy may be performed under fluoroscopy, which is "real time" imaging (x-rays) done with the assist of dye, to help guide diagnostic and therapeutic procedures. The images are viewed on a television monitor in the procedure room. This room has lead-lined walls.
- PP. <u>Utilization Rate</u>: Expressed as a percentage, this is the total amount of time used compared with the total amount of time budgeted for in the operating room.
- QQ. <u>Workload</u>: The anticipated number of procedures that is processed through a department/service area. The projected Surgery workload for a given location determines the number of procedure rooms in the Program for Design.

### 3 OPERATING RATIONALE AND BASIS OF CRITERIA

A. Workload projections and planned services / modalities for a specific MHS facility project shall be sought by the planner in order to develop a project based on these Criteria. Healthcare and clinical planners working on military hospitals, medical

- centers and clinics shall utilize and apply the workload based criteria set forth herein for identified services and modalities to determine space requirements for the project.
- B. Space planning criteria have been developed on the basis of an understanding of the activities involved in the functional areas required for Perioperative Services (Pre-Operative Holding / Phase II Recovery, PACU / Phase I Recovery, and Operating Rooms) and their relationship with other services of a medical facility. These criteria are predicated on established and/or anticipated best practice standards, as adapted to provide environments supporting the highest quality heath care for Service Members and their dependents.
- C. These criteria are subject to modification relative to equipment, medical practice, vendor requirements, and subsequent planning and design. The final selection of the size and type of medical equipment is determined during the design process.
- D. The area for each Room (NSF) in this chapter has been provided by the Military Health System (MHS) Space Template Board.
- E. Calculation of the all the Operating Rooms, except the Hybrid Room, in Functional Area 4: IPS Surgical Procedure Patient Area and Functional Area 12: AMBS Surgical Procedure Patient Area is derived from workload projections via the workload Input Data Statements as outlined below. Most of the remaining rooms in those functional area and in Functional Area 1: IPS Reception Area, Functional Area 2: IPS Pre-Operative Holding / Phase II Recovery Patient Area, Functional Area 3: IPS Anesthesia Procedure Patient Area; Functional Area 5: IPS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area; Functional Area 6: IPS Surgical Procedure Support Area; Functional Area 9: AMBS Reception Area, Functional Area 10: AMBS Pre-Operative Holding / Phase II Recovery Patient Area, Functional Area 11: AMBS Anesthesia Procedure Patient Area; Functional Area 13: AMBS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area; and Functional Area 14: AMBS Surgical Procedure Support Area are determined based on the number of Operating Rooms generated by workload. Mission, Staffing and Miscellaneous Input Data Questions drive the rest of the spaces in this chapter.
- F. Section 4: Input Data Questions and Section 5: Space Planning Criteria have been implemented and tested in SEPS II.
- G. Operating Room capacity calculation is based on the following formula / parameters: Formula:

Operating Days per Year x Hours of Operation per Day

X Utilization Factor
Average Length of Procedure (ALOP) in Minutes / 60 Minutes

#### User-defined Value:

- 1. Operating Days per Year: 232, 240 or 250. (default in SEPS: 240)
- 2. Hours of Operation per Day: 6, 7, or 8 (default in SEPS: 8)

#### Fixed Value:

1. Utilization Factor: 75%

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Calculation: Annual Workload for one General OR:

240 Operating Days per Year x 8 Hours of Operation per Day

- X 0.75 = 909

95 Minutes / 60 Minutes

Minimum Annual Workload to generate an Operating Room: 25% of Annual Workload for one Operating Room.

- H. Workload based room calculation examples:
  - 1. Room Criteria Statement (Room 1):

Minimum one if the projected annual clinic encounters is between 307 and 1,536; provide an additional one for every increment of 1,536 projected annual clinic encounters greater than 1,536; the minimum workload to generate an additional room is 307.

a. Input Data Statement 1, Answer 1:

How many annual clinic encounters are projected? (W) = 4,700

Step 1: Subtract the increment from the projected annual encounters to account for the "Minimum one" condition.

4,700 - 1,536 = 3,164

One room generated

Step 2: Divide the resulting value by the increment.

3,164 / 1,536 = 2.05

Two additional rooms generated

Step 3: Multiply the whole value ("2" in the previous step) by the increment.

 $2 \times 1,536 = 3,072$ 

Step 4: Subtract Step 3 from Step 1.

3,164 - 3,072 = 92

Step 5: Compare Step 4 with the "minimum workload to generate an additional room" value; if higher, provide an additional room.

92 is less than 307

No additional rooms generated.

#### Total number of rooms generated by 4,700 annual encounters: 3

b. Input Data Statement 1, Answer 2:

How many annual clinic encounters are projected? (W) = 15,000

Step 1: Subtract the increment from the projected annual encounters to account for the "Minimum one" condition.

15.000 - 1.536 = 13.464

One room generated

Step 2: Divide the resulting value by the increment.

13,464 / 1,536 = 8.76

Eight additional rooms generated

Step 3: Multiply the whole value ("8" in the previous step) by the increment.  $8 \times 1,536 = 12,288$ 

- Step 4: Subtract Step 3 from Step 1. 13,464 – 12,288 = 1,176
- Step 5: Compare Step 4 with the "minimum workload to generate an additional room" value; if higher, provide an additional room.

  1,176 is greater than 307

One additional room generated.

# Total number of rooms generated by 15,000 annual encounters: 10

#### 2. Room Criteria Statement (Room 2):

Minimum two if the projected annual encounters is between 614 and 6,144; provide an additional one for every increment of 3,072 projected annual encounters greater than 6,144; the minimum workload to generate an additional room is 614.

a. Input Data Statement 2, Answer 1:

How many annual clinic encounters are projected? (W) = 12,500

Step 1: Subtract the increment from the projected annual encounters to account for the "Minimum one" condition.

 $12,500 - 6,144 (3,072 \times 2) = 6,356$ 

Two rooms generated

Step 2: Divide the resulting value by the increment.

6,356 / 3,072 = 2.06

Two additional rooms generated

Step 3: Multiply the whole value ("2" in the previous step) by the increment.

 $2 \times 3,072 = 6,144$ 

Step 4: Subtract Step 3 from Step 1.

6,356 - 6,144 = 212

Step 5: Compare Step 4 with the "minimum workload to generate an additional room" value; if higher, provide an additional room.

212 is less than 614

No additional rooms generated.

## Total number of rooms generated by 12,500 annual encounters: 4

#### b. Input Data Statement 2, Answer 2:

How many annual clinic encounters are projected? (W) = 18,000

Step 1: Subtract the increment from the projected annual encounters to account for the "Minimum one" condition.

 $18,000 - 6,144 (3,072 \times 2) = 11,856$ 

Two rooms generated

Step 2: Divide the resulting value by the increment.

11,856 / 3,072 = 3.85

Three additional rooms generated

Step 3: Multiply the whole value ("3" in the previous step) by the increment.

 $3 \times 3,072 = 9,216$ 

Step 4: Subtract Step 3 from Step 1.

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11,856 - 9,216 = 2,640

Step 5: Compare Step 4 with the "minimum workload to generate an additional room" value; if higher, provide an additional room.

2,640 is greater than 614

One additional room generated.

Total number of rooms generated by 18,000 annual encounters: 6

**TABLE 1: WORKLOAD PARAMETER CALCULATION** 

| 440: INPATIENT SURGERY (IPS) AND AMBULATORY SURGERY (AMBS)           |  |                     |  |   |  |
|--|--|---------------------|--|---|--|
| PROCEDURES   | AVERAGE<br>LENGTH OF<br>PROCEDURE<br>(minutes) | UTILIZATION<br>RATE | ANNUAL<br>WORKLOAD<br>PER<br>OPERATING<br>ROOM (*) | MINIMUM<br>ANNUAL<br>WORKLOAD<br>TO GENERATE<br>ONE ROOM<br>(25%) |  |
|  | Inpat  | ient Surgery (IF    | PS)  |   |  |
| General OR   | 95   | 75% 909             |  | 227   |  |
| Urology /<br>Cystoscopy OR   | 105  | 75%                 | 823  | 206   |  |
| Cardiothoracic OR  | 205  | 75%                 | 421  | 105   |  |
| Neurosurgical OR   | 210  | 75%                 | 411  | 103   |  |
| Orthopedic OR  | 100  | 75% 864             |  | 216   |  |
| Hybrid OR Specific approval required, no workload parameters needed. |  |                     |  |   |  |
| Ambulatory Surgery (AMBS)  |  |                     |  |   |  |
| General OR   | 85   | 75%                 | 1,016  | 254   |  |

(\*) Values in this column are representative and are based on an 8-hour per day and a 240-day per year default value. SEPS calculates this value dynamically based on answers to the following Input Data Statements:

#### For Inpatient Surgery (IPS):

- (1) Is Inpatient Surgery (IPS) authorized to operate outside the standard 8-hour per day shift? (Misc); if not:
  - (2) Is Inpatient Surgery (IPS) authorized to operate a 6-hour per day shift? (Misc) (If not, a 7-hour per day shift will be used to calculate workload driven spaces), and
- (3) Is Inpatient Surgery (IPS) authorized to operate outside the standard 240 days per year? (Misc); if not:
  - (4) Is Inpatient Surgery (IPS) authorized to operate 232 days per year? (Misc) (If not, 250 days per year will be used to calculate workload driven spaces)

#### For Ambulatory Surgery (AMBS):

- (5) Is Ambulatory Surgery (AMBS) authorized to operate outside the standard 8-hour per day shift? (Misc); if not:
  - (6) Is Ambulatory Surgery (AMBS) authorized to operate a 6-hour per day shift? (Misc) (If not, a 7-hour per day shift will be used to calculate workload driven spaces), and

- (7) Is Ambulatory Surgery (AMBS) authorized to operate outside the standard 240 days per year? (Misc); if not:
  - (8) Is Ambulatory Surgery (AMBS) authorized to operate 232 days per year? (Misc) (If not, 250 days per year will be used to calculate workload driven spaces)

#### 4 PROGRAM DATA REQUIRED (Input Data Questions): INPATIENT SURGERY (IPS)

#### A. Mission Input Data Statements

- 1. Is Inpatient Surgery (IPS) authorized? (M)
  - a. Is use of Patient Dressing Cubicles for the IPS Pre-Operative Holding / Phase II Recovery Area authorized? (M)
  - b. Are Patient Personal Property Lockers for the IPS Pre-Operative Holding / Phase II Recovery Patient Area authorized? (M)
  - c. Is a Patient Discharge Lounge authorized for the IPS: Pre-Operative Holding / Phase II Recovery Patient Area authorized? (M)
  - d. Is use of Patient Rooms for the IPS: Pre-Operative Holding / Phase II Recovery authorized? (M) (If not, Patient Cubicles will be provided)
  - e. Is a PACS Viewing Room for the IPS: Pre-Operative Holding / Phase II Recovery Patient Area authorized? (M)
  - f. Is an IPS Anesthesia Procedure Patient Area authorized? (M)
  - g. Is an IPS Anesthesia Induction Room authorized? (M)
  - h. Is a Satellite Laboratory for the IPS: Surgical Procedure Patient Area authorized? (M)
  - i. Is a Decontamination / Clean-up Area for the IPS: Surgical Procedure Patient Area authorized? (M)
  - j. Is use of a Sub-Sterile Room for the IPS: Surgical Procedure Patient Area authorized? (M)
  - k. Is a Satellite Blood Bank for the IPS: Surgical Procedure Patient Area authorized? (M)
  - I. Is a PACS Viewing Room for the IPS: Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area authorized? (M)
  - m. Is a Frozen Section Laboratory for the IPS: Surgical Procedure Support Area authorized? (M)
  - n. Is a Specimen Holding for the IPS: Surgical Procedure Support Area authorized? (M)
  - o. Is a Satellite Pharmacy for the IPS: Surgical Procedure Support Area authorized? (M)
  - p. Is Patient Records storage in Inpatient Surgery (IPS) authorized? (M)
  - q. Is an Inpatient Surgery (IPS) Graduate Medical Education program authorized? (M)
    - 1. How many Inpatient Surgery (IPS) Resident / Student FTE positions are authorized? (S)

#### B. Workload Input Data Statements

- 2. How many annual Inpatient General OR procedures are projected? (W)
- 3. How many annual Inpatient Urology / Cystoscopy OR procedures are projected? (W)
- 4. How many annual Inpatient Cardiothoracic OR procedures are projected? (W)
- 5. How many annual Inpatient Neurosurgical OR procedures are projected? (W)
- 6. How many annual Inpatient Orthopedic OR procedures are projected? (W)

#### C. Staffing Input Data Statements

a. How many Inpatient Surgery (IPS) provider FTE positions are authorized? (S)

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- 1. How many Inpatient Surgery (IPS) provider FTE positions are authorized to have a private office in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
- 2. How many Inpatient Surgery (IPS) provider FTE positions are authorized to have a shared office in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
- 3. How many Inpatient Surgery (IPS) provider FTE positions are authorized to have a cubicle in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
- b. How many Inpatient Surgery (IPS) non-provider FTE positions are authorized?(S)
  - 1. How many Inpatient Surgery (IPS) non-provider FTE positions are authorized to have a private office in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
  - 2. How many Inpatient Surgery (IPS) non-provider FTE positions are authorized to have a shared office in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
  - 3. How many Inpatient Surgery (IPS) non-provider FTE positions are authorized to have a cubicle in the Inpatient Surgery (IPS) Staff and Administrative Area? (S)
- c. How many Inpatient Surgery (IPS) provider FTEs will work on peak shift? (Misc)
- d. How many Inpatient Surgery (IPS) non-provider FTEs will work on peak shift? (Misc)

#### D. Miscellaneous Input Data Statements

- e. How many Hybrid Operating Rooms (ORs) are authorized? (Misc)
- f. Is additional storage space for Interventional Radiology equipment for the IPS: Surgical Procedure Patient Area authorized? (Misc)
- g. Is additional storage space for Robotics equipment for the IPS: Surgical Procedure Patient Area authorized? (Misc)
- h. Is additional storage space for Crash Carts in the IPS: Surgical Procedure Patient Area authorized? (Misc)
- i. Is a Scrubs Distribution room for the IPS Staff and Administrative Area authorized? (Misc)
- j. Is a Sub-Waiting for the IPS Staff and Administrative Area authorized? (Misc)
- k. (1) Is Inpatient Surgery (IPS) authorized to operate outside the standard 8-hour per day shift? (Misc)
- (2) Is Inpatient Surgery (IPS) authorized to operate a 7-hour per day shift?
   (Misc) (If not, a 6-hour per day shift will be used to calculate workload driven spaces)
- m. (3) Is Inpatient Surgery (IPS) authorized to operate outside the standard 240 days per year? (Misc)
- n. (4) Is Inpatient Surgery (IPS) authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)

# 5 SPACE PLANNING CRITERIA: INPATIENT SURGERY (IPS)

For calculation of the number of Vending Machine areas, Public Toilets, Communication Closets, and Janitors Closets for this Chapter, please refer to DoD Space Planning Criteria Chapter 6.1: Common Areas.

#### A. FA 1: IPS Reception Area:

1. Waiting, Inpatient Surgery (WRC01)......240 NSF Minimum NSF; provide an additional 120 NSF for every increment of two Operating Rooms (of any type) greater than two.

Minimum allocated NSF accommodates three standard seats at 16 NSF plus one wheelchair space at 25 NSF and one Bariatric bench seat at 36 NSF and circulation area. Depending on the concept of operations for this chapter, waiting space across all units may be combined or dispersed.

This space is provided to accommodate children's play activities; it shall be outfitted with appropriate furniture and accessories. It can be an open or enclosed area included in or adjacent to Waiting.

Allocated NSF accommodates up to four receptionists and circulation.

#### B. FA 2: IPS Pre-Operative Holding / Phase II Recovery Patient Area:

This is a separate space to accommodate outpatients and same-day admission patients that may change from street clothing into hospital gowns and be prepared for surgery. Typically provided if patient cubicles and outpatients are authorized. Where private pre-op holding room(s) or private holding cubicle(s) are provided, a separate change area is not required.

Locate adjacent to Patient Dressing Cubicles.

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This space provided to securely store patient belongings in half-sized lockers. It is for outpatients and same-day admission patients who may change from street clothing into hospital gowns and be prepared for surgery. Locate adjacent to Patient Dressing Cubicles if provided.

This is a quiet, private area for the Same-Day Surgery / Outpatient to relax while waiting for their transportation after being discharged from the hospital. Accommodates lounge chairs / recliners and a touchdown workstation for the discharge nurse assigned to this area.

5. **Pre-Operative Holding / Phase II Recovery Station (RROP1)......120 NSF** *Minimum six; provide an additional three per each Operating Room, of any type, greater than two.* 

Planner should allocate resulting number of stations in Single-Station or Multi-Station Rooms. Pre-Op and Phase II recovery can take place in this room. Ideally located directly adjacent to the PACU. A handwashing station shall be provided in this room. If Multi-Station room is used, patient cubicles should be provided in pairs to allow handwashing stations between them.

- 6. Toilet,
  - Pre-Operative Holding / Phase II Recovery Patient (TLTU1) .......60 NSF Minimum one; provide an additional one for every increment of eight Pre-Operative Holding / Phase II Recovery Patient Stations greater than eight.

Allocated NSF provides a hand-washing station, work counter, refrigerator, storage cabinets, drinking water-dispensing unit (separate from hand-washing station), and equipment for serving nourishments.

Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.

9. Viewing Room,

Picture Archiving and Communication System (PACS) (XVC01) .......120 NSF Provide one if a PACS Viewing Room in the IPS Pre-Operative Holding / Phase II

C.

|     | Recovery Patient Area is authorized.  |
|-----|---|
| 10. | Medication Room (MEDP1)   |
|     | Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.   |
| 11. | Lounge, Staff (SL001)   |
|     | Locate near the Operating Rooms.  |
| 12. | Utility Room, Clean (UCCL1)   |
|     | Allocated NSF provides space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines. Clean linen may be stored in a designated area in this room if space is not provided in a separate room or in an alcove. |
| 13. | <b>Utility Room, Soiled (USCL1)</b>   |
|     | Allocated NSF provides space for a handwashing station, a work counter, space for waste receptacles and soiled linen receptacles and provisions for disposal of liquid waste.   |
| 14. | Storage, Equipment (SRSE1)  |
| 15. | Alcove, Crash Cart (RCA01)  |
| 16. | Alcove, Portable Imaging (XRM01)  |
| 17. | Alcove, Blanket Warmer (RCA04)  |
| FA  | 3: IPS Anesthesia Procedure Patient Area:   |
| 1.  | Anesthesia Procedure, Single-Station Room, (ORPP1)240 NSF Provide one if an IPS Anesthesia Procedure Patient Area is authorized.  |
|     | Provides space in an enclosed room for anesthesiologist to perform procedures not requiring OR space. Examples are Cardioversion, ECT, Evoked Potentials. Room will accommodate the proceduralist and the anesthesiologist with their equipment.  |

D.

| 2. | Anesthesia Procedure, Multi-Station Room (ORPP2)240 NSF Minimum NSF; provide an additional 120 NSF for every increment of four Operating Rooms (of any type) greater than four if an IPS Anesthesia Procedure Patient Area is authorized.  |
|----|--|
|    | Minimum NSF provides space for two patients requiring regional blocks or line placement prior to surgery or holding following transport from the Pre-Op area or another area of the hospital. This room shall be near the Operating Rooms but observable by staff working at a control or nursing station. |
| 3. | Nurse Station (NSTA1)  |
|    | This space accommodates the observation of patients in the Anesthesia Procedure Patient Area. It may be distributed (centralized or decentralized) per individual project design.  |
| 4. | Workroom, Anesthesia (ANCW1)   |
|    | Space for cleaning, testing and storing anesthesia equipment. Space for work counter(s) and sink(s) and racks for cylinders.   |
| 5. | Team Room, Anesthesia (WRCH1)  |
| 6. | Medication Room (MEDP1)  |
| 7. | Storage, Gas Cylinder (SRGC2)  |
| FA | 4: IPS Surgical Procedure Patient Area:  |
| 1. | Control Desk (NSTA5)   |
|    | This space to permit visual observation of all traffic into the Operating Rooms; accommodates up to four staff.  |
| 2. | Induction Room, Anesthesia (ORPP1)240 NSF Minimum one; provide an additional one for every increment of two ORs (of any type) greater than two if an IPS Anesthesia Induction Room is authorized.  |
|    | Room provided for a single-room induction room model whereby patient receives anesthesia in induction room located directly adjacent to the OR. There may be one induction room per OR or per group of ORs, depending on the concept of operations.  |
| 3. | Operating Room (OR), General (ORGS1)   |

|     | generate an additional General OR is 227. (Refer to Section 3)  |
|-----|---|
| 4.  | <b>Equipment Room, General OR (ORGE1)180 NSF</b> <i>Minimum NSF; provide an additional 60 NSF per each General Operating Room greater than one.</i>   |
| 5.  | Operating Room (OR), Urology / Cystoscopy (ORCS1)   |
|     | Coordinate the location of this OR (Cystoscopy with Fluoroscopy Procedure Room) with the Urology Clinic. Locate in one place only. Shielded Control is provided within the room.  |
| 6.  | Operating Room (OR), Cardiothoracic (ORCT1)   |
| 7.  | Operating Room (OR), Neurosurgical (ORNS1)900 NSF Provide one for every increment of 411 projected annual Neurosurgical OR Procedures; the minimum workload to generate a room is 103. (Refer to Table 1)               |
| 8.  | Operating Room (OR), Orthopedic (OROS1)   |
| 9.  | Equipment Room, Cardiothoracic OR (ORCM1)180 NSF Provide one per each Cardiothoracic OR.  |
| 10. | Equipment Room, Neurosurgical OR (ORNE1)  |
| 11. | Equipment Room, Orthopedic OR (OROE1)   |
|     | This space is provided to accommodate additional equipment storage for large equipment, when complex orthopedic surgery is performed, preferably adjacent to the Orthopedic Specialty Operating Room.                   |
| 12. | Pump Room, Cardiothoracic OR (ORHL1)  |
|     | This space is provided to accommodate extra corporeal pump(s), supplies, and accessories and service area. When provided, it should be located in the OR restricted area, preferably adjacent to the Cardiothoracic OR. |
| 13. | Laboratory, Satellite (LBSP2)   |
|     | This space includes a sink and countertop with space for equipment such as blood analyzer (cardiac markers, blood gases, chemistry, and electrolytes)   |
| 14. | Storage, Orthopedic OR (OROE1)  |
|     |   |

from the restricted corridor.

| 15. | Operating Room (OR), Hybrid (ORHY1)900 NSF Provide one per each Hybrid Operating Room (OR) authorized.  |
|-----|---|
|     | This OR may accommodate Interventional and Vascular / Neurosurgery specialties; it may accommodate monoplane, biplane or articulated biplane for Cardiologic, Neurologic, Orthopedic, and Trauma / Vascular cases.  |
| 16. | Control Room, Hybrid OR (ORHC1)   |
| 17. | Equipment Room, Hybrid OR (ORHE1)   |
| 18. | Pump Room, Hybrid OR (OREP1)240 NSF Provide one per each Hybrid Operating Room (OR).  |
| 19. | Satellite Laboratory, Hybrid OR (LBSP2)   |
|     | Dedicated to the Hybrid Operating Room(s).  |
| 20. | Clean Core (ORCC1)  |
|     | Allocated minimum NSF includes space to accommodate sterile supplies, Malignant Hyperthermia Cart, holding of case carts for the Operating Rooms, equipment, tissue freezer and/or refrigerator (for tissues such as low temp allograft, tissue implants, etc) and medication refrigerator. |
| 21. | <b>Decontamination / Clean-up Area (ORDA1)</b>  |
|     | If Central Sterile is not directly adjacent, this will room will be considered. It will not be located in Substerile between two ORs. This space may even be located in Soiled Utility. A room to bring equipment to decontaminate and then bring to be flashed sterilized.                 |
| 22. | Sub-Sterile Room (ORSR1)  |
|     | Space allocated for Immediate Use Sterilization (Flash Sterilizer) and a double basin sink if authorized. (If Central Sterile Department is adjacent to the Surgery Department, no need for this room).   |
| 23. | Scrub Sink Area (ORSA1)60 NSF Provide one per each Operating Room (of any type).  |
|     | Allocated NSF allows for two adjacent scrub positions and should be located near the entry point to each Operating Room. If located between two adjacent Operating Rooms, four positions should be provided. This area will be accessed from the restricted corridor.                       |

E.

| 24. | <b>Storage, Interventional Radiology (XIRE1)</b>   |
|-----|--|
| 25. | Storage, Robotics Equipment (ORNE1)  |
|     | This space accommodates the storage and re-charging of robotic surgery devices and equipment if it will not be stored in the Operating Room itself.  |
| 26. | Satellite Blood Bank (LMBB1)   |
|     | Provisions for refrigerated blood bank storage that meets the standards of the American Blood Banking Association is required.   |
| 27. | Storage Stretcher (SRLW1)  |
|     | Locate proximate to the OR entry doors.  |
| 28. | Alcove, Crash Cart (RCA01)   |
| FA  | 5: IPS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area:   |
| 1.  | PACU / Phase I Recovery Station (RRSS1)  |
|     | Planner should allocate resulting number of Stations in Single-Station or Multi-Station Rooms. This room shall be used for contact isolation, pediatric and VIP patients. If Multi-Station Room is used, minimum area should be 360 NSF to accommodate three Patient Stretchers in an open or semi-enclosed space with curtains on three sides of a stretcher. |
| 2.  | PACU / Phase I Recovery, Negative Pressure Isolation Room (RRIR1)120 NSF Provide one for the IPS PACU / Phase I Recovery Patient Area.   |
|     | Utilized for Airborne Infection Isolation patients. The number, location and type of airborne infection isolation rooms shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.  |
| 3.  | Nurse Station, PACU / Phase I Recovery (NSTA1)   |
|     | This space may be distributed (centralized or decentralized) per individual project design.  |

|    | 4.        | <b>Team Collaboration Room (WRCH1)</b>  |
|----|-----------|---|
|    |           | Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.  |
|    | 5.        | Viewing Room, Picture Archiving and Communication System (PACS) (XVC01)120 NSF Provide one if a PACS Viewing Room in the IPS PACU / Phase I Recovery Patient Area is authorized.  |
|    | 6.        | Medication Room (MEDP1)120 NSF Provide one for the IPS PACU / Phase I Recovery Patient Area.  |
|    |           | Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.   |
|    | 7.        | Utility Room, Clean (UCCL1)   |
|    |           | Allocated NSF provides space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines. Clean linen may be stored in a designated area in this room if space is not provided in a separate room or in an alcove. |
|    | 8.        | Utility Room, Soiled (USCL1)  |
|    |           | Allocated NSF provides space for a handwashing station, a work counter, space for waste receptacles and soiled linen receptacles and provisions for disposal of liquid waste.   |
|    | 9.        | Alcove, Crash Cart (RCA01)  |
|    | 10.       | Alcove, Portable Imaging (XRM01)  |
|    | 11.       | Alcove, Blanket Warmer (RCA04)  |
|    | 12.       | Storage, Equipment (SRSE1)  |
|    | 13.       | Lounge, Staff (SL001)   |
| F. | <u>FA</u> | 6: IPS Surgical Procedure Support Area:   |
|    | 1.        | Laboratory, Frozen Section (LBEM3)  |

| Area is aι | ıtho | rized |      |  |  |  |
|------------|------|-------|------|--|--|--|
|            |      |       | <br> |  |  |  |

This room is utilized for the preparation and examination of frozen sections. Do not program this room if specimens are transported to the Main Lab.

This room is utilized for the holding of specimens that will be transported to the Main Lab for processing. It will have a biosafety hood and proper ventilation for the use of formalin.

- 4. **Utility Room, Clean (UCCL1)......120 NSF**Minimum NSF; provide an additional 60 NSF for every increment of four ORs (of all types) greater than four.

Allocated NSF includes space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines.

This space provides an area for cleanup of medical equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by Central Sterile or similar service. A Waste Management System may be stored in this room. This room should be accessible from the main corridor.

#### G. FA 7: IPS Staff and Administrative Area:

- 2. **On-Call Room (DUTY1)......120 NSF**Provide one for IPS Staff and Administrative Area..

This space is provided to dispense and receive scrubs. Space may be provided within each locker room or directly adjacent. May be a space for an automated scrub management system. Locate adjacent to Operating Room.

| 4. | Office, Department / Clinic Chief (OFA04)   |
|----|---|
| 5. | Office, Executive Assistant (OFA04)   |
| 6. | Sub-Waiting (WRC03)   |
|    | Allocated NSF provides space for minimum of two chairs.   |
| 7. | Office, NCOIC / LCPO / LPO (OFA04)  |
| 8. | Team Collaboration Room (WRCH1)   |
|    | Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.  |
| 9. | Office, Private (OFA04)   |
| 10 | Office, Shared (OFA05)  |
| 11 | Cubicle (OFA03)   |
|    | These cubicles may be collocated in a shared space or dispersed as required.  |
| 12 | Storage, Patient Records (MRS01)  |
|    | The Military Health System is moving towards an integrated electronic medical record. If required, space for paper medical records for patients will be planned.                  |
| 13 | . Conference Room (CRA01)   |
|    | Planner must determine adequacy and availability of existing Conference Room space and the ability to optimize resources by sharing Conference Room space with other departments. |
| 14 | . Copier (RPR01)120 NSF Provide one for IPS Staff and Administrative Area.  |
|    | This is a room for the copier / printer / scanner. It may be located directly adjacent to the reception area or in the clinic staff support area.                                 |
| 15 | . Storage, Office Supplies (SRS01)60 NSF Provide one for IPS Staff and Administrative Area.   |
|    | Allocated NSF provides space for office supplies, patient forms and literature.   |

H.

| 16. | Lounge, Staff (SL001)   |
|-----|---|
| 17. | Locker / Changing Room, Male Staff (LR002)  |
|     | This Space to accommodate donning surgical attire. Provide one-way changing flow from Staff Entrance to semi-restricted area. Provide additional locker space for those FTEs without assigned office or cubicle space. Locate near the Operating Rooms. |
| 18. | Locker / Changing Room, Female Staff (LR002)  |
|     | This Space to accommodate donning surgical attire. Provide one-way changing flow from Staff Entrance to semi-restricted area. Provide additional locker space for those FTEs without assigned office or cubicle space. Locate near the Operating Rooms. |
| 19. | Toilet / Shower, Male Staff (TLTS1)   |
| 20. | Toilet / Shower, Female Staff (TLTS1)   |
| FA  | 8: IPS GME Education / Training Area:   |
| 1.  | Office, Residency Program Director (OFA04)  |
| 2.  | Resident Collaboration Room (WKTM1)   |
|     | This room will contain one cubicle per Resident / Student at 60 NSF. In addition to the cubicles, a table with chairs for collaboration space and bookcases will be provided.   |
| 3.  | Classroom / Conference Room (CLR01)   |

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program is authorized.

Planner must determine adequacy and availability of existing Classroom / Conference Room space and the ability to optimize resources by sharing Classroom / Conference Room space with other GME programs.

# 6 PROGRAM DATA REQUIRED (Input Data Questions): AMBULATORY SURGERY (AMBS)

#### A. Mission Input Data Statements

- 1. Is Ambulatory Surgery (AMBS) authorized? (M)
  - a. Is use of Patient Dressing Cubicles for the Pre-Operative Holding / Phase II Recovery Area authorized? (M)
  - b. Is use of Patient Personal Property Alcove in the AMBS Pre-Operative Holding / Phase II Recovery Patient Area authorized? (M)
  - c. Is use of a Patient Discharge Lounge in the AMBS Pre-Operative Holding / Phase II Recovery Patient Area authorized? (M)
  - d. Is an AMBS Anesthesia Procedure Patient Area authorized? (M)
  - e. Is use of Patient Rooms for the AMBS Pre-Operative Holding / Phase II Recovery authorized? (M) (If not, Patient Cubicles will be provided)
  - f. Is a PACS Viewing Room for the AMBS Pre-Operative Holding / Phase II Recovery Patient Area authorized> (M)
  - g. s a Satellite Laboratory for the AMBS Surgical Procedure Patient Area authorized? (M)
  - h. Is a Decontamination / Clean-up Area for the AMBS Surgical Procedure Patient Area authorized? (M)
  - i. Is use of a Sub-Sterile Room in the AMBS Surgical Procedure Patient Area authorized? (M)
  - j. Is additional storage for Interventional Radiology equipment in the AMBS Surgical Procedure Patient Area authorized? (M)
  - k. Is additional storage for Robotics equipment in the AMBS Surgical Procedure Patient Area authorized? (M)
  - I. Is a Satellite Blood Bank in the AMBS Surgical Procedure Patient Area authorized? (M)
  - m. Is additional space for storing Crash Carts in the AMBS Surgical Procedure Patient Area authorized? (M)
  - n. Is a PACS Viewing Room in the AMBS PACU / Phase I Recovery Patient Area authorized? (M)
  - o. Is a Frozen Section Laboratory in the AMBS Surgical Procedure Support Area iauthorized? (M)
  - Is a Specimen Holding in the AMBS Surgical Procedure Support Area authorized? (M)
  - q. Is a Satellite Pharmacy in the AMBS Surgical Procedure Support Area authorized? (M)
  - r. Is an Ambulatory Surgery Graduate Medical Education program authorized? (M)
    - 1. How many Ambulatory Surgery Resident / Student FTE positions are authorized? (S)

#### B. Workload Input Data Statements

1. How many annual Ambulatory General OR procedures are projected? (W)

# C. Staffing Input Data Statements

- a. How many Ambulatory Surgery provider FTE positions are authorized? (S)
  - 1. How many Ambulatory Surgery provider FTE positions are authorized to have a private office in the Ambulatory Surgery Staff and Administrative Area? (S)
  - 2. How many Ambulatory Surgery provider FTE positions are authorized to have a shared office in the Ambulatory Surgery Staff and Administrative Area? (S)
  - How many Ambulatory Surgery provider FTE positions are authorized to have a cubicle in the Ambulatory Surgery Staff and Administrative Area? (S)
- b. How many Ambulatory Surgery non-provider FTE positions are authorized?(S)
  - How many Ambulatory Surgery non-provider FTE positions are authorized to have a private office in the Ambulatory Surgery Staff and Administrative Area? (S)
  - 2. How many Ambulatory Surgery non-provider FTE positions are authorized to have a shared office in the Ambulatory Surgery Staff and Administrative Area? (S)
  - 3. How many Ambulatory Surgery non-provider FTE positions are authorized to have a cubicle in the Ambulatory Surgery Staff and Administrative Area? (S)

#### D. Miscellaneous Input Data Statements

- a. How many PACU / Phase I Recovery Patient Isolation Rooms greater than one are authorized? (Misc)
- b. Is Patient Records storage in the AMBS Staff and Administrative Area authorized? (Misc)
- c. Is a Scrubs Distribution room for the AMBS Staff and Administrative Area authorized? (Misc)
- d. Is Sub-Waiting for the AMBS Staff and Admininstrative Area authorized? (Misc)
- e. How many Ambulatory Surgery FTEs will work on peak shift? (Misc)
- f. (1) Is Ambulatory Surgery (AMBS) authorized to operate outside the standard 8-hour per day shift? (Misc)
- g. (2) Is Ambulatory Surgery (AMBS) authorized to operate a 7-hour per day shift? (Misc) (If not, a 6-hour per day shift will be used to calculate workload driven spaces)
- h. (3) Is Ambulatory Surgery (AMBS) authorized to operate outside the standard 240 days per year? (Misc)
- i. (4) Is Ambulatory Surgery (AMBS) authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)

#### 7 SPACE PLANNING CRITERIA: AMBULATORY SURGERY (AMBS)

For calculation of the number of Vending Machine areas, Public Toilets, Communication Closets, and Janitors Closets for this Chapter, please refer to DoD Space Planning Criteria Chapter 6.1: Common Areas.

# A. FA 9: AMBS Reception Area:

- 1. Waiting, Ambulatory Surgery (WRC01) .......240 NSF Minimum NSF; provide an additional 120 NSF for every increment of two General Operating Rooms greater than two.
  - Minimum allocated NSF accommodates three standard seats at 16 NSF plus one wheelchair space at 25 NSF and one Bariatric bench seat at 36 NSF and circulation area. Depending on the concept of operations for this chapter, waiting space across all units may be combined or dispersed.
- 2. Playroom (PLAY1)......120 NSF Provide one for Ambulatory Surgery.

This space is provided to accommodate children's play activities; it shall be outfitted with appropriate furniture and accessories. It can be an open or enclosed area included in or adjacent to Waiting.

3. Reception (RECP1) .......120 NSF Provide one for Ambulatory Surgery.

Allocated NSF accommodates up to four receptionists and circulation.

- 4. Kiosk, Patient Check-in (CLSC1) .......30 NSF Provide one for Ambulatory Surgery.

Room used for one-on-one patient education and includes space for family to accompany the patient.

- 7. Alcove, Wheelchair (SRLW1)......60 NSF Provide one for Ambulatory Surgery.

#### B. FA 10: AMBS Pre-Operative Holding / Phase II Recovery Patient Area:

A separate space to accommodate outpatients and same-day admission patients that may change from street clothing into hospital gowns and be prepared for surgery. Typically provided if patient cubicles and outpatients are authorized. Where private pre-op holding room(s) or private holding cubicle(s) are provided, a separate change area is not required.

2. Toilet, Patient (TLTU1) .......60 NSF Minimum one; provide an additional one for every increment of two Patient Dressing Cubicles.

Locate adjacent to Patient Dressing Cubicles.

| 3. | Alcove, Patient Personal Property (LR001)   |
|----|---|
|    | This space provided to securely store patient belongings in half-sized lockers. It is for outpatients and same-day admission patients who may change from street clothing into hospital gowns and be prepared for surgery. Locate adjacent to Patient Dressing Cubicles if provided.  |
| 4. | Lounge, Patient Discharge (WRF01)   |
|    | This is a quiet, private area for the Same-Day Surgery / Outpatient to relax while waiting for their transportation after being discharged from the hospital. Accommodates lounge chairs / recliners and a touchdown workstation for the staff assigned to this area.   |
| 5. | Pre-Operative Holding / Phase II Recovery Station (RROP1)   |
|    | Planner should allocate resulting number of Stations in Single-Station or Multi-Station Rooms. Pre-Op and Phase II recovery can take place in this room. Ideally located directly adjacent to the PACU. A handwashing station shall be provided in this room. If Multi-Station room is used, patient cubicles should be provided in pairs to allow handwashing stations between them. |
| 6. | Toilet, Pre-Operative Holding / Phase II Recovery Patient (TLTU1)   |
| 7. | Nourishment Room (NCWD1)  |
|    | Allocated NSF provides a hand-washing station, work counter, refrigerator, storage cabinets, drinking water-dispensing unit (separate from hand-washing station), and equipment for serving nourishments.   |
| 8. | <b>Team Collaboration Room (WRCH1)</b>  |
|    | Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.  |
| 9. | Viewing Room, Picture Archiving and Communication System (PACS) (XVC01) 120 NSF Provide one if a PACS Viewing Room for the AMBS Pre-Operative Holding /   |

C.

|           | Phase II Recovery Patient Area is authorized.   |
|-----------|---|
| 10        | D. Medication Room (MEDP1)  |
|           | Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.   |
| 11        | 1. Lounge, Staff (SL001)  |
|           | Locate near the Operating Rooms.  |
| 12        | 2. Utility Room, Clean (UCCL1)  |
|           | Allocated NSF provides space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines. Clean linen may be stored in a designated area in this room if space is not provided in a separate room or in an alcove. |
| 13        | 3. Utility Room, Soiled (USCL1)   |
|           | Allocated NSF provides space for a handwashing station, a work counter, space for waste receptacles and soiled linen receptacles and provisions for disposal of liquid waste.   |
| 14        | 1. Storage, Equipment (SRSE1)   |
| 15        | 5. Alcove, Crash Cart (RCA01)   |
| 16        | S. Alcove, Portable Imaging (XRM01)   |
| 17        | 7. Alcove, Blanket Warmer (RCA04)   |
| <u>F/</u> | A 11: AMBS Anesthesia Procedure Patient Area:   |
| 1.        | Anesthesia Procedure, Single-Station Room (ORPP1)240 NSF Minimum one; provide an additional one for every increment of four General Operating Rooms greater than four if an AMBS Anesthesia Procedure Patient Area is authorized.   |

D.

|           | Provides space in an enclosed room for anesthesiologist to perform procedures not requiring OR space. Examples are Cardioversion, ECT, Evoked Potentials. Room will accommodate the proceduralist and the anesthesiologist with their equipment.   |
|-----------|--|
| 2.        | Anesthesia Procedure, Multi-Station Room (ORPP2)240 NSF<br>Provide one if an AMBS Anesthesia Procedure Patient Area is authorized.   |
|           | Minimum NSF provides space for two patients requiring regional blocks or line placement prior to surgery or holding following transport from the Pre-Op area or another area of the hospital. This room shall be near the Operating Rooms but observable by staff working at a control or nursing station. |
| 3.        | Nurse Station (NSTA1)  |
|           | This space accommodates the observation of patients in the Anesthesia Procedure Patient Area. It may be distributed (centralized or decentralized) per individual project design.  |
| 4.        | Workroom, Anesthesia (ANCW1)   |
|           | Provides space for cleaning, testing and storing anesthesia equipment. Space for work counter(s), sink(s) and racks for cylinders.   |
| 5.        | <b>Team Room, Anesthesia (WRCH1)120 NSF</b> Minimum NSF; provide an additional 30 NSF per each General Operating Room greater than three if an AMBS Anesthesia Procedure Patient Area is authorized.   |
| 6.        | Medication Room (MEDP1)  |
|           | Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.  |
| 7.        | Storage, Gas Cylinder (SRGC2)  |
| <u>FA</u> | 12: AMBS Surgical Procedure Patient Area:  |
| 1.        | Control Desk (NSTA5)   |
|           | This space to permit visual observation of all traffic into the Operating Rooms; accommodates up to four staff.  |
| 2.        | Operating Room (OR), General (ORGS1)   |
| 3.        | Equipment Room, General OR (ORGE1)   |

|     | greater than one.   |
|-----|---|
| 4.  | Laboratory, Satellite (LBSP2)   |
|     | This space includes a sink and countertop with space for equipment such as blood analyzer (cardiac markers, blood gases, chemistry, and electrolytes)   |
| 5.  | Clean Core (ORCC1)  |
|     | Allocated minimum NSF includes space to accommodate sterile supplies, holding of case carts for the Operating Rooms, tissue freezer and/or refrigerator (for tissues such as low temp allograft, tissue implants, etc) and medication refrigerator.                         |
| 6.  | Decontamination / Clean-up Area (ORDA1)   |
|     | If Central Sterile is not directly adjacent, this will room will be considered. It will not be located in Substerile between two ORs. This space may even be located in Soiled Utility. A room to bring equipment to decontaminate and then bring to be flashed sterilized. |
| 7.  | Sub-Sterile Room (ORSR1)  |
|     | Space allocated for Immediate Use Sterilization (Flash Sterilizer) and a double basin sink (if authorized) (If Central Sterile Dept. is adjacent to the Surgery Department, no need for this room)  |
| 8.  | Scrub Sink Area (ORSA1)   |
|     | Allocated NSF allows for two adjacent scrub positions and should be located near the entry point to each Operating Room. If located between two adjacent Operating Rooms, four positions should be provided. This area will be accessed from the restricted corridor.       |
| 9.  | Storage, Interventional Radiology (XIRE1)   |
| 10. | Storage, Robotics Equipment (ORNE1)   |
|     | This space accommodates the storage and re-charging of robotic surgery devices and equipment if it will not be stored in the Operating Room itself.   |
| 11. | Satellite Blood Bank (LMBB1)  |

E.

|           | Area is authorized.  |
|-----------|--|
|           | Provisions for refrigerated blood bank storage that meets the standards of the American Blood Banking Association is required.   |
| 12.       | <b>Storage Stretcher (SRLW1)</b>   |
|           | Locate proximate to the OR entry doors.  |
| 13.       | Alcove, Crash Cart (RCA01)   |
| FA<br>Are | 13: AMBS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient   |
| 1.        | PACU / Phase I Recovery Station (RRSS1)  |
|           | Planner should allocate resulting number of Stations in Single-Station or Multi-Station Rooms. This room shall be used for contact isolation, pediatric and VIP patients. If Multi-Station Room is used, minimum area should be 360 NSF to accommodate three Patient Stretchers in an open or semi-enclosed space with curtains on three sides of a stretcher. |
| 2.        | PACU / Phase I Recovery, Negative Pressure Isolation Room (RRIR1)  |
|           | Utilized for Airborne Infection Isolation patients. The number, location and type of airborne infection isolation rooms shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.  |
| 3.        | Nurse Station, PACU / Phase I Recovery (NSTA1)   |
|           | This space may be distributed (centralized or decentralized) per individual project design.  |
| 4.        | <b>Team Collaboration Room (WRCH1)</b>   |
|           | Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.   |
| 5.        | Viewing Room   |

Picture Archiving and Communication System (PACS) (XVC01)....... 120 NSF Provide one if a PACS Viewing Room in the AMBS PACU / Phase I Recovery

Patient Area is authorized.

F.

the use of formalin.

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| 6.        | Medication Room (MEDP1)120 NSF<br>Provide one for the AMBS PACU / Phase I Recovery Patient Area.  |
|-----------|---|
|           | Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.   |
| 7.        | Utility Room, Clean (UCCL1)   |
|           | Allocated NSF provides space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines. Clean linen may be stored in a designated area in this room if space is not provided in a separate room or in an alcove. |
| 8.        | Utility Room, Soiled (USCL1)  |
|           | This room, as part of a two-room suite, is utilized for scope washing / high level disinfecting. It should have a pass-through from the Soiled Scope Wash Utility Room to the Clean Scope Wash Utility Room.  |
| 9.        | Alcove, Crash Cart (RCA01)30 NSF Provide one for the AMBS PACU / Phase I Recovery Patient Area.   |
| 10.       | Alcove, Portable Imaging (XRM01)  |
| 11.       | Alcove, Blanket Warmer (RCA04)  |
| 12.       | Storage, Equipment (SRSE1)  |
| 13.       | Lounge, Staff (SL001)   |
| <u>FA</u> | 14: AMBS Surgical Procedure Support Area:   |
| 1.        | Laboratory, Frozen Section (LBEM3)  |
|           | This room is utilized for the preparation and examination of frozen sections. Do not program this room if specimens are transported to the Main Lab.  |
| 2.        | <b>Specimen Holding (LBSH1)</b>   |
|           | This room is utilized for the holding of specimens that will be transported to the Main Lab for processing. It will have a biosafety hood and proper ventilation for the use of formalia.   |

| ;  | 3.             | Pharmacy, Satellite (PHDS1)  |
|----|----------------|--|
| 4  | 4.             | Utility Room, Clean (UCCL1)  |
|    |                | Allocated NSF provides space for a work counter, a handwashing station and storage facilities for clean and sterile supplies such as shelving and automated dispensing machines. Clean linen may be stored in a designated area in this room if space is not provided in a separate room or in an alcove.  |
| !  | 5.             | Utility Room, Soiled (USCL1)   |
|    |                | This space provides an area for cleanup of medical equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by Central Sterile or similar service. The Neptune Waste Management System unit is stored in this room. This room should be accessible from the main corridor.   |
| (  | 6.             | Storage, Equipment (SRSE1)   |
| •  | 7.             | Storage, Gas Cylinder (SRGC2)120 NSF Provide one for AMBS Surgical Procedure Support Area.   |
| G. | FΑ             | 15: AMBS Staff and Administrative Area:  |
|    |                | 10. Ambo otali ana Administrativo Alca.  |
|    |                | Dictation Area (NSTA2)   |
|    | 1.             | Dictation Area (NSTA2)60 NSF   |
| ;  | 1.<br>2.       | Dictation Area (NSTA2)   |
| ;  | 1.<br>2.       | Dictation Area (NSTA2)   |
| ;  | 1.<br>2.<br>3. | Dictation Area (NSTA2)   |
| ;  | 1.<br>2.<br>3. | Dictation Area (NSTA2)   |
| ;  | 1.<br>2.<br>3. | Dictation Area (NSTA2)   |
| ;  | 1.<br>2.<br>3. | Dictation Area (NSTA2) 60 NSF Provide one for the AMBS Staff and Administrative Area.  On-Call Room (DUTY1) 120 NSF Provide one for the AMBS Staff and Administrative Area.  Scrubs Distribution Room (LCCL4) 120 NSF Provide one if a Scrubs Distribution room for the AMBS Staff and Administrative Area is authorized.  This space is provided to dispense and receive scrubs. Space may be provided within each locker room or directly adjacent. May be a space for an automated scrub management system. Locate adjacent to Operating Room.  Office, Department / Clinic Chief (OFA04) 200 NSF Provide one for the AMBS Staff and Administrative Area.  Office, Executive Assistant (OFA04) 120 NSF Provide one for the AMBS Staff and Administrative Area.  Sub-Waiting (WRC03) 60 NSF Provide one if Sub-Waiting for the AMBS Staff and Administrative Area is |

| 8.  | Team Collaboration Room (WRCH1)   |
|-----|---|
|     | Allocated NSF provides space for staff collaboration with touchdown computer stations for documentation and a table with chairs.  |
| 9.  | Office, Private (OFA04)   |
| 10. | Office, Shared (OFA05)  |
| 11. | Cubicle (OFA03)   |
|     | These cubicles may be collocated in a shared space or dispersed as required.  |
| 12. | Storage, Patient Records (MRS01)  |
|     | The Military Health System is moving towards an integrated electronic medical record. If required, space for paper medical records for patients will be planned.                  |
| 13. | Conference Room (CRA01)   |
|     | Planner must determine adequacy and availability of existing Conference Room space and the ability to optimize resources by sharing Conference Room space with other departments. |
| 14. | Copier (RPR01)120 NSF Provide one for the AMBS Staff and Administrative Area.   |
|     | This is a room for the copier/printer/scanner. It may be located directly adjacent to the reception area or in the clinic staff support area.                                     |
| 15. | Storage, Office Supplies (SRS01)60 NSF Provide one for the AMBS Staff and Administrative Area.  |
|     | Allocated NSF provides space for office supplies, patient forms and literature.   |
| 16. | Lounge, Staff (SL001)   |
| 17. | Locker / Changing Room, Male Staff (LR002)  |
|     | This Space to accommodate donning surgical attire. Provide one-way changing flow from Staff Entrance to semi-restricted area. Provide additional locker space                     |

for those FTEs without assigned office or cubicle space. Locate near the Operating Rooms.

- - This Space to accommodate donning surgical attire. Provide one-way changing flow from Staff Entrance to semi-restricted area. Provide additional locker space for those FTEs without assigned office or cubicle space. Locate near the Operating Rooms.

# H. FA 16: AMBS GME Education / Training Area:

- - This room will contain one cubicle per Resident / Student at 60 NSF. In addition to the cubicles, a table with chairs for collaboration space and bookcases will be provided.

Planner must determine adequacy and availability of existing Classroom / Conference Room space and the ability to optimize resources by sharing Classroom / Conference Room space with other GME programs.

#### 8 PLANNING AND DESIGN CONSIDERATIONS

The following design considerations are intended to provide planners and designers with guidance on how to follow world-class and evidence-based design strategies for new and renovation of existing healthcare facilities. For a more comprehensive list, refer to the *World Class Checklist* (<a href="https://facilities.health.mil/home/">https://facilities.health.mil/home/</a>). Also refer to Section 1.2 – 6,

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Design Considerations and Requirements of the <u>Guidelines for Design and Construction</u> of Health Care Facilities of the Facility Guidelines Institute (FGI).

#### General

- A. The net-to-department gross factor (NTDG) for the Inpatient Surgery and Ambulatory Surgery is **1.60** This number when multiplied by the programmed net square foot (NSF) area determines the departmental gross square feet. This factor accounts for the space occupied by internal department circulation, interior partitions and other construction elements not included in the net square feet for each room/space.
- B. Provide same handed patient care and treatment rooms where appropriate.
- C. The surgical suite will be divided into three distinct areas; unrestricted, semirestricted, and restricted.
  - 1. Unrestricted: Street clothes are permitted, and the area is to have control point for monitoring entry for patients, staff, and materials.
  - 2. Semi-restricted: Surgical attire is required, and traffic is limited to authorized personnel. Storage and work areas for processing of instruments and corridors leading to the restricted areas are included.
  - 3. Restricted: these areas include the operating room, clean core and scrub sinks. Surgical attire and hair covering is required, along with masks where open sterile supplies are utilized.
- D. Create a separate circulation flow between patients and staff ('on stage' and 'off stage') to provide privacy, safety and patient / staff satisfaction.
- E. The Surgical Suite should be restricted to the general public as well as to non-authorized staff.
- F. Provision should be made for isolation of infectious patients in both the Pre-Operative Holding / Phase II Recovery and PACU / Phase I Recovery areas (determined by an ICRA). For more information on infection prevention and control, see the ICRA section of <u>Guidelines for Design and Construction of Health Care Facilities</u> of the Facility Guidelines Institute (FGI).
- G. Consider ceiling mounted patient lifts in key areas to eliminate need for staff-assisted lifting of patients.
- H. Provide for bariatric patients where applicable.
- I. Provide visual and acoustic privacy for patients in examination, treatment and procedure areas.
- J. Whenever possible, provide natural lighting in the PACU, Pre-op and Phase II Recovery areas.
- K. Whenever possible, provide natural lighting in staff areas (i.e. staff lounge) and Waiting.
- L. The movement of patients and materials within the Surgery Suite should be physically separated. Clean Supplies, such as medical / surgical and linen, shall be separate from the retrieval of used / unused soiled supplies and equipment (instruments).
- M. Patient corridors should be a minimum of 8'-0" wide, to accommodate wheelchairs, equipment, or gurneys.
- N. Consideration should be given to the effects of building vibration, as building vibration could interfere with the accuracy of patient testing.

#### **Pre-Operative Holding / Phase II Recovery**

- A. Locate the Pre-Operative Holding / Phase II Recovery directly adjacent to the PACU if able.
- B. Locate all patient recovery positions to allow direct observation of the patient from the nurse station.
- C. The Pre-Operative Holding Area should be co-located or merged into one shared suite with the Phase II Recovery Area to allow for more efficient use of that space. Since most surgical procedures are started in the morning, the Pre-Operative / Holding Area can occupy underutilized Phase II Recovery Space in the morning but the same area can be used for additional Phase II recovery in the afternoon.
- D. Ideally, patient will be accommodated in a private (single-station) space to allow more privacy, include family, and provide space for changing.
- E. If a Multi-Station Pre-Operative Holding / Phase II Recovery Room is designed, provide patient stations / cubicles in pairs to allow hand washing stations between them, refer to Space Template.
- F. Provide a 'relaxing' environment to counteract the stress a rapid turnover unit can convey, including adequate lighting, soothing wood tones, and in-room televisions.
- G. Provide space for family seating, with wireless internet access.
- H. Provide decentralized nursing stations to allow staff to be closer to the point of care.
- Provide separation of pediatric and adult patients. Consider private enclosed stations for pediatric cases. Planning should be flexible enough to allow the swing of space, sometimes used for Pediatric patients to be used for adults at other times.
- J. Plan the patient flow so pre-procedure patients do not have visual contact with postprocedure patients.
- K. Provide easy and discrete access for the family to Pre-Operative Holding / Phase II Recovery

#### Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area

- A. The PACU should be self contained and located in close proximity to all ORs. In new construction, ensure direct access to surgical suite without crossing public hospital corridors.
- B. Locate all patient recovery positions to allow direct observation of the patient from the nurse station.
- C. Layout of PACU spaces and acoustic separation of reception and nurse station spaces from patient bays should be carefully considered in order to maintain privacy and noise control.
- D. Provide separation of pediatric and adult patients. Consider private enclosed stations for pediatric cases. Planning should be flexible enough to allow the swing of space, sometimes used for Pediatric patients to be used for adults at other times.

#### **Operating Rooms**

A. Universal, same-sized rooms where procedures from multiple different specialties can be performed will increase efficiency in the surgery department.

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- B. In the Ambulatory Surgery Center, General Operating Rooms (ORs) are identical providing the facility maximum flexibility for case scheduling.
- C. The operating room suite will be designed with a Clean Core to have no cross traffic of clean supplies and soiled/decontaminated areas. Flow of clean and soiled / decontaminated supplies and equipment to suite itself shall be designed to not compromise universal precautions or aseptic techniques.
- D. Include infrastructure to support the trend towards integration. This will help Operating Rooms remain up to date in the years to come as integration technology continues to develop.
- E. Include systems for integrated image routing. This will simplify the management of feeds from multiple video sources, and will make intra-operative imaging more efficient.
- F. Design circulating nurse stations inside the Operating Rooms that collocate control of lights, booms, audiovisual and other equipment. This nurse control station provides a platform for nurses to control Operating Rooms equipment, streamlining Operating Rooms use and enhancing the work environment of surgeons and other Operating Rooms staff.
- G. All floors of the Operating Rooms will be homogeneous with a coved floor base extending no less than 6" above finish floor. No floor drains are permitted.

#### 9 FUNCTIONAL RELATIONSHIPS

Relationship of DoD 440: Inpatient Surgery (IPS) and Inpatient Surgery (IPS) to services listed below:

TABLE 2: INPATIENT SURGERY FUNCTIONAL RELATIONSHIP MATRIX

| Services   | Relationship | Reasons       |
|--|--------------|---------------|
| Cardiology / Pulmonary Services - Cardiac Catheterization Lab (Cath Lab) | 3            | A, C          |
| Central Sterile  | 3            | В             |
| Elevators  | 1, 4         | H, I          |
| Emergency Department   | 1,4          | A, C, G, H, I |
| Endoscopy  | 3            | A, B, C, I    |
| General and Specialty Surgical Clinics                                   | 3            | G, H          |
| Intensive Care Units   | 1,4          | A, C, G, H, I |
| Logistics - Biomedical Equipment Maintenance                             | 3            | A, B          |
| Orthopedic Clinic  | 3            | A, G, H, I    |
| Pathology  | 3            | G             |
| Pharmacy   | 3            | B, G          |
| Radiology  | 3            | A, H, I       |
| Specialty Medical Clinics  | 3            | G, H          |
| Surgical Nursing Units   | 3            | H, I          |
| Urology (Cystoscopy)   | 3            | A, G, H, I    |

TABLE 3: AMBULATORY SURGERY FUNCTIONAL RELATIONSHIP MATRIX

| Services   | Relationship | Reasons    |
|--|--------------|------------|
| Cardiology / Pulmonary Services - Cardiac Catheterization Lab (Cath Lab) | 3            | A, C       |
| Central Sterile  | 3            | В          |
| Elevators  | 1, 4         | H, I       |
| Endoscopy  | 3            | A, B, C, I |
| General and Specialty Surgical Clinics                                   | 3            | G, H       |
| Logistics - Biomedical Equipment Maintenance                             | 3            | A, B       |
| Orthopedic Clinic  | 3            | A, G, H, I |
| Pathology  | 3            | G          |
| Outpatient Pharmacy  | 3            | B, G       |
| Outpatient Radiology   | 3            | A, H, I    |
| Specialty Medical Clinics  | 3            | G, H       |
| Urology (Cystoscopy)   | 3            | A, G, H, I |

#### Legend:

### Relationship:

- 1. Adjacent
- 2. Close / Same Floor
- 3. Close / Different Floor Acceptable
- 4. Limited Traffic

#### Reasons:

- A. Common use of resources
- B. Accessibility of supplies
- C. Urgency of contact
- D. Noise or vibration
- E. Presence of odors or fumes

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- F. Contamination hazard
- G. Sequence of work
- H. Patient's convenience

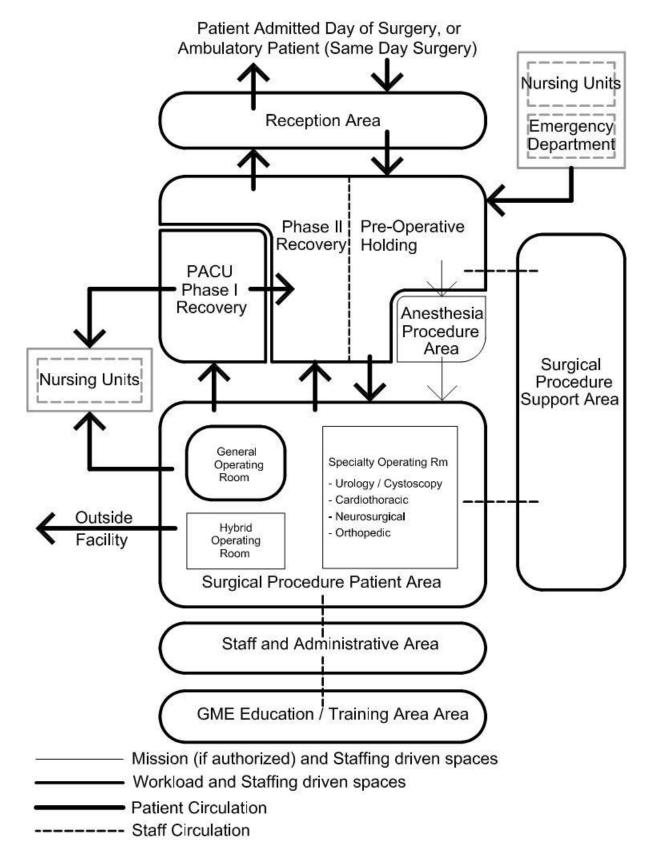
- I. Frequent contact
- J. Need for security

#### **10 FUNCTIONAL DIAGRAM**

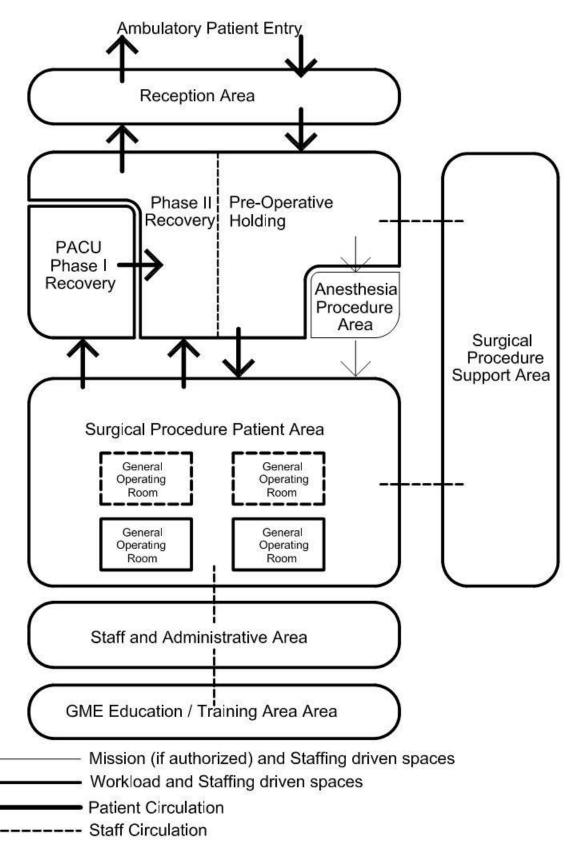
Functional Diagrams show the relationship of each functional area to the whole department. In some instances it shows important spaces within a functional area and how staff and patients may flow through the department. This diagram is not intended to serve as a "bubble diagram" that the planner / designer will create for an individual project. Size and shapes of spaces do not reflect actual configuration or square footage of spaces / rooms.

Refer to Functional Diagram(s) on next page(s)

#### 10 FUNCTIONAL DIAGRAM: INPATIENT SURGERY



#### 11 FUNCTIONAL DIAGRAM: AMBULATORY SURGERY



## 12 Appendix A: SPACE PLANNING CRITERIA SUMMARY

## **FA 1:IPS Reception Area:**

| Room Name                  | Room Code | NSF | Space Criteria                     |
|----------------------------|-----------|-----|------------------------------------|
|                            |           |     | Minimum NSF; provide an            |
|                            |           |     | additional 120 NSF for every       |
|                            |           |     | increment of two Operating Rooms   |
| Waiting, Inpatient Surgery | WRC03     | 240 | (of any type) greater than two.    |
|                            |           |     | Provide one for Inpatient Surgery  |
| Playroom                   | PLAY1     | 120 | (IPS).                             |
|                            |           |     | Provide one for Inpatient Surgery  |
| Reception                  | RECP1     | 120 | (IPS).                             |
|                            |           |     | Provide one for Inpatient Surgery  |
| Kiosk, Patient Check-in    | CLSC1     | 30  | (IPS).                             |
|                            |           |     | Minimum one; provide an            |
|                            |           |     | additional one for every increment |
|                            |           |     | of four Operating Rooms (of any    |
| Consult Room               | OFDC2     | 120 | type) greater than four.           |
|                            |           |     | Provide one for Inpatient Surgery  |
| Alcove, Wheelchair         | SRLW1     | 60  | (IPS).                             |

FA 2:IPS Pre-Operative Holding / Phase II Recovery Patient Area:

| Parm Name                 |           |     | •                                  |
|---------------------------|-----------|-----|------------------------------------|
| Room Name                 | Room Code | NSF | •                                  |
|                           |           |     | Provide one for every increment of |
|                           |           |     | six Pre-Operative Holding / Phase  |
|                           |           |     | II Recovery Patient Stations       |
|                           |           |     | greater than six if use of Patient |
|                           |           |     | Dressing Cubicles for the Pre-     |
|                           |           |     | Operative Holding / Phase II       |
| Cubicle, Patient Dressing | DR001     | 60  | Recovery Area is authorized.       |
|                           |           |     | Minimum one; provide an            |
|                           |           |     | additional one for every increment |
| Toilet, Patient           | TLTU1     | 60  | of two Patient Dressing Cubicles.  |
|                           |           |     | Minimum NSF; provide an            |
|                           |           |     | additional 30 NSF for each         |
|                           |           |     | increment of three Pre-Operative   |
|                           |           |     | Holding / Phase II Recovery        |
|                           |           |     | Patient Stations greater than      |
|                           |           |     | twenty-four if use of Patient      |
|                           |           |     | Personal Property Lockers in the   |
|                           |           |     | IPS Pre-Operative Holding / Phase  |
| Lockers, Patient Personal |           |     | II Recovery Patient Area is        |
| Property                  | LR001     | 30  | authorized.                        |

| Lounge, Patient Discharge                                       | WRF01 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of three Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine if use of a Patient Discharge Lounge in the IPS Pre-Operative Holding / Phase II Recovery Patient Area is authorized. |
|---|-------|-----|---|
| Pre-Operative Holding / Phase II Recovery Station               | RROP1 | 120 | Minimum six; provide an additional three per each Operating Room, of any type, greater than two.  |
| Toilet, Pre-Operative Holding / Phase II Recovery Patient       | TLTU1 | 60  | Minimum one; provide an additional one for every increment of eight Pre-Operative Holding / Phase II Recovery Patient Stations greater than eight.  |
| Nourishment Room  | NCWD1 | 120 | Minimum one; provide an additional one for every increment of twenty Pre-Operative Holding / Phase II Recovery Patient Stations greater than twenty.  |
| Team Collaboration Room   | WRCH1 | 120 | Minimum NSF; provide an additional 30 NSF per each Operating Room (of any type) greater than four.  |
| Viewing Room, Picture Archiving and Communication System (PACS) | XVC01 | 120 | Provide one if a PACS Viewing<br>Room in the IPS Pre-Operative<br>Holding / Phase II Recovery<br>Patient Area is authorized.  |
| Medication Room   | MEDP1 | 120 | Minimum one; provide an additional one for every increment of twenty Pre-Operative Holding / Phase II Recovery Patient Stations greater than twenty.  |
| Lounge, Staff   | SL001 | 120 | Minimum NSF, provide an additional 60 NSF for every increment of five IPS provider FTEs working on peak shift greater than ten; maximum 360 NSF.  |
| Utility Room, Clean   | UCCL1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of nine Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine.   |

|                          |       |     | Minimum NSF; provide an additional 30 NSF for every increment of nine Pre-Operative |
|--------------------------|-------|-----|---|
|                          |       |     | Holding / Phase II Recovery   |
| Utility Room, Soiled     | USCL1 | 120 | Patient Stations greater than nine.   |
|                          |       |     | Minimum NSF; provide an   |
|                          |       |     | additional 30 NSF for every   |
|                          |       |     | increment of nine Pre-Operative   |
|                          |       |     | Holding / Phase II Recovery   |
| Storage, Equipment       | SRSE1 | 120 | Patient Stations greater than nine.   |
|                          |       |     | Provide one for the IPS Patient   |
|                          |       |     | Pre-Operative Holding / Phase II  |
| Alcove, Crash Cart       | RCA01 | 30  | Recovery Area.  |
|                          |       |     | Provide one for the IPS Patient   |
|                          |       |     | Pre-Operative Holding / Phase II  |
| Alcove, Portable Imaging | XRM01 | 30  | Recovery Area.  |
|                          |       |     | Provide one for the IPS Patient   |
|                          |       |     | Pre-Operative Holding / Phase II  |
| Alcove, Blanket Warmer   | RCA04 | 30  | Recovery Area.  |

## FA3: IPS Anesthesia Procedure Patient Area:

| Room Name                                 | Room Code | NSF | Space Criteria  |
|---|-----------|-----|---|
| Amosthopia Dropadura                      |           |     | Provide one if an IPS Anesthesia  |
| Anesthesia Procedure, Single-Station Room | ORPP1     | 240 | Procedure Patient Area is authorized.   |
| Anesthesia Procedure, Multi-Station Room  | ORPP2     | 240 | Minimum NSF; provide an additional 120 NSF for every increment of four Operating Rooms (of any type) greater than four if an IPS Anesthesia Procedure Patient Area is authorized. |
|   |           |     | Provide one if an IPS Anesthesia  |
| Nurse Station                             | NSTA1     | 120 | Procedure Patient Area is authorized.   |
| Workroom, Anesthesia                      | ANCW1     | 120 | Minimum NSF; provide additional 60 NSF per each Operating Room (of any type) greater than six if an IPS Anesthesia Procedure Patient Area is authorized.                          |
| Team Room, Anesthesia                     | WRCH1     | 120 | Minimum NSF; provide an additional 30 NSF per each Operating Room (of any type) greater than three if an IPS Anesthesia Procedure Patient Area is authorized.                     |
| Medication Room                           | MEDP1     | 120 | Provide one if an IPS Anesthesia<br>Procedure Patient Area is   |

|                       |       |     | authorized.   |
|-----------------------|-------|-----|---|
|                       |       |     | Provide one if an IPS Anesthesia<br>Procedure Patient Area is |
| Storage, Gas Cylinder | SRGC2 | 120 | authorized.   |

## **FA4:IPS Surgical Procedure Patient Area:**

| Room Name                                    | Room Code | NSF | Space Criteria  |
|--|-----------|-----|---|
| Control Desk                                 | NSTA5     | 120 | Provide one for the Surgical Procedure Patient Area.  |
| Induction Room,<br>Anesthesia                | ORPP1     | 240 | Minimum one; provide an additional one for every increment of two ORs (of any type) greater than two if an IPS Anesthesia Induction Room is authorized.   |
| Operating Room (OR),<br>General              | ORGS1     | 660 | Minimum two; provide an additional one for every increment of 909 projected annual IPS General OR Procedures greater than 1,818; the minimum workload to generate a room is 227. (Refer to Table 1) |
| Equipment Room,<br>General OR                | ORGE1     | 180 | Minimum NSF; provide an additional 60 NSF per each General Operating Room greater than one.   |
| Operating Room (OR),<br>Urology / Cystoscopy | ORCS1     | 660 | Provide one for every increment of 823 projected annual Urology / Cystoscopy OR Procedures; the minimum workload to generate a room is 206. (Refer to Table 1)                                      |
| Operating Room (OR),<br>Cardiothoracic       | ORCT1     | 900 | Provide one for every increment of 421 projected annual Cardiothoracic OR Procedures; the minimum workload to generate a room is 105. (Refer to Table 1)  |
| Operating Room (OR),<br>Neurosurgical        | ORNS1     | 900 | Provide one for every increment of 411 projected annual Neurosurgical OR Procedures; the minimum workload to generate a room is 103. (Refer to Table 1)   |

|  |       | 1   |  |
|--|-------|-----|--|
| Operating Room (OR),<br>Orthopedic     | OROS1 | 900 | Provide one for every increment of<br>864 projected annual Orthopedic<br>OR Procedures; the minimum<br>workload to generate a room is<br>216. (Refer to Table 1) |
| Equipment Room,<br>Cardiothoracic OR   | ORCM1 | 180 | Provide one per each Cardiothoracic OR.  |
| Equipment Room,<br>Neurosurgical OR    | ORNE1 | 180 | Provide one per each Neurosurgical OR.   |
| Equipment Room,<br>Orthopedic OR       | OROE1 | 180 | Provide one per each Orthopedic OR.  |
| Pump Room,<br>Cardiothoracic OR        | ORHL1 | 240 | Provide one per each Cardiothoracic OR.  |
| Laboratory, Satellite                  | LBSP2 | 120 | Provide one if a Satellite Laboratory for the IPS Surgical Procedure Patient Area is authorized.   |
| Storage, Orthopedic OR                 | OROE1 | 180 | Provide one per each Orthopedic OR.  |
| Operating Room (OR),<br>Hybrid         | ORHY1 | 900 | Provide one per each Hybrid Operating Room (OR) authorized.  |
| Control Room, Hybrid OR                | ORHC1 | 240 | Minimum one if one Hybrid OR is authorized; provide an additional one for every increment of two Hybrid Operating Rooms (ORs) greater than two                   |
| Equipment Room, Hybrid OR              | ORHE1 | 180 | Provide one per each Hybrid OR.  |
| Pump Room, Hybrid OR                   | OREP1 | 240 | Provide one per each Hybrid Operating Room (OR).   |
| 19. Satellite Laboratory,<br>Hybrid OR | LBSP2 | 120 | Provide one if authorized or if a Hybrid OR is authorized.   |
| Clean Core                             | ORCC1 | 240 | Minimum NSF; provide an additional 200 NSF per each Operating Room (of any type) greater than two.  Provide one if a Decontamination /                           |
| Decontamination / Clean-<br>up Area    | ORDA1 | 120 | Clean-up Area for the IPS Surgical Procedure Patient Area is authorized.   |

| Sub-Sterile Room                  | ORSR1 | 120 | Minimum one; provide an additional one for every increment of four Operating Rooms (of any type) greater than four if use of a Sub-Sterile Room in the IPS Surgical Procedure Patient Area is authorized. |
|-----------------------------------|-------|-----|---|
| Scrub Sink Area                   | ORSA1 | 60  | Provide one per each Operating Room (of any type).  |
| Storage, Interventional Radiology | XIRE1 | 180 | Provide one if additional storage for Interventional Radiology equipment in the IPS Surgical Procedure Patient Area is authorized   |
| Storage, Robotics<br>Equipment    | ORNE1 | 180 | Provide one if additional storage for Robotics equipment in the IPS Surgical Procedure Patient Area is authorized.  |
| Satellite Blood Bank              | LMBB1 | 120 | Provide one if a Satellite Blood<br>Bank in the IPS Surgical<br>Procedure Patient Area is<br>authorized.  |
| Storage Stretcher                 | SRLW1 | 60  | Provide one for every increment of two Operating Rooms (ORs) (of any type).   |
| Alcove, Crash Cart                | RCA01 | 30  | Provide one if additional storage space for Crash Carts in the IPS Surgical Procedure Patient Area is authorized.   |

# FA5:IPS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area:

| Room Name                | Room Code | NSF | Space Criteria                     |
|--------------------------|-----------|-----|------------------------------------|
|                          |           |     | Minimum three; provide an          |
|                          |           |     | additional three for every         |
|                          |           |     | increment of two Operating         |
| PACU / Phase I Recovery  |           |     | Rooms, of any type, greater than   |
| Station                  | RRSS1     | 120 | two.                               |
| PACU / Phase I Recovery, |           |     |                                    |
| Negative Pressure        |           |     | Provide one for the IPS PACU /     |
| Isolation Room           | RRIR1     | 120 | Phase I Recovery Patient Area.     |
|                          |           |     | Minimum NSF; provide an            |
|                          |           |     | additional 30 NSF for every        |
|                          |           |     | increment of four PACU / Phase I   |
|                          |           |     | Recovery Patient Stations and      |
| Nurse Station, PACU /    |           |     | PACU / Phase I Recovery Patient    |
| Phase I Recovery         | NSTA1     | 120 | Isolation Rooms greater than four. |

| Team Collaboration Room   | WRCH1 | 120 | Minimum NSF; provide an additional 30 NSF per each Operating Room (of any type) greater than four.   |
|---|-------|-----|--|
| Viewing Room, Picture Archiving and Communication System (PACS) | XVC01 | 120 | Provide one if a PACS Viewing<br>Room in the IPS PACU / Phase I<br>Recovery Patient Area is<br>authorized.   |
| Medication Room   | MEDP1 | 120 | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Utility Room, Clean   | UCCL1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of eight PACU / Phase I Recovery Patient Stations and PACU / Phase I Recovery Patient Isolation Rooms greater than twelve. |
| Utility Room, Soiled  | USCL1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of eight PACU / Phase I Recovery Patient Stations and PACU / Phase I Recovery Patient Isolation Rooms greater than twelve. |
| Alcove, Crash Cart  | RCA01 | 30  | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Alcove, Portable Imaging  | XRM01 | 30  | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Alcove, Blanket Warme   | RCA04 | 30  | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Storage, Equipment  | SRSE1 | 120 | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Lounge, Staff   | SL001 | 120 | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |

FA6:IPS Surgical Procedure Support Area:

| Room Name          | Room Code | NSF | Space Criteria   |
|--------------------|-----------|-----|--|
| Laboratory, Frozen |           |     | Provide one if a Frozen Section<br>Laboratory in the IPS Surgical<br>Procedure Support Area is |
| Section            | LBEM3     | 120 | authorized.  |
| Specimen Holding   | LBSH1     | 120 | Provide one if a Specimen Holding in the IPS Surgical Procedure Support Area is authorized.    |

| Pharmacy, Satellite   | PHDS3 | 120 | Provide one if a Satellite Pharmacy in the IPS Surgical Procedure Support Area is authorized. |
|-----------------------|-------|-----|---|
|                       |       |     | Minimum NSF; provide an additional 60 NSF for every   |
|                       |       |     | increment of four ORs (of all types)  |
| Utility Room, Clean   | UCCL1 | 120 | greater than four.  |
|                       |       |     | Minimum NSF; provide an   |
|                       |       |     | additional 60 NSF for every   |
|                       |       |     | increment of four ORs (of all types)  |
| Utility Room, Soiled  | USCL1 | 120 | greater than four.  |
|                       |       |     | Provide one for IPS Inpatient   |
| Storage, Equipment    | SRSE1 | 120 | Surgery.  |
|                       |       |     | Provide one for IPS Inpatient   |
| Storage, Gas Cylinder | SRGC2 | 120 | Surgery.  |

## FA7: IPS Staff and Administrative Area:

| Room Name                         | Room Code | NSF | Space Criteria   |
|-----------------------------------|-----------|-----|--|
| Dictation Area                    | NSTA2     | 60  | Provide one for IPS Staff and Administrative Area.   |
| On-Call Room                      | DUTY1     | 120 | Provide one for IPS Staff and Administrative Area  |
| Scrubs Distribution Room          | LCCL4     | 120 | Provide one if a Scrubs Distribution room for the IPS Staff and Administrative Area is authorized.                                   |
| Office, Department / Clinic Chief | OFA04     | 120 | Provide one for IPS Staff and Administrative Area.   |
| Office, Executive Assistant       | OFA04     | 120 | Provide one for IPS Staff and Administrative Area.   |
| Sub-Waiting                       | WRC03     | 60  | Provide one if Sub-Waiting for the IPS Staff and Administrative Area is authorized.  |
| Office, NCOIC / LCPO / LPO        | OFA04     | 120 | Provide one for IPS Staff and Administrative Area.   |
| Team Collaboration Room           | WRCH1     | 120 | Provide one for IPS Staff and Administrative Area.   |
| Office, Private                   | OFA04     | 120 | Provide one per each Inpatient Surgery provider and non-provider FTE position authorized to have a private office.                   |
| Office, Shared                    | OFA05     | 120 | Provide one for every increment of two Inpatient Surgery provider and non-provider FTE positions authorized to have a shared office. |

|                                    |        |     | Provide one per each Inpatient   |
|------------------------------------|--------|-----|--|
|                                    |        |     | Surgery provider and non-provider FTE position authorized to have a    |
| Cubicle                            | OFA03  | 60  | cubicle.   |
|                                    |        |     | Provide one if Patient Records   |
|                                    | MDOOA  | 400 | storage in the IPS Staff and   |
| Storage, Patient Records           | MRS01  | 120 | Administrative Area is authorized.  Minimum NSF; provide an            |
|                                    |        |     | additional 60 NSF if the total   |
|                                    |        |     | number of Inpatient Surgery FTE  |
|                                    |        |     | provider and non-provider positions authorized is greater than         |
| Conference Room                    | CRA01  | 240 | ten.   |
|                                    |        |     | Provide one for IPS Staff and  |
| Copier                             | RPR01  | 120 | Administrative Area.   |
|                                    |        |     | Provide one for IPS Staff and  |
| Storage, Office Supplies           | SRS01  | 60  | Administrative Area.   |
|                                    |        |     | Minimum NSF, provide an additional 60 NSF for every                    |
|                                    |        |     | increment of five Inpatient Surgery                                    |
|                                    |        |     | non-provider FTEs working on   |
| Lounge, Staff                      | SL001  | 120 | peak shift greater than ten;<br>maximum 360 NSF.                       |
|                                    | 0.200  |     | Minimum NSF if total number of   |
|                                    |        |     | Inpatient Surgery FTE provider and                                     |
|                                    |        |     | non-provider positions authorized is between five and thirteen;        |
|                                    |        |     | provide an additional 6 NSF per  |
|                                    |        |     | each Inpatient Surgery FTE   |
| Locker / Changing Room, Male Staff | LR002  | 120 | position authorized greater than thirteen.                             |
| Iviale Stall                       | LIXUUZ | 120 | Minimum NSF if total number of   |
|                                    |        |     | Inpatient Surgery FTE provider and                                     |
|                                    |        |     | non-provider positions authorized                                      |
|                                    |        |     | is between five and thirteen; provide an additional 6 NSF per          |
|                                    |        |     | each Inpatient Surgery (IPS) FTE                                       |
| Locker / Changing Room,            | . =    |     | position authorized greater than                                       |
| Female Staff                       | LR002  | 120 | thirteen.  Minimum one if the total number of                          |
|                                    |        |     | Inpatient Surgery FTE provider and                                     |
|                                    |        |     | non-provider positions authorized                                      |
|                                    |        |     | is between five and thirteen;  |
|                                    |        |     | provide an additional one for every increment of ten Inpatient Surgery |
|                                    |        |     | FTE positions authorized greater                                       |
| Toilet / Shower, Male Staff        | TLTS1  | 60  | than thirteen.   |

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|                         |       |    | Minimum one if the total number of Inpatient Surgery FTE provider and non-provider positions authorized is between five and thirteen; provide an additional one for every increment of ten Inpatient Surgery |
|-------------------------|-------|----|--|
| Toilet / Shower, Female |       |    | FTE positions authorized greater   |
| Staff                   | TLTS1 | 60 | than thirteen.   |

**FA8:IPS GME Education / Training Area:** 

| Room Name              | Room Code | NSF | Space Criteria   |
|------------------------|-----------|-----|--|
| Office, Residency      |           |     | Provide one if an Inpatient Surgery Graduate Medical Education |
| Program Director       | OFA04     | 120 | program is authorized.   |
|                        |           |     | Minimum NSF; provide an  |
|                        |           |     | additional 60 NSF per each                                     |
|                        |           |     | Inpatient Surgery Resident /                                   |
|                        |           |     | Student FTE position authorized                                |
|                        |           |     | greater than two if an Inpatient                               |
| Resident Collaboration |           |     | Surgery Graduate Medical                                       |
| Room                   | WKTM1     | 240 | Education program is authorized.                               |
|                        |           |     | Provide one if the total number of                             |
|                        |           |     | Inpatient Surgery Resident /                                   |
|                        |           |     | Student FTE positions is greater                               |
|                        |           |     | than five if an Inpatient Surgery                              |
| Classroom / Conference |           |     | Graduate Medical Education                                     |
| Room                   | CLR01     | 240 | program is authorized.   |

FA9: AMBS Reception Area:

| Room Name               | <b>Room Code</b> | NSF | Space Criteria  |
|-------------------------|------------------|-----|---|
| Waiting, Ambulatory     |                  |     | Minimum NSF; provide an additional 120 NSF for every increment of two General |
| Surgery                 | WRC01            | 240 | Operating Rooms greater than two.   |
|                         |                  |     | Provide one for Ambulatory  |
| Playroom                | PLAY1            | 120 | Surgery.  |
|                         |                  |     | Provide one for Ambulatory  |
| Reception               | RECP1            | 120 | Surgery.  |
|                         |                  |     | Provide one for Ambulatory  |
| Kiosk, Patient Check-in | CLSC1            | 30  | Surgery.  |
|                         |                  |     | Provide one for Ambulatory  |
| Patient Education       | CLSC3            | 120 | Surgery.  |
|                         |                  |     | Minimum one; provide an   |
|                         |                  |     | additional one for every increment of four General Ors greater than           |
| Consult Room            | OFDC2            | 120 | four.   |
| COLICULT (COLI          | 0.002            | 120 | Provide one for Ambulatory  |
| Alcove, Wheelchair      | SRLW1            | 60  | Surgery.  |

**FA10:AMBS Pre-Operative Holding / Phase II Recovery Patient Area:** 

| FATU: AMBS Pre-Operat                                     |           |     | II Recovery Patient Area:   |
|---|-----------|-----|---|
| Room Name   | Room Code | NSF | Space Criteria  |
| Cubicle, Patient Dressing                                 | DR001     | 60  | Provide one for every increment of six Pre-Operative Holding / Phase II Recovery Patient Stations greater than six if use of Patient Dressing Cubicles for the Pre-Operative Holding / Phase II Recovery Area is authorized.  |
| Toilet, Patient   | TLTU1     | 60  | Minimum one; provide an additional one for every increment of two Patient Dressing Cubicles.  |
| Alcove, Patient Personal Property                         | LR001     | 30  | Minimum NSF; provide an additional 30 NSF for each increment of three Pre-Operative Holding / Phase II Recovery Patient Stations greater than twelve if use of Patient Personal Property Alcove in the AMBS Pre-Operative Holding / Phase II Recovery Patient Area is authorized. |
| Lounge, Patient Discharge                                 | WRF01     | 120 | Minimum NSF; provide an additional 30 NSF for every increment of three Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine if use of a Patient Discharge Lounge in the AMBS Pre-Operative Holding / Phase II Recovery Patient Area is authorized.        |
| Pre-Operative Holding /<br>Phase II Recovery Station      | RROP1     | 120 | Minimum six; provide an additional three per each General Operating Room greater than two.  |
| Toilet, Pre-Operative Holding / Phase II Recovery Patient | TLTU1     | 60  | Minimum one; provide an additional one for every increment of eight Pre-Operative Holding / Phase II Recovery Patient Stations greater than eight.  |
| Nourishment Room  | NCWD1     | 120 | Minimum one; provide an additional one for every increment of twenty Pre-Operative Holding / Phase II Recovery Patient Stations greater than twenty.  |
| Team Collaboration Room                                   | WRCH1     | 120 | Minimum NSF; provide an additional 30 NSF per each General Operating Room greater   |

|   |       |     | than four.   |
|---|-------|-----|--|
|   |       |     |  |
| Viewing Room, Picture Archiving and Communication System (PACS) | XVC01 | 120 | Provide one if a PACS Viewing<br>Room for the AMBS Pre-Operative<br>Holding / Phase II Recovery<br>Patient Area is authorized.                       |
| Medication Room   | MEDP1 | 120 | Minimum one; provide an additional one for every increment of twenty Pre-Operative Holding / Phase II Recovery Patient Stations greater than twenty. |
| Lounge, Staff   | SL001 | 120 | Minimum NSF; provide an additional 60 NSF per each General Operating Room greater than two.  |
| Utility Room, Clean   | UCCL1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of nine Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine.  |
| Utility Room, Soiled  | USCL1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of nine Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine.  |
| Storage, Equipment  | SRSE1 | 120 | Minimum NSF; provide an additional 30 NSF for every increment of nine Pre-Operative Holding / Phase II Recovery Patient Stations greater than nine.  |
| Alcove, Crash Cart  | RCA01 | 30  | Provide one for the AMBS Pre-<br>Operative Holding / Phase II<br>Recovery Patient Area.  |
| Alcove, Portable Imaging  | XRM01 | 30  | Provide one for the AMBS Pre-<br>Operative Holding / Phase II<br>Recovery Patient Area.  |
| Alcove, Blanket Warmer  | RCA04 | 30  | Provide one for the AMBS Pre-<br>Operative Holding / Phase II<br>Recovery Patient Area.  |

FA11: AMBS Anesthesia Procedure Patient Area:

| Room Name             | Room Code | NSF | Space Criteria                     |
|-----------------------|-----------|-----|------------------------------------|
|                       |           |     | Minimum one; provide an            |
|                       |           |     | additional one for every increment |
|                       |           |     | of four General Operating Rooms    |
|                       |           |     | greater than four if an AMBS       |
| Anesthesia Procedure, |           |     | Anesthesia Procedure Patient Area  |
| Single-Station Room   | ORPP1     | 240 | is authorized.                     |
|                       |           |     | Provide one if an AMBS             |
| Anesthesia Procedure, |           |     | Anesthesia Procedure Patient Area  |
| Multi-Station Room    | ORPP2     | 240 | is authorized.                     |
|                       |           |     | Provide one if an AMBS             |
|                       |           |     | Anesthesia Procedure Patient Area  |
| Nurse Station         | NSTA1     | 120 | is authorized.                     |
|                       |           |     | Minimum NSF; provide additional    |
|                       |           |     | 60 NSF per each General            |
|                       |           |     | Operating Room greater than six if |
|                       |           |     | an AMBS Anesthesia Procedure       |
| Workroom, Anesthesia  | ANCW1     | 120 | Patient Area is authorized.        |
| ·                     |           |     | Minimum NSF; provide an            |
|                       |           |     | additional 30 NSF per each         |
|                       |           |     | General Operating Room greater     |
|                       |           |     | than three if an AMBS Anesthesia   |
|                       |           |     | Procedure Patient Area is          |
| Team Room, Anesthesia | WRCH1     | 120 | authorized.                        |
|                       |           |     | Provide one if an AMBS             |
|                       |           |     | Anesthesia Procedure Patient Area  |
| Medication Room       | MEDP1     | 120 | is authorized.                     |
|                       |           |     | Provide one if an AMBS             |
|                       |           |     | Anesthesia Procedure Patient Area  |
| Storage, Gas Cylinder | SRGC2     | 120 | is authorized.                     |

**FA12:AMBS Surgical Procedure Patient Area:** 

| Room Name              | Room Code | NSF  | Space Criteria                     |
|------------------------|-----------|------|------------------------------------|
| Room Name              | Room code | INGI | ·                                  |
| Operational Department | NOTAG     | 400  | Provide one for the AMBS Surgical  |
| Control Desk           | NSTA5     | 120  | Procedure Patient Area.            |
|                        |           |      | Minimum two; provide an            |
|                        |           |      | additional one for every increment |
|                        |           |      | of 909 projected annual AMBS       |
|                        |           |      | General OR Procedures greater      |
|                        |           |      | than 1,818; the minimum workload   |
| Operating Room (OR),   |           |      | to generate a room is 254. (Refer  |
| General                | ORGS1     | 660  | to Table 1)                        |
|                        |           |      | Minimum NSF; provide an            |
|                        |           |      | additional 60 NSF per each         |
| Equipment Room,        |           |      | General Operating Room greater     |
| General OR             | ORGE1     | 180  | than one.                          |

| Laboratory, Satellite               | LBSP2  | 120 | Provide one if a Satellite Laboratory for the AMBS Surgical Procedure Patient Area is authorized.  |
|-------------------------------------|--------|-----|--|
| Laboratory, Satellite               | LDOF 2 | 120 | Minimum NSF; provide an additional 200 NSF per each General Operating Room greater   |
| Clean Core                          | ORCC1  | 240 | than two.  |
| Decontamination / Clean-<br>up Area | ORDA1  | 120 | Provide one if a Decontamination / Clean-up Area for the AMBS Surgical Procedure Patient Area is authorized.   |
| Sub-Sterile Room                    | ORSR1  | 120 | Minimum one; provide an additional one for every increment of four General Operating Rooms greater than four if use of a Sub-Sterile Room in the AMBS Surgical Procedure Patient Area is authorized. |
| Scrub Sink Area                     | ORSA1  | 60  | Provide one per each General Operating Room.   |
| Storage, Interventional Radiology   | XIRE1  | 180 | Provide one if additional storage for Interventional Radiology equipment in the AMBS Surgical Procedure Patient Area is authorized.  |
| Storage, Robotics Equipment         | ORNE1  | 180 | Provide one if additional storage for Robotics equipment in the AMBS Surgical Procedure Patient Area is authorized.  |
| Satellite Blood Bank                | LMBB1  | 120 | Provide one if a Satellite Blood<br>Bank in the AMBS Surgical<br>Procedure Patient Area is<br>authorized.  |
| Storage Stretcher                   | SRLW1  | 60  | Provide one for every increment of two General Operating Rooms.  |
| Alcove, Crash Cart                  | RCA01  | 30  | Provide one if additional space for storing Crash Carts in the AMBS Surgical Procedure Patient Area is authorized.   |

# FA13:AMBS Post-Anesthesia Care Unit (PACU) / Phase I Recovery Patient Area:

| Room Name   | Room Code | NSF | Space Criteria   |
|---|-----------|-----|--|
| PACU / Phase I Recovery<br>Station                              | RRSS1     | 120 | Minimum three; provide an additional three for every increment of two General Operating Rooms greater than two.  |
| PACU / Phase I Recovery,<br>Negative Pressure<br>Isolation Room | RRIR1     | 120 | Provide one for the IPS PACU /<br>Phase I Recovery Patient Area.   |
| Nurse Station, PACU /<br>Phase I Recovery                       | NSTA1     | 120 | Minimum NSF; provide an additional 30 NSF for every increment of four PACU / Phase I Recovery Patient Stations and PACU / Phase I Recovery Patient Isolation Rooms greater than four.    |
| Team Collaboration Room   | WRCH1     | 120 | Minimum NSF; provide an additional 30 NSF per each General Operating Room greater than four.   |
| Viewing Room, Picture Archiving and Communication System (PACS) | XVC01     | 120 | Provide one if a PACS Viewing<br>Room in the AMBS PACU / Phase<br>I Recovery Patient Area is<br>authorized.  |
| Medication Room   | MEDP1     | 120 | Provide one for the AMBS PACU / Phase I Recovery Patient Area.   |
| Utility Room, Clean   | UCCL1     | 120 | Minimum NSF; provide an additional 30 NSF for every increment of eight PACU / Phase I Recovery Patient Stations and PACU / Phase I Recovery Patient Isolation Rooms greater than twelve  |
| Utility Room, Soiled  | USCL1     | 120 | Minimum NSF; provide an additional 30 NSF for every increment of eight PACU / Phase I Recovery Patient Stations and PACU / Phase I Recovery Patient Isolation Rooms greater than twelve. |
| Alcove, Crash Cart  | RCA01     | 30  | Provide one for the AMBS PACU /<br>Phase I Recovery Patient Area.  |
| Alcove, Portable Imaging  | XRM01     | 30  | Provide one for the PACU / Phase I Recovery Patient Area.  |

|                        |       |     | Provide one for the AMBS PACU / |
|------------------------|-------|-----|---------------------------------|
| Alcove, Blanket Warmer | RCA04 | 30  | Phase I Recovery Patient Area.  |
|                        |       |     | Provide one for the AMBS PACU / |
| Storage, Equipment     | SRSE1 | 120 | Phase I Recovery Patient Area.  |
|                        |       |     | Provide one for the AMBS PACU / |
| Lounge, Staff          | SL001 | 120 | Phase I Recovery Patient Area.  |

FA14: AMBS Surgical Procedure Support Area:

| FA14. AMBS Surgical   |           |     |  |
|-----------------------|-----------|-----|--|
| Room Name             | Room Code | NSF | Space Criteria   |
|                       |           |     | Provide one if a Frozen Section Laboratory in the AMBS Surgical                                |
| Laboratory, Frozen    |           |     | Procedure Support Area is  |
| Section               | LBEM3     | 120 | authorized.  |
| Specimen Holding      | LBSH1     | 120 | Provide one if a Specimen Holding in the AMBS Surgical Procedure Support Area is authorized.   |
| Pharmacy, Satellite   | PHDS1     | 120 | Provide one if a Satellite Pharmacy in the AMBS Surgical Procedure Support Area is authorized. |
| Utility Room, Clean   | UCCL1     | 120 | Provide one for AMBS Surgical Procedure Support Area.  |
| Utility Room, Soiled  | USCL1     | 120 | Provide one for AMBS Surgical Procedure Support Area.  |
| Storage, Equipment    | SRSE1     | 120 | Provide one for AMBS Surgical Procedure Support Area.  |
| Storage, Gas Cylinder | SRGC2     | 120 | Provide one for AMBS Surgical Procedure Support Area.  |

### **FA15:AMBS Staff and Administrative Area:**

| Room Name                         | Room Code | NSF | Space Criteria  |
|-----------------------------------|-----------|-----|---|
| Dictation Area                    | NSTA2     | 60  | Provide one for the AMBS Staff and Administrative Area.   |
| On-Call Room                      | DUTY1     | 120 | Provide one for the AMBS Staff and Administrative Area.   |
| Scrubs Distribution Room          | LCCL4     | 120 | Provide one if a Scrubs Distribution room for the AMBS Staff and Administrative Area is authorized. |
| Office, Department / Clinic Chief | OFA04     | 120 | Provide one for the AMBS Staff and Administrative Area.   |
| Office, Executive Assistant       | OFA04     | 120 | Provide one for the AMBS Staff and Administrative Area.   |
| Sub-Waiting                       | WRC03     | 60  | Provide one if Sub-Waiting for the AMBS Staff and Admininstrative Area is authorized.               |

| OFA04 | 120  | Provide one for the AMBS Staff and Administrative Area.  |
|-------|--|--|
| WRCH1 | 120  | Provide one for the AMBS Staff and Administrative Area.  |
| OFA04 | 120  | Provide one per each Ambulatory Surgery provider and non-provide FTE position authorized to have a private office.   |
| OFA05 | 120  | Provide one for every increment of two Ambulatory Surgery provider and non-provider FTE positions authorized to have a shared office   |
| OFA03 | 60   | Provide one per each Ambulatory Surgery provider and non-provide FTE position authorized to have a cubicle.  |
| MRS01 | 120  | Provide one if Patient Records storage in the AMBS Staff and Administrative Area is authorized.  |
| CRA01 | 240  | Minimum NSF; provide and additional 60 NSF if the total number of Ambulatory Surgery FTE positions authorized is greate than ten.  |
| RPR01 | 120  | Provide one for the AMBS Staff and Administrative Area.  |
| SRS01 | 60   | Provide one for the AMBS Staff and Administrative Area.  |
| SL001 | 120  | Minimum NSF, provide an additional 60 NSF for every increment of five Ambulatory Surgery FTEs working on peak shift greater than ten; maximum 360 NSF.   |
|       |  | Minimum NSF if total number of Ambulatory Surgery FTE provider and non-provider positions authorized is between five and thirteen; provide an additional 6 NSF per each Ambulatory Surger FTE position authorized greater than thirteen. |
|       | WRCH1  OFA04  OFA05  OFA03  MRS01  CRA01  RPR01  SRS01 | WRCH1       120         OFA04       120         OFA05       120         MRS01       120         CRA01       240         RPR01       120         SRS01       60         SL001       120   |

|  |              |     | Minimum NSF if total number of<br>Ambulatory Surgery FTE provider |
|--|--------------|-----|---|
|  |              |     | and non-provider positions  |
|  |              |     | authorized is between five and                                    |
|  |              |     | thirteen; provide an additional 6                                 |
|  |              |     | NSF per each Ambulatory Surgery                                   |
| Locker / Changing Room,                |              |     | FTE position authorized greater                                   |
| Female Staff                           | LR002        | 120 | than thirteen.  |
|  |              |     | Minimum one if the total number of                                |
|  |              |     | Ambulatory Surgery FTE provider                                   |
|  |              |     | and non-provider positions  |
|  |              |     | authorized is between five and                                    |
|  |              |     | thirteen; provide an additional one                               |
|  |              |     | for every increment of ten  |
| _ ,, , , , , , , , , , , , , , , , , , | <b>-1 -0</b> |     | Ambulatory Surgery FTE positions                                  |
| Toilet / Shower, Male Staff            | TLTS1        | 60  | authorized greater than thirteen.                                 |
|  |              |     | Minimum one if the total number of                                |
|  |              |     | Ambulatory Surgery FTE provider                                   |
|  |              |     | and non-provider positions  |
|  |              |     | authorized is between five and                                    |
|  |              |     | thirteen; provide an additional one                               |
|  |              |     | for every increment of ten  |
| 20. Toilet / Shower,                   |              |     | Ambulatory Surgery FTE positions                                  |
| Female Staff                           | TLTS1        | 60  | authorized greater than thirteen.                                 |

## FA16: AMBS GME Education / Training Area:

| Room Name              | Room Code | NSF | Space Criteria                     |
|------------------------|-----------|-----|------------------------------------|
|                        |           |     | Provide one if an Ambulatory       |
| Office, Residency      |           |     | Surgery Graduate Medical           |
| Program Director       | OFA04     | 120 | Education program is authorized.   |
|                        |           |     | Minimum NSF; provide an            |
|                        |           |     | additional 60 NSF per each         |
|                        |           |     | Ambulatory Surgery Resident /      |
|                        |           |     | Student FTE position authorized    |
|                        |           |     | greater than two if an Ambulatory  |
| Resident Collaboration |           |     | Surgery Graduate Medical           |
| Room                   | WKTM1     | 240 | Education program is authorized.   |
|                        |           |     | Provide one if the total number of |
|                        |           |     | Ambulatory Surgery Resident /      |
|                        |           |     | Student FTE positions is greater   |
|                        |           |     | than five if an Ambulatory Surgery |
| Classroom / Conference |           |     | Graduate Medical Education         |
| Room                   | CLR01     | 240 | program is authorized.             |