CHAPTER 311: GENERAL AND SPECIALTY SURGICAL CLINICS

1 PURPOSE AND SCOPE

This chapter outlines space planning criteria for services and programs provided in a Dental Clinic located within the Military Health System (MHS).Outpatient clinics include both 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'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. 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. They are wall-mounted, highly visible, and accessible to everyone. The Americans with Disabilities Act requires that objects not protrude more than 4 inches into foot traffic areas of open aisles and walkways (hallways) unless the object's bottom edge is no higher than 27 inches from the ground.

B. 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.

C. 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. FGI Guidelines for Healthcare Facilities provides guidelines for the design of bariatric care units.

D. 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.

E. Bariatric Patient Toilet: This space is the bathroom for the bariatric patient. Preferred bariatric design solutions for this space include oversized toilet seats and floor-mounted toilets with weight capacity of at least 1,000-lbs. Toilet seat height of 17 to 19 inches and reinforced grab bars that hold at least 750-lbs is preferred to aid the patient to raise. Toilet centered 24 inches from a wall allows space for caregivers on each side to assist. Space to provide a minimum turning radius of 6' in order to accommodate larger wheelchairs is preferred. Sink placement, further away from the toilet, is recommended to prevent patients using it for lift support.

F. Clean Utility Room: 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.

G. 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.

H. 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.

I. Functional Area: 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.

J. 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.

K. 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.

L. 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.

M. Negative Pressure Isolation Room: 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.

N. Net-to-Department Gross Factor (NTDG): This number, when multiplied by the programmed net square foot (NSF) area, determines the departmental gross square feet (DGSF).

O. Office:

1. 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.
2. 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. Cubicle: 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.

P. 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.

Q. 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.

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

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

T. Program for Design (PFD): 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.

U. 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.

V. 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.

W. 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.

X. 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 from the main corridor.

Y. 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.

Z. 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.

AA. 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.

BB. 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.

CC. 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.

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 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 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 Exam Rooms in the Functional Area 3: 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 4: Input Data Questions and Section 5: Space Planning Criteria have been implemented and tested in SEPS II.

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

Formula:

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

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: 80%

Calculation: Annual Workload for one Exam Room:

$$\frac{\text{240 Operating Days per Year x 8 Hours of Operation per Day}}{\text{45 Minutes / 60 Minutes}} \text{ X 0.80 = 2,048}$$

Minimum Annual Workload to generate an Exam Room: 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.

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 x 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 x 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 x 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 x 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 x 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 x 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 is greater than 614
One additional room generated.
Total number of rooms generated by 18,000 annual encounters: 6

TABLE 1: WORKLOAD PARAMETER CALCULATION

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CLINICAL ENCOUNTERS / PROCEDURES	**AVERAGE LENGTH OF CLINIC ENCOUNTER (minutes)**	**UTILIZATION RATE**	**ANNUAL WORKLOAD PER EXAM / PROCEDURE ROOM (*)**	**MINIMUM ANNUAL WORKLOAD TO GENERATE ONE ROOM (20%)**
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 following Input Data Statements:

(1) Are General and Specialty Surgical Clinics authorized to operate outside the standard 8-hour per day shift? (Misc); if not:

(2) Are General and Specialty Surgical Clinics 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) Are General and Specialty Surgical Clinics authorized to operate outside the standard 240 days per year? (Misc); if not:

(4) Are General and Specialty Surgical Clinics 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)

A. Mission Input Data Statements
1. Is use of Screening Rooms for intake, vital signs, etc authorized? (M)
2. Is a Bariatric Patient Exam Room authorized? (M)
3. 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)

B. Workload Input Data Statements
1. How many annual General Exam Room encounters are projected? (W)

C. Staffing Input Data Statements
1. How many General and Specialty Surgical Clinics provider FTE positions are authorized? (S)
   a. How many General and Specialty Surgical Clinics provider FTE positions are authorized to have a private office? (Misc)
   b. How many General and Specialty Surgical Clinics provider FTE positions are authorized to have a shared office? (Misc)
   c. How many General and Specialty Surgical Clinics provider FTE positions are authorized to have a cubicle? (Misc)
2. How many General and Specialty Surgical Clinics non-provider FTE positions are authorized? (S)
   a. How many General and Specialty Surgical Clinics non-provider FTE positions are authorized to have a private office? (Misc)
   b. How many General and Specialty Surgical Clinics non-provider FTE positions are authorized to have a shared office? (Misc)
   c. How many General and Specialty Surgical Clinics non-provider FTE positions are authorized to have a cubicle? (Misc)

D. Miscellaneous Input Data Statements
1. Is a Playroom in the Reception Area authorized? (Misc)
2. Is a Consult Room in the Reception Area authorized? (Misc)
3. Is a Plastic Surgery Service for the General and Specialty Surgery Clinics authorized? (M) (if yes, a Photography Room will be provided)
4. Is an Executive Assistant / Clinic Manager FTE position authorized? (Misc)
5. Is an Associate Chief FTE position authorized? (Misc)
6. Is a Sub-Waiting in the Staff and Administrative Area authorized? (Misc)
7. Is a Patient Records Storage Room in the Staff and Administrative Area authorized? (Misc)
8. How many General and Specialty Surgical Clinics FTEs will work on peak shift? (Misc)

9. (1) Is the General and Specialty Surgical Clinics authorized to operate outside the standard 8-hour per day shift? (Misc)
    a. (2) 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)
10. (3) Is the General and Specialty Surgical Clinics authorized to operate outside the standard 240 days per year? (Misc)
    a. (4) 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)

5 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 6.1: Common Areas.

A. FA 1: Exam Room Calculation:

1. **Number of Exam Rooms (CALC1) ..... 0 NSF**
   Minimum one if the projected annual General Exam Room encounters is between 410 and 2,048; provide an additional one for every increment of 2,048 projected annual General Exam Room greater than 2,048; the minimum workload to generate an additional Exam Room is 410. (Refer to Section 3)

B. FA 2: Reception Area:

1. **Waiting (WRC01) ..... 120 NSF**
   Minimum NSF; provide an additional 60 NSF for every increment of four General, Isolation and Bariatric Exam Rooms greater than four.

   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 General and Specialty Surgical Clinics if authorized.

   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 General Waiting.

3. **Reception (RECP1) ..... 120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of twelve General, Isolation and Bariatric Exam Rooms, and Multipurpose Treatment Rooms greater than twelve.

   Allocated NSF accommodates up to four receptionists and circulation.

4. **Kiosk, Patient Check-in (CLSC1) ..... 30 NSF**
   Minimum one; provide an additional 30 NSF for every increment of twelve General, Isolation and Bariatric Exam Rooms, and Multipurpose Treatment Rooms greater than twelve.

5. **Patient Education (CLSC3).....120 NSF**
   Provide one for General and Specialty Surgical Clinics.

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

6. **Consult Room (OFDC2).....120 NSF**
   Provide one for General and Specialty Surgical Clinics if authorized.

7. **Alcove, Wheelchair (SRLW1).....60 NSF**
   Provide one for General and Specialty Surgical Clinics.

C. <u>FA 3: General Treatment Patient Area</u>:

1. **Screening Room (EXRG4).....120 NSF**
   Minimum one; provide an additional one for every increment of eight General, Isolation and Bariatric Exam Rooms greater than eight if Screening Rooms are authorized.

   Allocated NSF to accommodate both adult and pediatric patients.

2. **Exam Room, General (EXRG1).....120 NSF**
   Calculate the number of General Exam Rooms (refer to FA 1, Room 1). Minimum one; provide additional ones per each General Exam Room calculated; deduct the Bariatric and Negative Pressure Isolation Exam Rooms.

3. **Exam Room,**
   Negative Pressure Isolation (EXRG6).....120 NSF
   Provide one for General and Specialty Surgical Clinics.

   The number, location and type of airborne infection isolation and protective environment rooms shall be determined by the infection control risk assessment (ICRA), which shall be conducted during the early planning phase of a project.

4. **Toilet, Isolation Patient (TLTU1).....60 NSF**
   Provide one for General and Specialty Surgical Clinics.

5. **Exam Room, Bariatric (EXB01).....120 NSF**
   Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics and if the total number of calculated General Exam Rooms is three or greater.

6. **Toilet, Bariatric Patient (TLTB1).....60 NSF**
   Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics.

7. **Toilet, Exam Room 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.

   Allocated NSF provides space for patients waiting in a chair prior to proceeding to the procedure room; it must be monitored by the Nurse Station. Allocated NSF accommodates three standard seats at 18 NSF and circulation area.

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

   Allocated NSF provides space for patient waiting in a chair post-procedure prior to going home; patient must be monitored by the Nurse Station. Allocated NSF accommodates three standard seats at 18 NSF and circulation area.

10. **Treatment Room, Multipurpose (TRGS1)..... 180 NSF**
    Minimum one; provide an additional one for every increment of six General, Isolation and Bariatric Exam Rooms greater than six.

11. **Toilet, Treatment Room Patient (TLTU1)..... 60 NSF**
    Minimum one, provide an additional one for every increment of eight Multipurpose Treatment Rooms greater than eight.

12. **Exam Room / Consult (EXR10) ..... 120 NSF**
    Minimum one; provide an additional one for every increment of sixteen General, Isolation and Bariatric Exam Rooms greater than sixteen.

13. **Telehealth Room (WKTM2) ..... 120 NSF**
    Provide one for General and Specialty Surgical Clinics.

14. **Photography Room (MIPF1)..... 120 NSF**
    Provide one if a Plastic Surgery Service for the General and Specialty Surgical Clinics is authorized.

    Allocated space accommodates dedicated computer, camera, camera stand, stool, backdrops (e.g. fabric drapes), lighting equipment (e.g. strobes/flash system positioned on either side of camera). Ideally locate adjacent to exam room to preserve patient privacy and modesty.

15. **Cubicle, Patient Dressing (DR001) ..... 60 NSF**
    Minimum one, provide an additional one for every increment of two Treatment Rooms greater than two.

    Allocated NSF provides space for a seat or bench, mirror, locker for securing valuables and provisions for hanging patients' clothing. Cubicles should be provided convenient to the waiting areas and procedure rooms and may be grouped together.

16. **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.

D. <u>FA 4: Clinic Support Area</u>:

1. **Medication Room (MEDP1) ..... 120 NSF**
   Provide one for General and Specialty Surgical Clinics.

   Allocated NSF provides space for a work counter, sink, refrigerator and locked storage for biological or drugs. Accommodates space for automated medication dispensing machine.

2. **Utility Room, Clean (UCCL1) .....120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.

   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.

3. **Utility Room, Soiled (USCL1) .....120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.

   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.

4. **Storage, Stretcher (SRLW1) .....60 NSF**
   Provide one for General and Specialty Surgical Clinics.

5. **Storage, Equipment (SRSE1) .....120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.

6. **Alcove, AED (RCA01).....30 NSF**
   Provide one for General and Specialty Surgical Clinics.

E. <u>FA 5: Staff and Administrative Area</u>:

1. **Office, Department / Clinic Chief (OFA04).....120 NSF**
   Provide one for General and Specialty Surgical Clinics.

2. **Office, Executive Assistant / Clinic Manager (OFA04).....120 NSF**
   Provide one for General and Specialty Surgical Clinics if authorized.

3. **Office, Associate Chief (OFA04) .....120 NSF**
   Provide one for General and Specialty Surgical Clinics if authorized.

4. **Sub-Waiting (WRC03) .....60 NSF**
   Provide one for General and Specialty Surgical Clinics if authorized.

   Allocated NSF provides space for minimum of two seats plus circulation.

5. **Office, NCOIC / LCPO / LPO (OFA04).....120 NSF**
   Provide one for General and Specialty Surgical Clinics.

6. **Team Collaboration Room (WRCH1) .....120 NSF**
   Minimum one; provide an additional one for every increment of eight Multipurpose Treatment Rooms, General, Negative Pressure Isolation and Bariatric Patient Exam Rooms greater than eight.

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

7. **Office, Private (OFA04) .....120 NSF**
   Provide one per each General and Specialty Surgical Clinics provider and non-

provider FTE position authorized to have a private office.

8. **Office, Shared (OFA05)..... 120 NSF**
   Provide one for every increment of two General and Specialty Surgical Clinics provider and non-provider FTE positions authorized to have a shared office.

9. **Cubicle (OFA03)..... 60 NSF**
   Provide one per each General and Specialty Surgical Clinics provider and non-provider FTE position authorized to have a cubicle.

   These cubicles may be collocated in a shared space or dispersed as required.

10. **Storage, Patient Records (MRS01) ..... 120 NSF**
    Provide one for General and Specialty Surgical Clinics if authorized.

    The Military Health System is moving towards an integrated electronic medical record. If required, space for paper medical records for patients will be planned.

11. **Conference Room (CRA01)..... 240 NSF**
    Minimum NSF; provide an additional 60 NSF if the total number of FTE positions authorized is greater than ten.

    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.

12. **Copier (RPR01) ..... 120 NSF**
    Provide one for General and Specialty Surgical Clinics.

    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.

13. **Storage, Office Supplies (SRS01)..... 60 NSF**
    Provide one for General and Specialty Surgical Clinics.

    Allocated NSF provides space for office supplies, patient forms and literature.

14. **Lounge, Staff (SL001)..... 120 NSF**
    Minimum NSF, provide an additional 60 NSF for every increment of five FTEs working on peak shift greater than ten; maximum 360 NSF.

15. **Lockers, Personal Property (LR001) ..... 30 NSF**
    Minimum NSF, provide an additional 3 NSF per each FTE not assigned a private office, shared office or cubicle greater than ten.

F. <u>FA 6: GME Education / Training Area</u>:

1. **Office, Residency Program Director (OFA04)..... 120 NSF**
   Provide one if a General and Specialty Surgical Clinics Graduate Medical Education program is authorized.

2. **Office, Residency Program Coordinator (OFA04) ..... 120 NSF**
   Provide one if a General and Specialty Surgical Clinics Graduate Medical Education program is authorized.

3. **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.

This room should 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.

4. **Classroom / Conference Room (CLR01) ..... 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.

   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 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* (https://facilities.health.mil/home/). Also refer to Section 1.2 – 6, Design Considerations and Requirements of the latest version of *Guidelines for Design and Construction of Health Care Facilities of the Facility Guidelines Institute (FGI).*

A. Net-to-Department Gross Factor

1. The net-to-department gross factor (NTDG) for General and Specialty Surgical Clinics is **1.35** 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.

B. Reception Areas

1. Where possible, centralized intake should be considered where multiple clinics are co-located.
2. Consider designing clinic areas such that walking distances from intake to exam are kept to a minimum.
3. Visual and auditory privacy is required at intake, vitals collection, and scheduling activities.
4. 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.
5. The Playroom shall be constructed of surfaces and materials that are easy to clean and durable (nonporous and smooth).

C. Patient Areas

1. Exam rooms should be designed with dedicated patient, provider, and family zones where appropriate.
2. Consider placing high volume, quick turn encounters near the front of the clinical area.
3. Provide same-handed patient care and treatment rooms where appropriate.
4. Complete visual privacy for patients in examination, treatment and procedure areas is a critical design consideration.
5. Control of sound transmission between examination, treatment and procedure rooms is a critical design consideration.
6. Consider adopting the same NSF for rooms with similar functions, such as treatment and exam rooms, to achieve standardization.

7. Consider sizing rooms such that conversion from one function to another, like a consult room to exam room, can be achieved more readily.
8. Provisions for bariatric patients should be included where applicable.
9. 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.

D. **Support Areas**

1. 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.

E. **Other Design Considerations**

1. 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.)
2. 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.
3. Where possible, clinic modules should include internal connecting corridors to allow circulation of staff, materials and sometimes patients in off-stage areas.
4. Design for flexibility and adaptability to accommodate future expansion.
5. Clearly define patient flows and facilitate wayfinding.
6. 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.
7. Create separate paths of travel where possible between patients and staff (“on stage” and “off stage”) to support privacy, safety and patient/staff satisfaction.
8. Consider physical layouts and design features which minimize institutional and maximize non-institutional aspects in order to provide a more therapeutic healing environment that promotes quicker recovery.
9. Create welcoming environments for patients and families by reducing environmental stressors. Daylighting, window views of nature, gardens, indoor plants, and nature photography may alleviate patient anxiety, and provide positive distractions in waiting areas and treatment rooms.
10. Where possible, locate clinics proximate to public parking and the main outpatient building entry to improve access and minimize travel distance.
11. Consider convenient access to both the Outpatient Pharmacy and Lab and Diagnostic and Treatment services as needed.
12. Co-locate clinics and inpatient units with the same specialty when possible.

7 FUNCTIONAL RELATIONSHIPS

Relationship of DoD 311: General and Specialty Surgical Clinics to services listed below:

TABLE 2: FUNCTIONAL RELATIONSHIP MATRIX

Services	Relationship	Reasons
Outpatient Surgery	1, 2, 3	A, C, G, H, I
Radiology	1, 2, 3	A, G, H, I
Outpatient Laboratory	3	G, H, I
Outpatient Pharmacy	3	H, I

Legend:

Relationship:

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

Reasons:

(Use as many as appropriate)

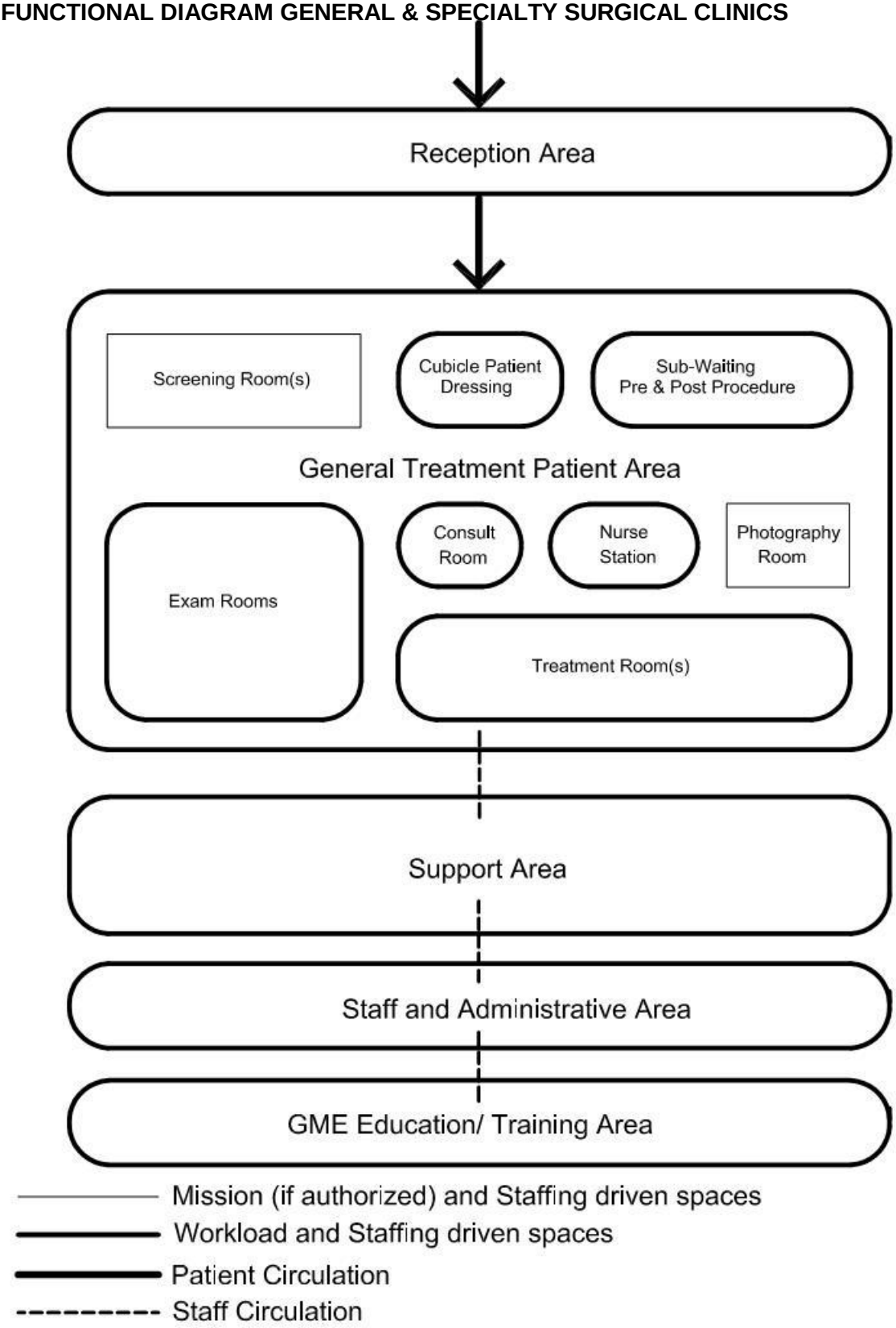
A. Common use of resources
B. Accessibility of supplies
C. Urgency of contact
D. Noise or vibration
E. Presence of odors or fumes
F. Contamination hazard
G. Sequence of work
H. Patient's convenience
I. Frequent contact
J. Need for security
K. Others (specify)

8 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)

8 FUNCTIONAL DIAGRAM GENERAL & SPECIALTY SURGICAL CLINICS



9 Appendix A: SPACE PLANNING CRITERIA SUMMARY

FA 1:Exam Room Calculation:

Room Name	Room Code	NSF	Space Criteria
Number of Exam Rooms	CALC1	0	Minimum one; provide an additional one for every increment of 2,048 projected annual General Exam Room encounters greater than 2,048; the minimum workload to generate a room is 410. (Refer to Table 1)

FA 2: Reception Area:

Room Name	Room Code	NSF	Space Criteria
Waiting	WRC01	120	Minimum NSF; provide an additional 60 NSF for every increment of four General, Isolation and Bariatric Exam Rooms greater than four.
Playroom	PLAY1	120	Provide one for General and Specialty Surgical Clinics if authorized.
Reception	RECP1	120	Minimum NSF; provide an additional 30 NSF for every increment of twelve General, Isolation and Bariatric Exam Rooms, and Multipurpose Treatment Rooms greater than twelve.
Kiosk, Patient Check-in	CLSC1	30	Minimum one; provide an additional 30 NSF for every increment of twelve General, Isolation and Bariatric Exam Rooms, and Multipurpose Treatment Rooms greater than twelve.
Patient Education	CLSC3	120	Provide one for General and Specialty Surgical Clinics.
Consult Room	OFDC2	120	Provide one for General and Specialty Surgical Clinics if authorized.
Alcove, Wheelchair	SRLW1	60	Provide one for General and Specialty Surgical Clinics.

FA3: General Treatment Patient Area:

Room Name	Room Code	NSF	Space Criteria
Screening Room	EXRG4	120	Minimum one; provide an additional one for every increment of eight General, Isolation and Bariatric Exam Rooms greater than eight if Screening Rooms are authorized.
Exam Room, General	EXRG1	120	Calculate the number of General Exam Rooms (refer to FA 1, Room 1). Minimum one; provide additional ones per each General Exam Room calculated; deduct the Bariatric and Negative Pressure Isolation Exam Rooms. (Refer to Table 1)
Exam Room, Negative Pressure Isolation	EXRG6	120	Provide one for General and Specialty Surgical Clinics.
Toilet, Isolation Patient	TLTU1	60	Provide one for General and Specialty Surgical Clinics.
Exam Room, Bariatric	EXB01	120	Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics and if the total number of calculated General Exam Rooms is three or greater.
Toilet, Bariatric Patient	TLTB1	60	Provide one if a Bariatric Patient Exam Room is authorized for General and Specialty Surgical Clinics.
Toilet, Exam Room Patient	TLTU1	60	Minimum one; provide an additional one for every increment of eight General Exam Rooms greater than eight.
Sub-Waiting, Pre-Procedure Patient	WRC03	60	Minimum NSF; provide an additional 30 NSF per each Multipurpose Treatment Room greater than two.
Sub-Waiting, Post-Procedure Patient	WRC03	60	Minimum NSF; provide an additional 30 NSF per each Multipurpose Treatment Room greater than two.

Treatment Room, Multipurpose	TRGS1	180	Minimum one; provide an additional one for every increment of six General, Isolation and Bariatric Exam Rooms greater than six.
Toilet, Treatment Room Patient	TLTU1	60	Minimum one, provide an additional one for every increment of eight Multipurpose Treatment Rooms greater than eight.
Exam Room / Consult	EXR10	120	Minimum one; provide an additional one for every increment of sixteen General, Isolation and Bariatric Exam Rooms greater than sixteen.
Telehealth Room	WKTM2	120	Provide one for General and Specialty Surgical Clinics.
Photography Room	MIPF1	120	Provide one if a Plastic Surgery Service for the General and Specialty Surgical Clinics is authorized.
Cubicle, Patient Dressing	DR001	60	Minimum one, provide an additional one for every increment of two Treatment Rooms greater than two.
Nurse Station	NSTA1	120	Provide one for the General Treatment Patient Area.

FA4: Clinic Support Area:

Room Name	Room Code	NSF	Space Criteria
Medication Room	MEDP1	120	Provide one for General and Specialty Surgical Clinics.
Utility Room, Clean	UCCL1	120	Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.
Utility Room, Soiled	USCL1	120	Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.
Storage, Stretcher	SRLW1	60	Provide one for General and Specialty Surgical Clinics.

Storage, Equipment	SRSE1	120	Minimum NSF; provide an additional 30 NSF for every increment of eight Multipurpose Treatment Rooms, General, Isolation and Bariatric Exam Rooms greater than eight.
Alcove, AED	RCA01	30	Provide one for General and Specialty Surgical Clinics.

FA5: Staff and Administrative Area:

Room Name	Room Code	NSF	Space Criteria
Office, Department / Clinic Chief	OFA04	120	Provide one for General and Specialty Surgical Clinics.
Office, Executive Assistant / Clinic Manager	OFA04	120	Provide one for General and Specialty Surgical Clinics if authorized.
Office, Associate Chief	OFA04	120	Provide one for General and Specialty Surgical Clinics if authorized.
Sub-Waiting	WRC03	60	Provide one for General and Specialty Surgical Clinics if authorized.
Office, NCOIC / LCPO / LPO	OFA04	120	Provide one for General and Specialty Surgical Clinics.
Team Collaboration Room	WRCH1	120	Minimum one; provide an additional one for every increment of eight Multipurpose Treatment Rooms, General, Negative Pressure Isolation and Bariatric Patient Exam Rooms greater than eight.
Office, Private	OFA04	120	Provide one per each General and Specialty Surgical Clinics provider and non-provider FTE position authorized to have a private office.
Office, Shared	OFA05	120	Provide one for every increment of two General and Specialty Surgical Clinics provider and non-provider FTE positions authorized to have a shared office.
Cubicle	OFA03	60	Provide one per each General and Specialty Surgical Clinics provider and non-provider FTE position authorized to have a cubicle.

Storage, Patient Records	MRS01	120	Provide one for General and Specialty Surgical Clinics if authorized.
Conference Room	CRA01	240	Minimum NSF; provide an additional 60 NSF if the total number of FTE positions authorized is greater than ten.
Copier	RPR01	120	Provide one for General and Specialty Surgical Clinics.
Storage, Office Supplies	SRS01	60	Provide one for General and Specialty Surgical Clinics.
Lounge, Staff	SL001	120	Minimum NSF, provide an additional 60 NSF for every increment of five FTEs working on peak shift greater than ten; maximum 360 NSF.
Lockers, Personal Property	LR001	30	Minimum NSF, provide an additional 3 NSF per each FTE not assigned a private office, shared office or cubicle greater than ten.

FA6: GME Education / Training Area:

Room Name	Room Code	NSF	Space Criteria
Office, Residency Program Director	OFA04	120	Provide one if a General and Specialty Surgical Clinics Graduate Medical Education program is authorized.
Office, Residency Program Coordinator	OFA04	120	Provide one if a General and Specialty Surgical Clinics Graduate Medical Education program is authorized.
Resident Collaboration Room	WKTM1	240	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.
Classroom / Conference Room	CLR01	240	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.