



## DoD SPACE PLANNING CRITERIA

# CHAPTER 311: GENERAL AND SPECIALTY SURGICAL CLINICS JUNE 1, 2016

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**Purpose:** This issuance: To provide space planning criteria guidance in support of planning, programming and budgeting for DoD Military Health System (MHS) facilities.

# ***SUMMARY of CHANGE***

This revision, dated June 1, 2016 includes the following:

- On page 4, Section 1: Purpose and Scope, changed the first sentence to read “This chapter outlines space planning criteria for services and programs provided in an Outpatient Clinic located within the Military Health System (MHS).”
- On page 6, SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA, paragraph 2.1.G. Formula 1, changed the note that follows the formula to read “Minimum Annual Workload to generate an Exam Room is 20% of Annual Workload for one Exam Room.”
- On page 8, SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA, paragraph 2.1.H.2.a. Input data Statement 2, Answer 1: changed “**Step 1:**” to read “Subtract the increment from the projected annual encounters to account for the “Minimum two” condition.”
- On page 8, SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA, paragraph 2.1.H.2.a. Input data Statement 2, Answer 1: changed “**Step 1:**” formula to read “ $12,500 - (6,144) = 6,356$ ”
- On page 8, SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA, paragraph 2.1.H.2.a. Input data Statement 2, Answer 2: changed “**Step 1:**” to read “Subtract the increment from the projected annual encounters to account for the “Minimum two” condition.”
- On page 8, SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA, paragraph 2.1.H.2.b. Input data Statement 2, Answer 2: changed “**Step 1:**” formula to read “ $18,000 - (6,144) = 11,856$ ”
- On page 12, section 4.3. FA3: GENERAL TREATMENT PATIENT AREA, room 2, Exam, General (EXRG1), changed the criteria statement to read “Minimum one; provide additional Exam Rooms based on the total number of Calculated Exam Rooms (refer to FA 1, Room 1); deduct the Airborne Infection Isolation (AII) Exam, Bariatric Exam and Telehealth Exam rooms from the total number of workload driven Exam Rooms.”

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## **SECTION 1: PURPOSE AND SCOPE**

### **1.1.**

This chapter outlines space planning criteria for services and programs provided in an Outpatient Clinic located within the Military Health System (MHS). Outpatient clinics includes freestanding community-based facilities, as well as ambulatory clinics in or directly adjacent to hospital-based services. More specifically, the General and Specialty Surgical Clinics chapter covers the departments of Colorectal Surgery, General Surgery, Neurosurgery, Plastic Surgery, and Thoracic Surgery. Space planning criteria described in this chapter applies to each of these clinic types. Any specialty room types that apply to limited clinical specialties are also noted.

Space planning criteria related to the Endoscopy Suite may be found in Chapter 315: Specialty Medical Clinics.

This space planning criteria applies to all Military Medical Treatment Facilities (MTFs). Policies and directives, DoD Subject Matter Experts (SMEs), established and/or anticipated best practice guidelines / standards, and the Defense Health Agency (DHA) provides the foundation for the workload based space criteria and Net Square Footages (NSF) for each space. Room Codes (RCs) in this document are based on the latest version of DoD's UFC 4-510-01, Appendix B.

## **SECTION 2: OPERATING RATIONALE AND BASIS OF CRITERIA**

### **2.1.**

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 General and Specialty Surgical Clinics and its 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 health 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 Exam Rooms in the Functional Area 2: General Treatment Patient Area is derived from workload projections via the workload Input Data Statements as outlined below. Most of the remaining rooms in this functional area and in Functional Area 2: Reception Area and Functional Area 4: Clinic Support Area, are determined based on the number of Exam Rooms generated by workload. Mission, Staffing and Miscellaneous Input Data Questions drive the rest of the spaces in this chapter.

F. Section 3: Input Data Questions and Section 4: Space Planning Criteria have been implemented and tested in SEPS II.

G. Exam room capacity calculation is based on the following formula / parameters:

Formula 1: Annual Room Workload Capacity

$$\frac{(\text{Operating Days per Year})(\text{Hours of Operation per Day})}{\text{Average Length of Encounter (ALOE)in Minutes} \div 60 \text{ Minutes}} (\text{Utilization Factor})$$

User Defined Values:

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: 80%

Calculation: Annual Workload for one Exam Room:

$$\frac{240 \text{ Operating Days per Year} \times 8 \text{ Hours of Operation per Day}}{45 \text{ Minutes} \div 60 \text{ Minutes}} (0.80) = 2,048$$

Minimum Annual Workload to generate an Exam Room is 20% of Annual Workload for one Exam 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.

$$\frac{3,164}{1,536} = 2.05$$

Two additional rooms generated

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

$$(2)(1,536) = 3,072$$

**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.

$$92 < 307$$

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.

$$\frac{13,464}{1,536} = 8.76$$

Eight additional rooms generated

**Step 3:** Multiply the whole value (“8” in the previous step) by the increment.

$$(8)(1,536) = 12,288$$

**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.

$$1,176 > 307$$

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 two” condition.

$$12,500 - (6,144) = 6,356$$

Two rooms generated

**Step 2:** Divide the resulting value by the increment.

$$\frac{6,356}{3,072} = 2.06$$

Two additional rooms generated

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

$$(2)(3,072) = 6,144$$

**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.

$$212 < 614$$

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 two” condition.

$$18,000 - (6,144) = 11,856$$

Two rooms generated

**Step 2:** Divide the resulting value by the increment.

$$\frac{11,856}{3,072} = 3.85$$

Three additional rooms generated

**Step 3:** Multiply the whole value (“3” in the previous step) by the increment.

$$(3)(3,072) = 9,216$$

**Step 4:** Subtract Step 3 from Step 1.

$$11,856 - 9,216 = 2,640$$

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

$$2,640 > 614$$

One additional room generated.

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

**TABLE 1: WORKLOAD PARAMETER CALCULATION**

<b>311: GENERAL AND SPECIALTY SURGICAL CLINICS</b>				
<b>CLINICAL ENCOUNTERS / PROCEDURES</b>	<b>AVERAGE LENGTH OF CLINIC ENCOUNTER (minutes)</b>	<b>UTILIZATION RATE</b>	<b>ANNUAL WORKLOAD PER EXAM / PROCEDURE ROOM (*)</b>	<b>MINIMUM ANNUAL WORKLOAD TO GENERATE ONE ROOM (20%)</b>
General Exam Room Encounters	45	80%	2,048	410

(\*) 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 Input Data Statements:

## **SECTION 3: PROGRAM DATA REQUIRED**

**3.1. INPUT DATA STATEMENTS.** Input Data Statements are based on questions about Workload (W), Mission (M), Staffing (S) and Miscellaneous (Misc) information.

1. How many annual General and Specialty Surgical encounters are projected? (W)
2. Is the General and Specialty Surgical Clinics authorized to operate outside the standard 8-hour per day shift? (Misc)
  - a. Is the General and Specialty Surgical Clinics 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)
3. Is the General and Surgical Specialty Clinic authorized to operate outside the standard 240 days per year? (misc)
  - a. Is the General and Specialty Surgical Clinics authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)
4. Is the use of Screening Rooms for intake, vital signs, etc. authorized? (M)
5. How many Airborne Infection Isolation (AII) Exam Rooms, greater than one, are authorized by the MTFs ICRA? (Misc)
6. Is a Bariatric Patient Exam Room authorized? (M)
7. How many General and Specialty Surgical Clinics FTE positions are authorized? (S)
  - a. How many General and Specialty Surgical Clinics FTE positions are authorized to have a private office? (Misc)
  - b. How many General and Specialty Surgical Clinics FTE positions are authorized to have a shared office? (Misc)
  - c. How many General and Specialty Surgical Clinics FTE positions are authorized to have a cubicle? (Misc)
  - d. How many General and Specialty Surgical Clinics FTEs will work on peak shift? (Misc)
8. Is a Playroom in the Reception authorized? (Misc)
9. Is a Sub-Waiting in Staff and Administration authorized? (Misc)
10. Is Patient Records Storage in Staff and Administration authorized? (Misc)
11. Is a Conference Room for Staff and Administration authorized? (Misc)
12. Is a General and Specialty Surgical Clinics Graduate Medical Education program authorized? (M)
  - a. How many General and Specialty Surgical Clinics resident / student FTE positions are authorized? (S)

## **SECTION 4: SPACE PLANNING CRITERIA**

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 610: Common Areas.

### **4.1. FA1: EXAM ROOM CALCULATION.**

1. **Number of Exam Rooms (CALC1)** **0 NSF**  
Minimum one if the projected annual Exam Room encounters is between 410 and 2,048; provide an additional one for every increment of 2,048 projected annual Exam Room encounters greater than 2,048; the minimum workload to generate an Exam Room is 410. (Refer to Section 2)

### **4.2. FA2: RECEPTION.**

1. **Waiting (WRC01)** **120 NSF**  
Minimum NSF; provide an additional 60 NSF for every increment of four Exam Rooms of all types greater than four.
2. **Playroom (PLAY1)** **120 NSF**  
Provide one for General and Specialty Surgical Clinics if authorized.  
  
This space is provided to accommodate children's play activities, maybe an open or an enclosed area, and should be included within or adjacent to Waiting.
3. **Reception (RECP1)** **120 NSF**  
Minimum NSF; provide an additional 60 NSF for every increment of sixteen Exam Rooms of all types greater than sixteen.  
  
Minimum allocated NSF accommodates two FTEs.
4. **Kiosk, Patient Check-in (CLSC1)** **30 NSF**  
Minimum one; provide an additional one for every increment of sixteen Exam Rooms of all types greater than sixteen.
5. **Patient Education (CLSC3)** **120 NSF**  
Provide one for General and Specialty Surgical Clinics.

### **4.3. FA 3: GENERAL TREATMENT PATIENT AREA.**

1. **Screening (EXRG4)** **120 NSF**  
Minimum one; provide an additional one for every increment of eight Exam Rooms of all types greater than eight if Screening Rooms are authorized.

2. **Exam, General (EXRG1)** **120 NSF**  
Minimum one; provide additional Exam Rooms based on the total number of Calculated Exam Rooms (refer to FA 1, Room 1); deduct the Airborne Infection Isolation (AII) Exam, Bariatric Exam and Telehealth Exam rooms from the total number of workload driven Exam Rooms.

3. **Exam, Airborne Infection Isolation (AII) (EXRG6)** **180 NSF**  
Minimum one, Provide an additional one as authorized per the MTFs Infection Control Risk Assessment (ICRA).

The number, location and type of airborne infection isolation and protective environment rooms shall be determined by the ICRA, which shall be conducted during the early planning phase of a project. This room is part of the total number of workload driven exam rooms.

4. **Toilet, Airborne Infection Isolation (AII) Patient (TLTU1)** **60 NSF**  
Provide one for each Airborne Infection Isolation (AII) Exam Room.

5. **Exam, Bariatric (EXB01)** **150 NSF**  
Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics.

This room is part of the total number of workload driven exam rooms.

6. **Toilet, Bariatric Patient (TLTB1)** **75 NSF**  
Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics.

7. **Toilet, Patient (TLTU1)** **60 NSF**  
Minimum one; provide an additional one for every increment of eight General Exam Rooms greater than eight.

8. **Sub-Waiting, Pre-Procedure Patient (WRC03)** **60 NSF**  
Minimum NSF; provide an additional 30 NSF per each Multipurpose Treatment Room greater than two.

Patient must be monitored by the Nurse Station.

9. **Sub-Waiting, Post-Procedure Patient (WRC03)** **60 NSF**  
Minimum NSF; provide an additional 30 NSF per each Multipurpose Treatment Room greater than two.

Patient must be monitored by the Nurse Station.

10. **Procedure, Multipurpose (TRGS1)** **180 NSF**  
Minimum one; provide an additional one for every increment of sixteen Exam Rooms of all types greater than sixteen.
  
11. **Toilet, Patient Treatment (TLTU1)** **60 NSF**  
Minimum one, provide an additional one for every increment of eight Multipurpose Treatment Rooms greater than eight.
  
12. **Exam / Consult (EXR10)** **120 NSF**  
Minimum one; provide an additional one for every increment of sixteen Exam Rooms of all types greater than sixteen.
  
13. **Exam, Telehealth (EXTH1)** **120 NSF**  
Provide one for General and Specialty Surgical Clinics.  
  
This room is part of the total number of workload driven exam rooms. This room also supports the Photography function if Plastic Surgery Service is offered in the General and Specialty Medical Clinics.
  
14. **Cubicle, Patient Dressing (DR001)** **60 NSF**  
Minimum one, provide an additional one for every increment of two Treatment Rooms greater than two.
  
15. **Nurse Station (NSTA1)** **120 NSF**  
Provide one for the General Treatment Patient Area.  
  
The purpose of this Nurse Station is for the observation and monitoring of patients pre and post-procedure.

#### **4.4. FA 4: SUPPORT.**

1. **Medication Room (MEDP1)** **120 NSF**  
Provide one for General and Specialty Surgical Clinics.
  
2. **Utility Room, Clean (UCCL1)** **120 NSF**  
Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms and Exam Rooms of all types greater than eight.
  
3. **Utility Room, Soiled (USCL1)** **90 NSF**  
Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms and Exam Rooms of all types greater than eight.
  
4. **Storage, Stretcher (SRLW2)** **60 NSF**  
Provide one for General and Specialty Surgical Clinics.  
  
This space may also accommodate wheelchair storage.

- |    |  |                |
|----|--|----------------|
| 5. | <b>Storage, Equipment (SRSE1)</b><br>Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms and Exam Rooms of all types greater than eight. | <b>120 NSF</b> |
| 6. | <b>Alcove, Crash Cart (RCA01)</b><br>Provide one for General and Specialty Surgical Clinics.   | <b>30 NSF</b>  |

**4.5. FA 5: STAFF AND ADMINISTRATION.**

- |    |  |                |
|----|--|----------------|
| 1. | <b>Office, Department / Clinic Chief (OFA04)</b><br>Provide one for General and Specialty Surgical Clinics.  | <b>120 NSF</b> |
| 2. | <b>Sub-Waiting (WRC03)</b><br>Provide one for General and Specialty Surgical Clinics if authorized.  | <b>60 NSF</b>  |
| 3. | <b>Office, NCOIC / LCPO / LPO (OFA04)</b><br>Provide one for General and Specialty Surgical Clinics.   | <b>120 NSF</b> |
| 4. | <b>Team Collaboration Room (WRCH1)</b><br>Minimum one; provide an additional one for every increment of eight Exam Rooms of all types greater than eight.  | <b>120 NSF</b> |
| 5. | <b>Office, Private (OFA04)</b><br>Provide one per each General and Specialty Surgical Clinics FTE position authorized to have a private office.  | <b>120 NSF</b> |
| 6. | <b>Office, Shared (OFA05)</b><br>Provide one for every increment of two General and Specialty Surgical Clinics FTE positions authorized to have a shared office.   | <b>120 NSF</b> |
| 7. | <b>Cubicle (OFA03)</b><br>Provide one per each General and Specialty Surgical Clinics FTE position authorized to have a cubicle.<br><br>These cubicles may be collocated in a shared space or dispersed as required. | <b>60 NSF</b>  |
| 8. | <b>Storage, Patient Records (FILE1)</b><br>Provide one for General and Specialty Surgical Clinics if authorized.   | <b>120 NSF</b> |
| 9. | <b>Conference Room (CRA01)</b><br>Minimum NSF if a conference room for Staff and Administration is authorized; provide an additional 60 NSF if the total number of FTE positions authorized is greater than ten.     | <b>240 NSF</b> |

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.

10. **Copy / Office Supply (RPR01)** **120 NSF**  
Provide one for General and Specialty Surgical Clinics.
  
11. **Lounge, Staff (SL001)** **120 NSF**  
Minimum NSF, if the number of General and Specialty Surgical Clinics FTEs working on peak shift is ten; provide an additional 60 NSF for every increment of five FTEs working on peak shift greater than ten; maximum 360 NSF.
  
12. **Toilet, Staff (TLTU1)** **60 NSF**  
Minimum one provide an additional one for every increment of fifteen General and Specialty Surgical Clinics FTEs working on peak shift greater than fifteen.
  
13. **Lockers, Personal Property (LR001)** **30 NSF**  
Minimum NSF, provide an additional 30 NSF for every increment of four General and Specialty Surgical Clinics FTE positions not assigned a private office, shared office or cubicle greater than eight.

#### **4.6. FA 6: GME EDUCATION / TRAINING.**

1. **Office, Residency Program Director (OFA04)** **120 NSF**  
Provide one if a General and Specialty Surgical Clinics Graduate Medical Education program is authorized.
  
2. **Resident Collaboration Room (WKTM1)** **240 NSF**  
Minimum NSF; provide an additional 60 NSF per each Resident / Student FTE position authorized greater than two if a Graduate Medical Education program for General and Specialty Surgical Clinics is authorized.  
  
Minimum NSF accommodates 2 residents and a collaboration / reference area.
  
3. **Conference/Classroom (CRA01)** **240 NSF**  
Provide one if the total number of Resident / Student FTE positions is greater than five if a Graduate Medical Education program for General and Specialty Surgical Clinics is authorized.

## **SECTION 5: PLANNING AND DESIGN CONSIDERATIONS**

The following design considerations are intended to provide planners and designers with guidance on world-class and evidence-based design strategies for new healthcare facilities and renovation of existing ones. Please refer to the World Class Checklist (<https://facilities.health.mil/home/>). Also refer to the FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities by the Facility Guidelines Institute (FGI Guidelines) for additional information.

**5.1. NET-TO-DEPARTMENT GROSS FACTOR.** The net-to-department gross factor (NTDG) for General and Specialty Surgical Clinics is 1.40. 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 and interior partitions and other construction elements not defined by the net square foot area.

### **5.2. RECEPTION AREAS.**

- a. Where possible, centralized intake should be considered where multiple clinics are co-located.
- b. Consideration should be given to special needs of specific patient groups in a shared/general waiting area. For example, adolescent and geriatric patients may require different seating options and environments.
- c. The Playroom shall be constructed of surfaces and materials that are easy to clean and durable (nonporous and smooth).

### **5.3. PATIENT AREAS.**

- a. Consider placing high volume, quick turn encounters near the front of the clinical area.
- b. Consider efficiency of operations and a layout such that walking distances of the routes staff repeatedly take from consult room to the exam rooms, to the work areas (e.g. charting, supplies, medications), back to exam rooms are kept to a minimum.

### **5.4. SUPPORT AREAS.**

- a. Medication preparation areas should be enclosed to minimize distractions. A glass wall or window may be provided to permit observation of patients and clinic activities.

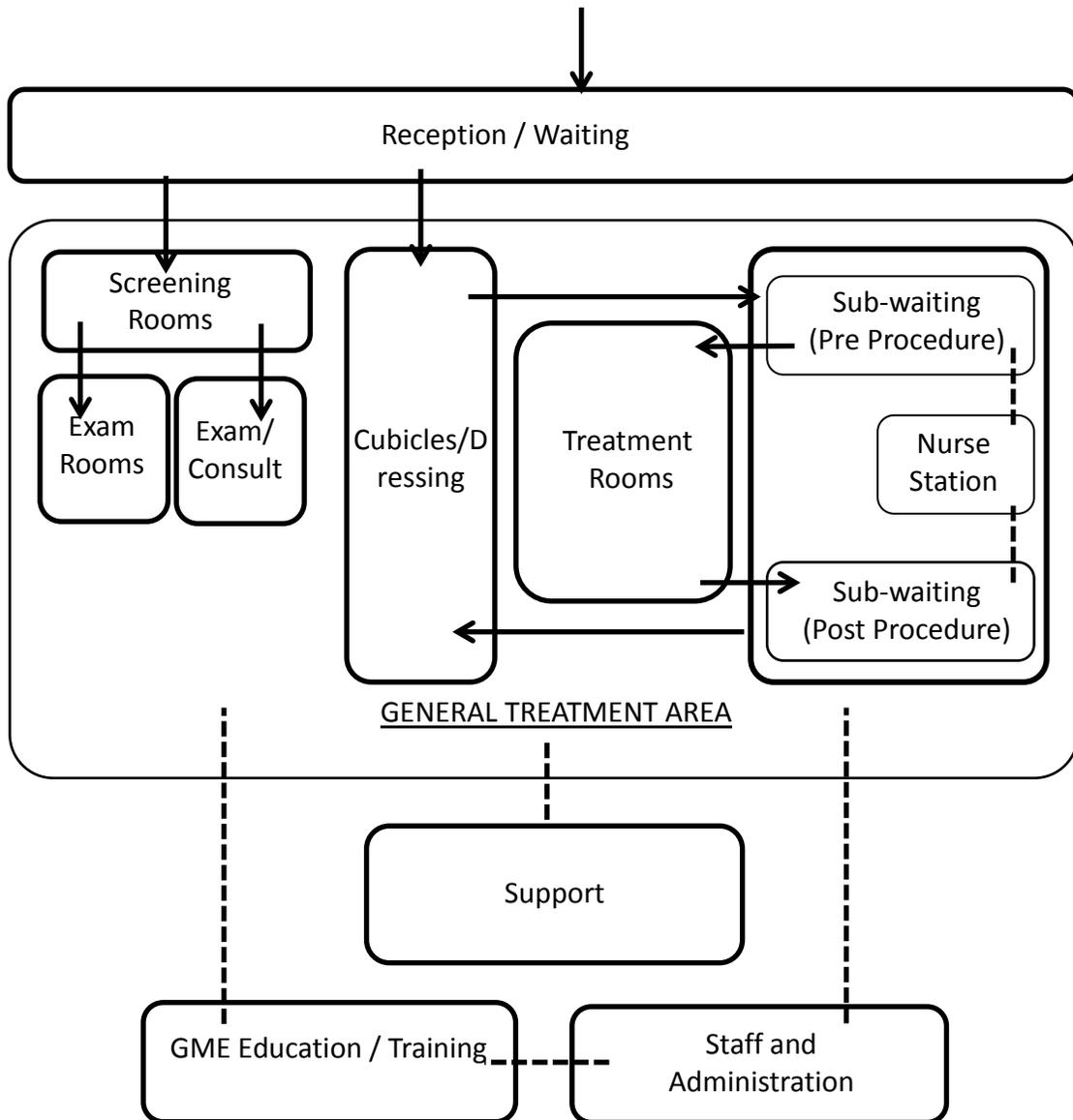
### **5.5. OTHER DESIGN CONSIDERATIONS.**

- a. Provide flexible, standardized and modular blocks of clinic space that include dedicated zones (e.g. intake/waiting, exam room, support core, administrative core, procedure and diagnostic core, etc.).

- b. Functional areas should be designed to provide flexibility in order to accommodate a variety of patient visit types and specialties. Standardized modules should be configured so that clinics can use available adjacent space as demand fluctuates from one clinic to the next.
- c. Where possible, clinic modules should include internal connecting corridors to allow circulation of staff, materials and sometimes patients in off-stage areas.
- d. Design for flexibility and adaptability to accommodate future expansion.
- e. Design space to foster effective team collaboration, especially important in innovative care delivery models, such as the patient-centered medical home model (PCMH). Central location of circulating corridors and visually open workstations will increase the quality and probability of unplanned interactions. Informal meeting spaces along hallways with flexibly arranged furniture and small niches with surfaces that allow stand-up work will encourage informal collaboration. Locating the team collaboration rooms and conference rooms close to individual spaces will promote problem solving.
- f. Where possible, locate clinics proximate to public parking and the main outpatient building entry to improve access and minimize travel distance.
- g. Consider convenient access to both the Outpatient Pharmacy and Lab and Patient Exam and Treatment areas as needed.
- h. Co-locate clinics and inpatient units with the same specialty when possible.

## SECTION 6: FUNCTIONAL DIAGRAM GENERAL & SPECIALTY SURGICAL CLINICS

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.



**LEGEND**

- > Patient Circulation
- - - - - Staff Circulation

**GENERAL and SPECIALTY SURGERY**

## **GLOSSARY**

### **G.1. DEFINITIONS.**

**Airborne Infection Isolation (AII) Room:** Formerly called negative pressure isolation room, an AII Room is a single-occupancy patient-care room used to isolate persons with certain suspected or confirmed infections. Examples are tuberculosis, measles, and chicken pox. Environmental factors are controlled in AII Rooms to minimize the transmission of infectious agents that are usually spread from person-to-person by droplet nuclei associated with coughing or aerosolization of contaminated fluids.

**Automated External Defibrillator (AED):** An AED or automated external defibrillator is a computerized medical device which can check a person's heart rhythm. It can recognize a rhythm that requires a shock, and it can advise the rescuer when a shock is needed. AEDs are typically placed in targeted public areas such as outpatient clinics, doctor's offices, office complexes, sports arenas, gated communities, shopping malls, and many others.

**Authorized:** This document uses the term "authorized" to indicate that, during a project's space plan development, a planner shall seek approval from the appropriate official in the chain of command to activate certain spaces or certain groups of spaces. Typical components that may require authorization are certain programs or services that activate Functional Areas (e.g., GME); office spaces (e.g., FTE position); specialized rooms (e.g., Hybrid OR) or other spaces (e.g., On-Call Room). Typically, Mission, Staffing and Miscellaneous Input Data Statements require authorization, while directly and indirectly workload driven rooms / spaces do not.

**Average Length of Encounter (ALOE):** In these space criteria, an encounter is defined as a face-to-face professional contact between a patient and a provider vested with responsibility for diagnosing, evaluating, and treating the patient's condition. The Length of Encounter is the time between set-up and clean-up of the Exam Room. The Average Length of Encounter is used to capture variations in Length of Encounter among similar clinical encounters that will take place in an Exam Room.

**Bariatrics:** 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.

**Bariatric Patient Exam Room:** This room is sized and equipped to accommodate the bariatric patient and their family member(s). It is sized for easier access. Minimum door width should be 4 feet to accommodate bariatric wheelchairs, and a minimum of a 6 feet turning radius should be provided. When provided, these rooms should be located towards the front (entrance) of the clinical suite.

**Bariatric Patient Toilet:** This space is the bathroom for the bariatric patient. Planner should refer to the FGI Guidelines for the preferred bariatric design solutions for this room. This bathroom

should be located proximate to the Bariatric Patient Exam / Treatment Room; however, it is not solely dedicated to the bariatric patient. It may be used by other patients for added flexibility.

Clean Utility Room: This room is used for the storage and holding of clean and sterile supplies. 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.

Consult Room: This is a consultation room for family members to meet with physicians or other providers privately and is ideally located near the waiting room.

Cubicle: A cubicle is a partially enclosed workspace, separated from neighboring workspaces by partitions. Managers and other staff with no supervisory responsibilities as well as part-time, seasonal, and job-sharing staff may qualify for a cubicle.

Encounter: A contact between an eligible beneficiary and a credentialed provider. An encounter may consist of examination, diagnosis, treatment, evaluation, consultation or counseling or a combination of the above. The encounter may take place in a clinic, by telephone, computer, or in other treatment or observation areas. Encounter volume used to generate exam room requirements should not include telephone encounters.

Exam/Consult Room: This room is intended to support one on one consults with a staff member and patient; it is outfitted with comfortable chairs, but it is also equipped with a sink or capped plumbing to facilitate easy conversion to an exam room. This room is located in the patient care zone, proximate to the exam rooms and not in the public zone or waiting room.

Full-Time Equivalent (FTE): 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. The FTE measure may also be used for specific workload staffing parameters such as a clinical FTE; the amount of time assigned to an employee providing clinical care. For example, a 0.5 clinical FTE for a healthcare worker would indicate that the healthcare worker provides clinical care half of the time per a 40-hour work week.

Functional Area: The grouping of rooms and spaces based on their function within a clinical service. Typical Functional Areas are Reception, Patient Area, Support, Staff and Administration, and Education.

Graduate Medical Education (GME): 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.

Hours of Operation per Day: These are the hours of operation within a department. For example, a hospital nursing unit and an emergency department will operate 24 hours per day; whereas a clinic may be operational 8 hours or more, depending on the clinic.

Infection Control Risk Assessment (ICRA): 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.

Input Data Statement: 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 workload or staffing related, based on projections for the facility.

Net-to-Department Gross Factor (NTDG): A parameter used to calculate the Department Gross Square Foot (DGSF) area based on the programmed Net Square Foot (NSF) area. Refer to DoD Chapter 130 for the NTDG factors for all Space Planning Criteria chapters.

Office, Private: A single occupancy office provided for confidential communication.

Office, Shared: An office that accommodates two workstations.

Operating Days per Year: The number of days per calendar year a facility is operational for patient care (refer to Section 3).

Outpatient Clinic: A clinic providing outpatient services in both freestanding community-based facilities, as well as ambulatory clinics in or directly adjacent to hospital-based services.

Personal Property Lockers: 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.

Photography Room: Dedicated studio for taking preoperative and postoperative photos for Plastic Surgery patients.

Picture Archiving and Communication System (PACS) Viewing Room: A digital radiology reading room that consists of workstations for interpretation.

Playroom: This space is provided to accommodate children's play activities; it shall be outfitted with appropriate furniture and accessories and included within the General Waiting.

Program for Design (PFD): A listing of all of the rooms / spaces generated based on answers to the Input Data Statements (see Section 3) and the space planning criteria outlined in this document (Section 4) in SEPS. The list is organized by Functional Area and includes the Room Quantity, Room Code, Room Name and generated Net Square Feet (NSF), Construction Phase and Construction Type.

Provider: A medical professional, such as a physician, nurse practitioner, or physician assistant, who examines, diagnoses, treats, prescribes medications, and manages the care of patients within the scope of their practice as established by the governing body of a healthcare organization.

Screening Room: After patients are checked in at reception they may proceed to the screening room for weights and vital signs prior to going to an exam room. However, activities such as screening, medical history, vitals, height and weight can also be conducted in the Exam Room. The inclusion of the Screening Room will depend upon the individual facility's model of care. Consideration should be given to models that facilitate gaining healthcare delivery efficiencies and an enhanced patient experience.

Space and Equipment Planning System (SEPS): 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 approved Space Planning Criteria, the chapter and specific project-related Mission, Workload and Staffing information entered in response to the Program Data Required - Input Data Statements (IDSs).

Soiled Utility Room: 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 to staff.

Sub-Waiting, Pre-Procedure: This is space for patient waiting in a chair prior to proceeding to the treatment room. It is similar to pre-procedure holding.

Sub-Waiting, Post-Procedure: Depending on the treatment performed, a patient may need extra time to sit up in a chair post-treatment (or procedure) prior to going home. This space is allocated for that purpose, as an option for short-term recovery.

Team Collaboration Room: 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.

Telehealth: 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.

Workload: The anticipated number of encounters or procedures processed through a clinic. The projected General and Specialty Surgical Clinic workload for a given location determines the number of Exam and Treatment Rooms in the Program for Design.