DoD Space Planning Criteria

Chapter 312: Orthopedics, Podiatry, Physical Medicine & Rehabilitation, Chiropractic and Sports Medicine
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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.

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SECTION 1: PURPOSE AND SCOPE

1.1. PURPOSE AND SCOPE This chapter outlines space planning criteria for services and programs provided in outpatient Orthopedics, Podiatry, Physical Medicine & Rehabilitation, Chiropractic and Sports Medicine 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.

Orthopedic and podiatry services are assumed to be combined into one department. It is assumed in this chapter that any orthopedic procedures requiring general anesthesia services will be consolidated in the Operating Rooms (ORs) of a Hospital.

Some facilities with an Orthopedics, Podiatry Clinic may not have an in-house Orthotics Laboratory. For those that do, this chapter provides a functional area with space criteria for the Orthotics Laboratory (i.e., Brace Shop).

Physical Medicine and Rehabilitation (PM&R) is a service that provides support to patients with musculoskeletal and neurological disorders. Physiatrists can offer electro-diagnostic studies; comprehensive treatment plans that involve physical and occupational therapy, medications, and injections; and they can prescribe and evaluate patients for medical equipment, orthotics, and braces. Thus, this chapter provides a functional area with space criteria for PM&R that will provide support to this clinic.

There is one functional area within this chapter that can be utilized by the planner to create the Chiropractic Clinic. Of those Military Treatment Facilities authorized to provide chiropractic care, it is understood that Chiropractic Services may be provided in conjunction with Physical Therapy, Occupational Therapy, Rehabilitation and/ or Orthopedics. It is important for the planner to collaborate with these services to determine the location and needs of Chiropractic Services.

U.S. military physicians are increasingly turning to sports medicine to treat the injuries Soldiers sustain on the battlefield and in basic training. Every Military Treatment Facility will practice Sports Medicine differently. It may be a standalone center or clinic, or it can consist of a few rooms that are part of the Physical Therapy or Orthopedics Clinic. The functional areas and spaces provided within this chapter that pertain to the Sports Medicine Clinic are comprehensive. Not all spaces will be required; therefore, careful planning and coordination must take place. Additionally, it is important to understand that spaces for aquatic therapy related to Physical Therapy and Sports Medicine shall not be duplicated in a medical facility.

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 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. 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 Orthopedics, Podiatry, Chiropractic and Sports Medicine Clinic 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, Procedure, Treatment and Testing Rooms in Functional Area 2: Orthopedics and Podiatry, Functional Area 4: Physical Medicine and Rehabilitation (PM&R) Patient Area, Functional Area 5: Chiropractic Patient Area, and Functional Area 10: Sports Medicine Patient Area is derived from workload projections via the workload Input Data Statements as outlined below. Most of the remaining rooms in these functional areas as well as the Clinic Support 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 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:

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

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.

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

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 one" condition.

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

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 one" condition.

$$18{,}000 - (6{,}144)((3{,}072)(2)) = 11{,}856$$

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

312: ORTHOPEDICS, PODIATRY, PM&R, CHIROPRACTIC AND SPORTS MEDICINE				
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%)**
Orthopedic Exam	45	80%	2,048	410
Podiatry Exam	30	80%	3,072	614
Orthopedic Hand Exam	20	80%	4,608	922
PM&R Exam	45	80%	2,048	410
Electromyography (EMG) Testing	90	80%	1,024	205
Chiropractic Treatment	30	80%	3,072	614
Sports Medicine Treatment	30	80%	3,072	614

(*) 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 Orthopedics, Podiatry, PM&R and Chiropractic:

1. Are Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate outside the standard 8-hour per day shift? (Misc); if not:
    a. Are Orthopedics, Podiatry, PM&R and Chiropractic 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

2. Are Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate outside the standard 240 days per year? (Misc); if not:
    a. Are Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate 232 days per year? (Misc) (If not, 250 days per year will be used to calculate workload driven spaces).

For Sports Medicine:

3. Is Sports Medicine Clinic authorized to operate outside the standard 8-hour per day shift? (Misc); if not:
    a. Is Sports Medicine Clinic 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

4. Is Sports Medicine Clinic authorized to operate outside the standard 240 days per year? (Misc); if not:
    a. Is Sports Medicine Clinic authorized to operate 232 days per year? (Misc) (If not, 250 days per year will be used to calculate workload driven spaces).

SECTION 3: PROGRAM DATA REQUIRED: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC

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

1. Is an Orthotics Lab authorized? (M)
    a. Is a Brace Shop, Lamination / Molding authorized? (Misc)
    b. Is a Brace Shop, Sewing Room / Shoe Room authorized? (Misc)
    c. Is a Brace Shop, Machine Room authorized? (Misc)
    d. Is a Brace Shop, Fabrication Area authorized? (Misc)
2. Is a Rehabilitation Gymnasium authorized? (M)
3. Is a Gait Lab for Physical Medicine and Rehabilitation (PM&R) authorized? (M)
4. Is a Bariatric Exam Room authorized for the Orthopedics and Podiatry Patient Area? (M)
5. Is a Graduate Medical Education program for Orthopedics, Podiatry and Chiropractic Clinic authorized (M)
    a. How many Orthopedics, Podiatry and Chiropractic Clinic Resident / Student FTE positions are authorized? (S)
6. How many annual Orthopedic Exam encounters are projected? (W)
7. How many annual Podiatry Exam encounters are projected? (W)
8. How many annual Orthopedic Hand Exam encounters are projected? (W)
9. How many annual Physical Medicine and Rehabilitation (PM&R) encounters are projected? (W)
10. How many annual EMG Testing encounters are projected? (W)
11. How many annual Chiropractic encounters are projected? (W)
12. How many Massage Therapist FTE positions are authorized? (S)
13. How many Orthopedics, Podiatry, PM&R and Chiropractic FTE positions are authorized? (S)
    a. How many Orthopedics, Podiatry, PM&R and Chiropractic FTE positions are authorized to have a private office? (Misc)
    b. How many Orthopedics, Podiatry, PM&R and Chiropractic FTE positions are authorized to have a shared office? (Misc)
    c. How many Orthopedics, Podiatry, PM&R and Chiropractic FTE positions are authorized to have a cubicle? (Misc)
14. Is an additional Airborne Infection Isolation (AII) Exam Room authorized? (Misc)
15. Is a Private Cast Room for Orthopedics and Podiatry authorized? (Misc)

16. Is a General Radiography Room for Orthopedics and Podiatry authorized? (Misc)
17. Is a dedicated room for the portable Ultrasound and C-Arm units for Orthopedics and Podiatry authorized? (Misc)
18. Is Sub-Waiting for the Orthopedics, Podiatry, PM&R and Chiropractic Staff and Administrative Area authorized? (Misc)
19. Is a Patient Records Storage Room in the Staff and Administration authorized? (Misc)
20. How many Orthopedics, Podiatry, PM&R and Chiropractic FTEs will work on peak shift? (Misc)
21. Are the Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate outside the standard 8-hour per day shift? (Misc)
    a. Are the Orthopedics, Podiatry, PM&R and Chiropractic 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)
22. Are the Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate outside the standard 240 days per year? (Misc)
    a. Are the Orthopedics, Podiatry, PM&R and Chiropractic Clinics authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces)

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 6.1: Common Areas.

4.1. FA1: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC RECEPTION.

1. **Waiting (WRC01)** **120 NSF**
   Minimum NSF; provide an additional 60 NSF for every increment of four Orthopedic, Podiatry, Orthopedic Hand, and PM&R Exam Rooms; EMG Testing Room, and Chiropractic Treatment Room greater than four.

2. **Playroom (PLAY1)** **120 NSF**
   Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Clinic.
   This space is provided to accommodate children's play activities; may be an open or 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 twelve Orthopedic Podiatry, Orthopedic Hand, and PM&R Exam Rooms; EMG Testing Room, and Chiropractic Treatment Room greater than twelve.

   Minimum allocated NSF accommodates two FTEs.

4. **Kiosk, Patient Check-in (CLSC1)** **30 NSF**
   Provide one for Orthopedics, Podiatry and Chiropractic Clinic.

5. **Patient Education (CLSC3)** **120 NSF**
   Provide one for Orthopedics, Podiatry and Chiropractic Clinic.

4.2. FA2: ORTHOPEDICS AND PODIATRY PATIENT AREA.

1. **Sub-Waiting, Pre-Procedure (WRC03)** **60 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of one Orthopedics and Podiatry Procedure Room greater than two.

2. **Sub-Waiting, Post-Procedure (WRC03)** **60 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of one Orthopedics and Podiatry Procedure Room greater than two.

3. **Cubicle, Patient Dressing (DR001)** **60 NSF**
   Provide one per each Orthopedics and Podiatry Procedure Room.

4. **Procedure Room, Orthopedics and Podiatry (TROR1)** **180 NSF**
   Minimum one; provide an additional one for every increment of eight Orthopedic, Podiatry and Orthopedic Hand Exam Rooms greater than eight.

5. **Exam Room, Orthopedic (EXRG1)** **120 NSF**
   Minimum two if the projected annual Orthopedic Exam encounters is between 410 and 4,096; provide an additional one for every increment of 2,048 projected annual Orthopedic Exam greater than 4,096; the minimum workload to generate an additional Orthopedic Exam Room is 410. (Refer to Section 2).

6. **Exam Room, Airborne Infection Isolation (AII) (EXRG6)** **180 NSF**
   Minimum one; provide an additional one per each Airborne Infection Isolation (AII) Exam Room authorized greater than one.

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

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

8. **Exam Room, Bariatric (EXB01)** **150 NSF**
   Provide one if a Bariatric Exam Room is authorized for Orthopedics and Podiatry Patient Area.

9. **Toilet, Bariatric Patient (TLTB1)** **75 NSF**
   Provide one for the Bariatric Exam Room.

10. **Exam Room, Orthopedic Hand (EXRG1)** **120 NSF**
    Minimum one if the projected annual Orthopedic Hand Exam encounters is between 922 and 4,608; provide an additional one for every increment of 4,608 projected annual Orthopedic Hand Exam greater than 4,608; the minimum workload to generate an additional Orthopedic Hand Exam Room is 922. (Refer to Section 2)

11. **Exam Room, Podiatry (EXP01)** **120 NSF**
    Minimum two if the projected annual Podiatry Exam encounters is between 614 and 6,144; provide an additional one for every increment of 3,072 projected annual Podiatry Exam greater than 6,144; the minimum workload to generate an additional Podiatry Exam Room is 614. (Refer to Section 2)

12. **Cast Room, Multi-Station (OPCR2)** **360 NSF**
    Minimum NSF; provide an additional 120 NSF for every increment of four Orthopedic, Podiatry and Orthopedic Hand Exam Rooms greater than eight.

13. **Cast Room, Private (OPCR1)** **180 NSF**
    Provide one if a Private Cast Room for Orthopedics and Podiatry is authorized.

14. **General Radiography (XDR01)** **300 NSF**
    Provide one if a General Radiography Room for Orthopedics and Podiatry is authorized.

15. **Ultrasound / Portable C-Arm (XDUS1)** **120 NSF**
    Provide one if a dedicated room for the portable Ultrasound and C-Arm units is authorized.

16. **Toilet, Patient (TLTU1)** **60 NSF**
    Minimum one; provide an additional one for every increment of eight Procedure and Exam Rooms, of all types, greater than eight.

17. **Viewing Room, Picture Archiving and Communication System (PACS) (XVC01)** **120 NSF**
    Provide one for Orthopedics, Podiatry and Chiropractic Clinic.

18. **Storage, Plaster (SRS01)** **120 NSF**
    Provide one for Orthopedics, Podiatry and Chiropractic Clinic.

19. **Storage, Splint and Crutch (SRCS1)** **120 NSF**
Minimum NSF; provide an additional 60 NSF for every increment of eight Orthopedic, Podiatry and Orthopedic Hand Exam Rooms greater than eight.

4.3. FA3: PHYSICAL MEDICINE AND REHABILITATION (PM&R) PATIENT AREA.

1. **Exam Room, PM&R (PTBT1)** **150 NSF**
Minimum one if the projected annual Physical Medicine and Rehabilitation (PM&R) encounters is between 410 and 2,048; provide an additional one for every increment of 2,048 projected annual Physical Medicine and Rehabilitation (PM&R) greater than 2,048; the minimum workload to generate an additional PM&R Exam Room is 410. (Refer to Section 2)

2. **EMG Testing (PTEM1)** **120 NSF**
Minimum one if the projected annual EMG Testing encounters is between 205 and 1,024; provide an additional one for every increment of 1,024 projected annual EMG Testing greater than 1,024; the minimum workload to generate an additional EMG Testing Room is 205. (Refer to Section 2)

3. **Gymnasium, Rehabilitation (PTEA1)** **480 NSF**
Provide one if a Rehabilitation Gymnasium is authorized.

4. **Gait Lab (PTGL1)** **180 NSF**
Provide one if Gait Lab for Physical Medicine and Rehabilitation (PM&R) is authorized.

5. **Toilet, Patient (TLTU1)** **60 NSF**
Minimum one; provide an additional one for every increment of eight PM&R Exam Room or EMG Testing Room greater than eight.

4.4. FA4: CHIROPRACTIC PATIENT AREA.

1. **Treatment Room, Chiropractic (PTBT1)** **150 NSF**
Minimum two if the projected annual Chiropractic encounters is between 614 and 6,144; provide an additional one for every increment of 3,072 projected annual Chiropractic encounters greater than 6,144; the minimum workload to generate an additional Chiropractic Treatment Room is 614. (Refer to Section 2)

2. **Spinal Decompression Room (PTBT1)** **150 NSF**
Minimum one; provide an additional one for every increment of four Chiropractic Treatment Rooms greater than four.

3. **Massage Therapy Room (PTBT1)** **150 NSF**
Provide one per each Massage Therapist FTE position authorized.

4. **Toilet, Patient (TLTU1)** **60 NSF**
   Provide one for Chiropractic Service.

4.5. FA5: ORTHOTICS LABORATORY.

1. **Reception (RECP3)** **60 NSF**
   Provide one if an Orthotics Lab is authorized.

2. **Kiosk, Patient Check-in (CLSC1)** **30 NSF**
   Provide one if an Orthotics Lab is authorized.

3. **Sub-Waiting (WRC03)** **60 NSF**
   Provide one if an Orthotics Lab is authorized.

4. **Orthotics Laboratory, Lamination / Molding (APLA1)** **120 NSF**
   Provide one if an Orthotics Lab and Lamination / Molding Brace Shop are authorized.

5. **Orthotics Laboratory, Sewing / Shoe (APSH1)** **120 NSF**
   Provide one if an Orthotics Lab and a Sewing / Shoe Brace Shop are authorized.

6. **Orthotics Laboratory, Machine Room (APMS1)** **300 NSF**
   Provide one if an Orthotics Lab and Machine Room Brace Shop are authorized.

7. **Orthotics Laboratory, Fitting (APFR1)** **120 NSF**
   Minimum NSF; provide an additional 60 NSF for every increment of two Podiatry Exam Rooms greater than two if an Orthotics Lab is authorized.

8. **Orthotics Laboratory, Adjustment and Modification (APAM1)** **150 NSF**
   Provide one if an Orthotics Lab is authorized.

9. **Orthotics Laboratory, Fabrication (APFB1)** **180 NSF**
   Provide one if an Orthotics Lab and a Fabrication Area are authorized.

10. **Toilet, Patient (TLTU1)** **60 NSF**
    Provide one if an Orthotics Lab is authorized.

11. **Storage, Equipment (SRSE1)** **120 NSF**
    Provide one if an Orthotics Lab is authorized.

4.6. FA6: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC SUPPORT.

1. **Utility Room, Clean (UCCL1)** **120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Orthopedics and Podiatry Procedure Rooms, Orthopedic Exam Rooms, Podiatry Exam Rooms, Orthopedic Hand Exam Rooms, PM&R Exam Rooms, EMG Testing

Rooms, and Spinal Decompression and Chiropractic Treatment Rooms greater than eight.

2. **Utility Room, Soiled (USCL1)** **90 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Orthopedics and Podiatry Procedure Rooms, Orthopedic Exam Rooms, Podiatry Exam Rooms, Orthopedic Hand Exam Rooms, PM&R Exam Rooms, EMG Testing Rooms, and Spinal Decompression and Chiropractic Treatment Rooms greater than eight.

3. **Alcove, Wheelchair (SRLW1)** **30 NSF**
   Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Support.

4. **Storage, Equipment (SRSE1)** **120 NSF**
   Minimum NSF; provide an additional 30 NSF for every increment of eight Orthopedics and Podiatry Procedure Rooms, Orthopedic Exam Rooms, Podiatry Exam Rooms, Orthopedic Hand Exam Rooms, PM&R Exam Rooms, EMG Testing Rooms, and Spinal Decompression and Chiropractic Treatment Rooms greater than eight.

5. **Storage, Splint and Crutch (SRCS1)** **120 NSF**
   Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Support.

6. **Alcove, Crash Cart (RCA01)** **30 NSF**
   Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Support.

7. **Alcove, Ice Machine (ICE01)** **30 NSF**
   Provide one for Orthopedics, Podiatry and Chiropractic Support.

8. **Alcove, Portable Equipment (XRM01)** **30 NSF**
   Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Support.

4.7. FA7: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC STAFF AND ADMINISTRATION.

1. **Office, Clinic Chief (OFA04)** **120 NSF**
   Provide one for the Orthopedics, Podiatry, PM&R and Chiropractic Clinic.

2. **Sub-Waiting (WRC03)** **60 NSF**
   Provide one if Sub-Waiting for the Orthopedics, Podiatry, PM&R and Chiropractic Staff and Administration is authorized.

3. **Office, NCOIC / LCPO / LPO (OFA04)** **120 NSF**
   Provide one for the Orthopedics, Podiatry, PM&R and Chiropractic Staff and Administration.

4. **Team Collaboration Room (WRCH1)** **120 NSF**
   Minimum one; provide an additional one for every increment of eight Orthopedic, Orthopedic Hand, Podiatry, PM&R Exams Rooms, EMG Testing Rooms and Chiropractic Treatment Rooms greater than eight.

5. **Office, Private (OFA04)** **120 NSF**
   Provide one per each Orthopedics, Podiatry, PM&R and Chiropractic FTE position authorized to have a private office.

6. **Office, Shared (OFA05)** **120 NSF**
   Provide one for every increment of two Orthopedics, Podiatry, PM&R and Chiropractic FTE positions authorized to have a shared office.

7. **Cubicle (OFA03)** **60 NSF**
   Provide one per each Orthopedics, Podiatry, PM&R and Chiropractic FTE position authorized to have a cubicle.

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

8. **Storage, Patient Records (FILE1)** **60 NSF**
   Provide one if Patient Records storage in the Orthopedics, Podiatry, PM&R and Chiropractic Staff and Administration is authorized.

9. **Conference Room (CRA01)** **240 NSF**
   Minimum NSF; provide an additional 60 NSF if the total number of Orthopedics, Podiatry, PM&R and Chiropractic 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.

10. **Copy/Office Supply (RPR01)** **120 NSF**
    Provide one for Orthopedics, Podiatry, PM&R and Chiropractic Staff and Administration.

11. **Lounge, Staff (SL001)** **120 NSF**
    Minimum NSF if the number of Orthopedics, Podiatry, PM&R and Chiropractic 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 Orthopedics, Podiatry, PM&R and Chiropractic Clinic FTE positions 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 Orthopedics, Podiatry, PM&R and Chiropractic FTE positions not assigned a private office, a shared office or a cubicle greater than eight.

4.8. FA8: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC GME EDUCATION / TRAINING.

1. **Office, Residency Program Director (OFA04)** **120 NSF**
   Provide one if a Graduate Medical Education program for Orthopedics, Podiatry, PM&R and Chiropractic 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 Orthopedics, Podiatry, PM&R and Chiropractic 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 Orthopedics, Podiatry, PM&R and Chiropractic is authorized.

SECTION 5: PROGRAM DATA REQUIRED: SPORTS MEDICINE

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

a. Is a Sports Medicine Clinic authorized? (M)
    a. Is a Graduate Medical Education program for Sports Medicine authorized? (M)
        i. How many Sports Medicine Resident / Student FTE positions are authorized? (S)
b. Is a Sports Medicine Diagnostic Imaging authorized? (M
    a. Is a Viewing Room (PACS) for Sports medicine Diagnostic Imaging authorized? (Misc)
c. Is a Sports Medicine Performance Lab authorized? (M)
    a. Is a Performance Diagnostics Room authorized? (Misc)
    b. Is a Simulation Motion Laboratory authorized? (Misc)
    c. Is a Group Exercise Gymnasium authorized? (Misc)
d. How many annual Sports Medicine encounters are projected? (W)
e. How many Sports Medicine FTE positions are authorized? (S)
    a. How many Sports Medicine FTE positions are authorized to have a private office? (Misc)
    b. How many Sports Medicine FTE positions are authorized to have a shared office? (Misc)
    c. How many Sports Medicine FTE positions are authorized to have a cubicle? (Misc)
f. How many Single-Station Sport Medicine Treatment Rooms are authorized? (Misc)
g. Is a Strength and Conditioning Room authorized? (Misc)
h. Is Aquatic Therapy authorized? (Misc)
    a. Is a Small Aquatic Therapy Pool authorized? (Misc)
    b. Is a Medium Aquatic Therapy Pool authorized? (Misc)
    c. Is a Large Aquatic Therapy Pool authorized? (Misc)
i. Is a Patient Records Storage Room in the Sports Medicine Staff and Administration authorized? (Misc)
j. Is Sub-Waiting for the Sports Medicine Staff and Administration authorized? (Misc)
k. How many Sports Medicine FTEs will work on peak shift? (Misc)
l. Is the Sports Medicine Clinic authorized to operate outside the standard 8-hour per day shift? (Misc)
    a. Is the Sports Medicine Clinic authorized to operate a 7-hour per day shift? (Misc)
m. Is the Sports Medicine Clinic authorized to operate outside the standard 240 days per year? (Misc)
    a. Is the Sports Medicine Clinic authorized to operate 250 days per year? (Misc) (If not, 232 days per year will be used to calculate workload driven spaces).

SECTION 6: SPACE PLANNING CRITERIA: SPORTS MEDICINE

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.

6.1. FA1: SPORTS MEDICINE RECEPTION.

1. **Waiting, Sports Medicine (WRC01)** **120 NSF**
   Minimum NSF; provide an additional 60 NSF for every increment of four Sports Medicine Treatment Cubicles, Private Treatment Rooms, and Exam Rooms greater than four.

2. **Reception (RECP1)** **120 NSF**
   Provide one for Sports Medicine Reception.

   Allocated NSF accommodates two FTEs.

3. **Kiosk, Patient Check-in (CLSC1)** **30 NSF**
   Provide one for Sports Medicine Reception.

4. **Patient Education (CLSC3)** **120 NSF**
   Provide one for Sports Medicine Reception.

6.2. FA2: SPORTS MEDICINE PATIENT AREA.

1. **Sport Medicine Treatment, Single-Station Room (PTBT1)** **150 NSF**
   Provide one per each Private Treatment Room authorized.

2. **Sports Medicine Treatment, Multi-Station (PTTC1)** **120 NSF**
   Minimum one if the projected annual Sports Medicine encounters is between 614 and 3,072; provide an additional one for every increment of 3,072 projected annual Sports Medicine encounters greater than 3,072; the minimum workload to generate an additional Multi-Station Sports Medicine Treatment Room is 614. (Refer to Section 2).

3. **Workstation, Sports Medicine Technician (PTCW1)** **30 NSF**
   Minimum one; provide one for every increment of three Sports Medicine Treatment Cubicles greater than three.

4. **Treatment Support, Sports Medicine (PTTS1)** **60 NSF**
   Provide one for the Sports Medicine Patient Area.

5. **Strength and Conditioning Room (PTEA1)** **600 NSF**
   Provide one if a Strength and Conditioning Room is authorized.

Allocated NSF provides space for a gym focused on functional training rather than traditional weight machines. Space also included for large half-rack systems, cable pull machines, pull-up bars, dip machines, and TRX suspension systems. May also include a field turf area for pushing/pulling sleds and flipping truck tires, etc.

6. **Alcove, Portable Imaging (XRM01)** **30 NSF**
Provide one for the Sports Medicine Patient Area.

7. **Alcove, Ice Machine (ICE01)** **30 NSF**
Provide one for the Sports Medicine Patient Area.

8. **Locker / Changing, Male Patient (LR002)** **120 NSF**
Provide one for the Sports Medicine Patient Area.

9. **Locker / Changing, Female Patient (LR002)** **120 NSF**
Provide one for the Sports Medicine Patient Area.

10. **Toilet / Shower, Male Patient (TLTS1)** **60 NSF**
Provide one for the Sports Medicine Patient Area.

11. **Toilet / Shower, Female Patient (TLTS1)** **60 NSF**
Provide one for the Sports Medicine Patient Area.

6.3. FA3: SPORTS MEDICINE AQUATIC THERAPY.

1. **Aquatic Therapy Pool, Small (PTAP1)** **500 NSF**
Provide one if Sports Medicine, Aquatic Therapy and a Small Aquatic Therapy Pool are authorized.

Allocated NSF accommodates up to 5 patients performing therapeutic exercises.

2. **Aquatic Therapy Pool, Medium (PTAP2)** **2,000 NSF**
Provide one if Sports Medicine, Aquatic Therapy and a Medium Aquatic Therapy Pool are authorized.

Allocated NSF accommodates up to 20 patients performing therapeutic exercises.

3. **Aquatic Therapy Pool, Large (PTAP3)** **3,000 NSF**
Provide one if Sports Medicine, Aquatic Therapy and a Large Aquatic Therapy Pool is authorized.
Allocated NSF accommodates more than 20 patients performing therapeutic exercises.

4. **Team Collaboration Room (WRCH1)** **120 NSF**
   Provide one if Sports Medicine and Aquatic Therapy are authorized.

5. **Locker / Changing, Aquatic Therapy Male Patient (LR002)** **120 NSF**
   Minimum NSF; provide an additional 30 NSF if a Medium Aquatic Therapy Pool is authorized; provide an additional 60 NSF if a Large Aquatic Therapy Pool is authorized.

6. **Locker / Changing, Aquatic Therapy Female Patient (LR002)** **120 NSF**
   Minimum NSF; provide an additional 30 NSF if a Medium Aquatic Therapy Pool is authorized; provide an additional 60 NSF if a Large Aquatic Therapy Pool is authorized.

7. **Toilet / Shower, Aquatic Therapy Male Patient (TLTS1)** **60 NSF**
   Minimum one; provide an additional one if a Medium Aquatic Therapy Pool is authorized; provide an additional two if a Large Aquatic Therapy Pool is authorized.

8. **Toilet / Shower, Aquatic Therapy Female Patient (TLTS1)** **60 NSF**
   Minimum one; provide an additional one if a Medium Aquatic Therapy Pool is authorized; provide an additional two if a Large Aquatic Therapy Pool is authorized.

9. **Toilet / Shower, Staff (TLTS1)** **60 NSF**
   Minimum one; provide an additional one if a Medium or Large Aquatic Therapy Pool is authorized.

10. **Storage, Pool Equipment (SRSE1)** **120 NSF**
    Minimum NSF; provide an additional 120 NSF if a Medium or Large Aquatic Therapy Pool is authorized.

11. **Storage, Pool Chemicals (SRHM1)** **120 NSF**
    Provide one if a Sports Medicine and Aquatic Therapy are authorized.

12. **Pump Room, Pool (MECH1)** **120 NSF**
    Minimum NSF; provide an additional 120 NSF if a Medium or Large Aquatic Therapy Pool is authorized.

13. **Alcove, Clean Linen (LCCL3)** **30 NSF**
    Provide one if a Sports Medicine and Aquatic Therapy are authorized.

14. **Alcove, Soiled Linen (LCSL3)** **30 NSF**
    Provide one if a Sports Medicine and Aquatic Therapy are authorized.

6.4. FA4: SPORTS MEDICINE PERFORMANCE LAB.

1. **Classroom (CLR01)** **240 NSF**
   Provide one if Sports Medicine and a Performance Lab are authorized.

2. **Performance Diagnostics (PTES1)** **240 NSF**
   Provide one if Sports Medicine, a Sports Medicine Performance Lab and Performance Diagnostics are authorized.

   Allocated NSF provides multi-station space for tests like VO2 max testing, Wingate testing, functional movement testing including y-balance, and body composition testing.

3. **Laboratory, Simulation Motion (PTIS1)** **240 NSF**
   Provide one if Sports Medicine, a Sports Medicine Performance Lab, and Simulation Motion Laboratory are authorized.

   Allocated NSF provides space for video movement evaluation. This includes video gait analysis with space for cameras, lighting, and a treadmill; open space for recording functional movement assessment; a wall mounted video monitor for gait re-training located in front of the gait analysis treadmill.

4. **Exam Room, Sports Medicine (EXRG1)** **120 NSF**
   Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

5. **Communications Room, Simulation Lab (CMP02)** **120 NSF**
   Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

   Allocated NSF provides space for Video Server / Storage / CDs.

6. **Equipment Room, Simulation Lab (SRSE1)** **120 NSF**
   Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

7. **Gymnasium, Group Exercise (PTEA1)** **1,200 NSF**
   Provide one if Sports Medicine, a Sports Medicine Performance Lab, and a Group Exercise Gymnasium are authorized.

   Allocated NSF provides an open area for functional rehabilitation classes, spin classes, yoga classes, etc. It may include an area dedicated to TRX suspension training (attached to the wall or can be purchased as a large rack system on rollers to accommodate groups up to 22 participants).

8. **Locker / Changing, Male Patient (LR002)** **120 NSF**
   Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

9. **Locker / Changing, Female Patient (LR002)** **120 NSF**
   Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

10. **Toilet / Shower, Male Patient (TLTS1)** **60 NSF**
    Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

11. **Toilet / Shower, Female Patient (TLTS1)** **60 NSF**
    Provide one if Sports Medicine and a Sports Medicine Performance Lab are authorized.

6.5. FA5: SPORTS MEDICINE DIAGNOSTIC IMAGING.

1. **Sub-Waiting, Diagnostic Imaging (WRC03)** **60 NSF**
   Provide one if Sports Medicine Diagnostic Imaging is authorized.

2. **Cubicle, Patient Dressing (DR001)** **60 NSF**
   Provide one if Sports Medicine Diagnostic Imaging is authorized.

3. **General Radiography Room (XDR01)** **300 NSF**
   Provide one if Sports Medicine Diagnostic Imaging is authorized.

4. **Viewing Room, Picture Archiving & Communication System (PACS) (XVC01)** **120 NSF**
   Provide one if Sports Medicine Diagnostic Imaging and a Viewing Room (PACS) are authorized.

6.6. FA6: SPORTS MEDICINE SUPPORT.

1. **Utility Room, Clean (UCCL1)** **120 NSF**
   Provide one if Sports Medicine is authorized.

2. **Utility Room, Soiled (USCL1)** **90 NSF**
   Provide one if Sports Medicine is authorized.

3. **Storage, Equipment (SRSE1)** **120 NSF**
   Provide one if Sports Medicine is authorized.

4. **Alcove, Mobile Radiographic Unit (XRM01)** **30 NSF**
   Provide one if Sports Medicine is authorized.

5. **Alcove, Wheelchair (SRLW1)** **30 NSF**
   Provide one if Sports Medicine is authorized.

6. **Alcove, Crash Cart (RCA01)** **30 NSF**
   Provide one if Sports Medicine is authorized.

6.7. FA7: SPORTS MEDICINE STAFF AND ADMINISTRATION.

1. **Office, Clinic Chief (OFA04)** **120 NSF**
   Provide one for the Sports Medicine Staff and Administration.

2. **Sub-Waiting (WRC03)** **60 NSF**
   Provide one if sub-waiting for the Sports Medicine Staff and Administration is authorized.

3. **Office, NCOIC / LCPO / LPO (OFA04)** **120 NSF**
   Provide one for the Sports Medicine Staff and Administration.

4. **Team Collaboration Room (WRCH1)** **120 NSF**
   Minimum NSF; provide an additional one for every increment of eight Sports Medicine Treatment Cubicle, Private Treatment Room and Sports Medicine Exam Room greater than eight.

5. **Office, Private (OFA04)** **120 NSF**
   Provide one per each Sports Medicine FTE position authorized to have a private office.

6. **Office, Shared (OFA05)** **120 NSF**
   Provide one for every increment of two Sports Medicine FTE positions authorized to have a shared office.

7. **Cubicle (OFA03)** **60 NSF**
   Provide one per each Sports Medicine FTE position authorized to have a cubicle. These cubicles may be collocated in a shared space or dispersed as required.

8. **Storage, Patient Records (FILE1)** **60 NSF**
   Provide one if Patient Records storage in the Sports Medicine Staff and Administration is authorized.

9. **Conference Room (CRA01)** **240 NSF**
   Minimum NSF; provide an additional 60 NSF if the total number of Sports Medicine 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.

10. **Copy/Office Supply (RPR01)** **120 NSF**
    Provide one for Sports Medicine Staff and Administration.

11. **Lounge, Staff (SL001)** **120 NSF**
    Minimum NSF if the number of Sports Medicine 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 Sports Medicine FTE positions 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 Sports Medicine FTE positions not assigned a private office, a shared office or a cubicle greater than eight.

6.8. FA8: SPORTS MEDICINE GME EDUCATION / TRAINING.

1. **Office, Residency Program Director (OFA04)** **120 NSF**
   Provide one if a Graduate Medical Education program for Sports Medicine 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 Sports Medicine is authorized.

   Minimum NSF accommodates two 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 Sports Medicine is authorized.

SECTION 7: 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.

7.1. NET-TO-DEPARTMENT GROSS FACTOR. The net-to-department gross (NTDG) factor for the Orthopedics, Podiatry, PM&R, Chiropractic, and Sports Medicine Clinic 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.

7.2. RECEPTION AREAS. Where possible, centralized intake should be considered where multiple clinics are collocated.

7.3. PATIENT AREAS. Consider placing high volume, quick turn encounters near the front of the Patient Care area.

7.4. OTHER GENERAL 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. Design space to foster effective team collaboration, especially important in innovative care delivery models like the patient-centered medical home model (PCMH).

3. Where possible, locate these clinics proximate to public parking and the main outpatient building entry to improve access and minimize travel distance.

4. Collocate clinics and inpatient units with the same specialty when possible.

7.5. ORTHOPEDICS, PODIATRY, CHIROPRACTIC AND SPORTS MEDICINE CLINIC SPECIFIC DESIGN CONSIDERATIONS.

1. Provide automatic opening doors at department entry doors that do not have hold-open devices. The openers allow patients to access or exit the department unassisted.

2. Provide Waiting Room seating with a mix of chairs with and without arms in addition Hip Chairs and wheelchair space.

3. Provide protective wall covering in departmental corridors to protect from damage due to wheelchair and gurney traffic.

4. Design the casting rooms with a large, open, multi-station layout with cubicle curtains separating stations for flexibility. Separate enclosed rooms should be for Full Body applications and excessively noisy patients.

5. Cast Room dust and noise control is required for a safe and clean environment for patient and staff.

6. Design Cast Room to allow access for the portable x-ray unit.

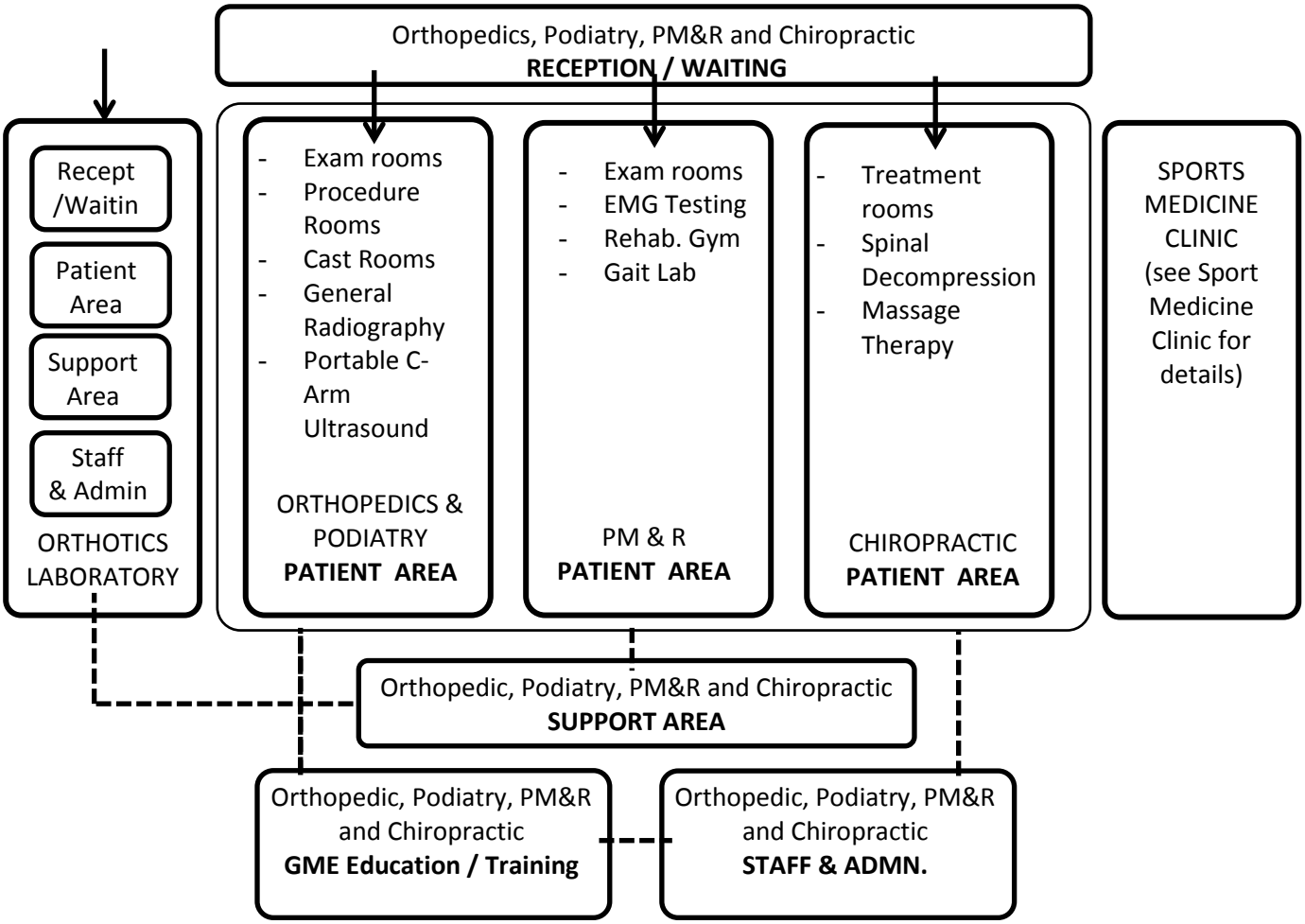
7. If an Orthotics Lab is required by the functional program, the Orthotics Fitting Room must include provision for patient privacy.

8. If a pool for Aquatic Therapy is required by the functional program, the patient dressing area should be directly accessible to the pool without entering public or exercise areas. As well, a toilet room that is accessible without entering public or exercise areas should be provided.

SECTION 8: FUNCTIONAL DIAGRAMS

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.

8.1. FUNCTIONAL DIAGRAM: ORTHOPEDICS, PODIATRY, PM&R AND CHIROPRACTIC.



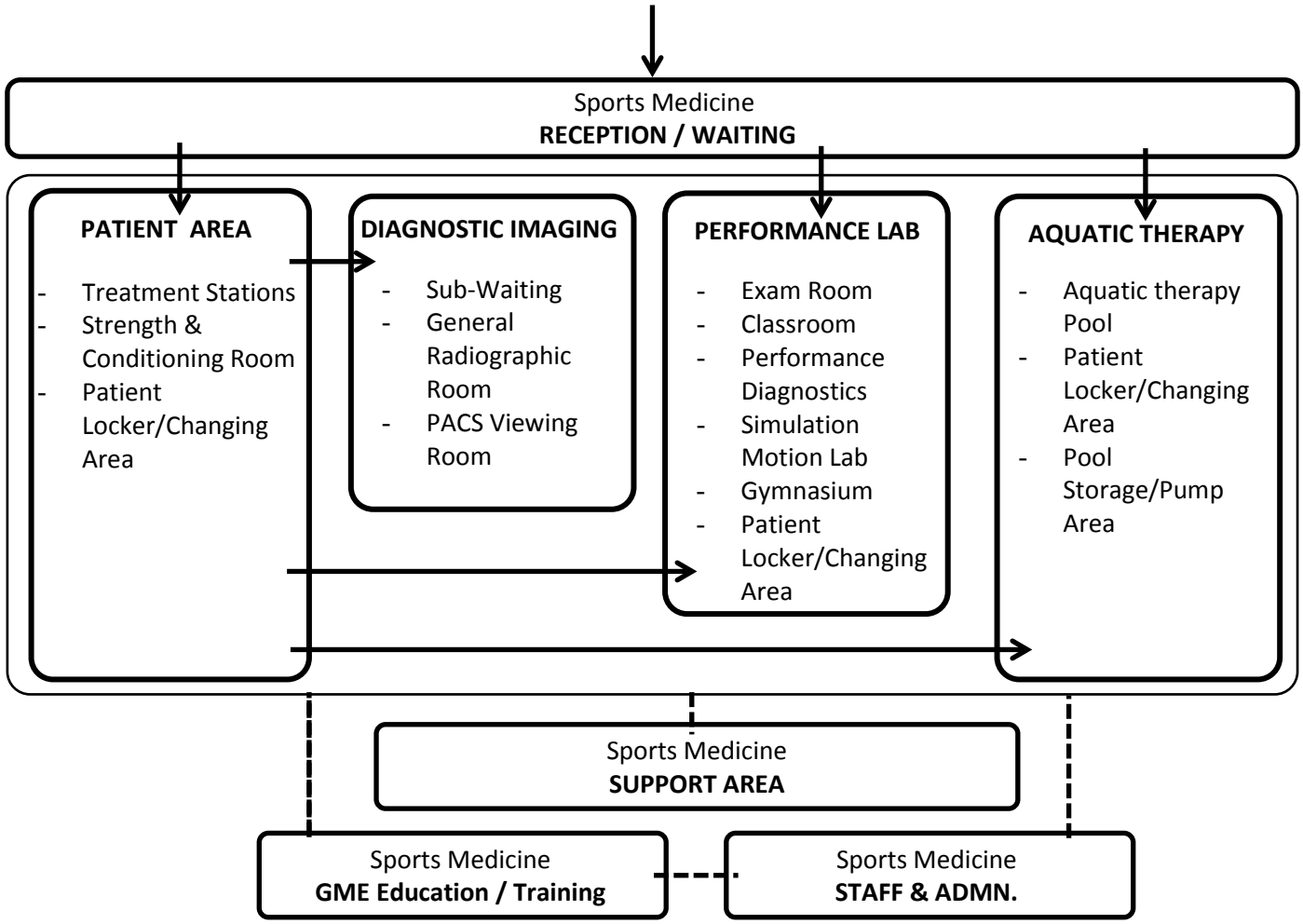
Orthopedics, Podiatry, PM&R, Chiropractic

LEGEND

Patient Circulation

Staff Circulation

8.2. FUNCTIONAL DIAGRAM: SPORTS MEDICINE.



LEGEND

SPORTS MEDICINE

Patient Circulation

Staff Circulation

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.

Aquatic Therapy: Aquatic Therapy or Pool Therapy is physical therapy that is performed in the water. Aquatic therapy uses the resistance of water instead of weights. It aims to rehabilitate patients after injury or those with chronic illness, avoiding the amount of weight placed on the joints by exercise outside the water.

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

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. 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 rise. 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 feet 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.

C-Arm: The name given to specialized x-ray imaging machines, due to their special arced semi-circular design. They provide real-time detailed viewing of anatomic structures using fluoroscopic imaging and/or injectable dye. They can be small and portable.

Chiropractor: A licensed primary health-care provider that may diagnose all conditions of the human body by physical examination, x-ray, MRI, blood tests or any other diagnostic testing as taught in chiropractic colleges and universities. They may treat by manipulation, diet, exercise, rehabilitation, nutrition, acupuncture and physical modalities such as traction, electrical stimulation, ultrasound, soft tissue techniques and laser. They may work as part of a team with the patient's family physician, surgeon or other healthcare specialist to best resolve the patient's problem.

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.

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.

Electromyography (EMG): An electromyogram (EMG) measures the electrical activity of muscles at rest and during contraction. EMG is used as a diagnostics tool for identifying neuromuscular diseases, assessing low-back pain, kinesiology, and disorders of motor control. EMG signals are also used as a control signal for prosthetic devices such as prosthetic hands, arms, and lower limbs.

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.

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 per 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 service. Typical Functional Areas in clinical services are Reception, Patient Area, Support, Staff and Administration, and Education.

Gait Lab: A Gait Lab offers gait analysis testing. This test analyzes how a patient walks and identifies any abnormal walking patterns. The test has several components. All of this information provides a comprehensive picture of the various factors contributing to the gait disorder. State-of-the-art instruments such as advanced video recording techniques and 3-D motion capture technology may be used to analyze a patient's body movement and muscle activity while walking.

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 they could be 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.

Orthopedics: The branch of surgery that is broadly concerned with the skeletal system. Orthopedic specialists care for a variety of diseases and injuries to bones, muscles, tendons, ligaments, and related tissues, using the latest surgical, arthroscopic, and radiology techniques to get people moving again by repairing, reconstructing, and relieving pain.

Orthotics: An orthotic is a foot-supporting device also known as a custom insole. Foot Orthotics support, correct and accommodate the bones, tendons, ligaments, and plantar fascia band in each foot.

Orthotics Lab: Where the fabrication of custom foot orthotics, shoe modifications and professionally fit shoes for optimal fit, function and performance takes place.

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

Performance Diagnostics: Performance diagnostics combined with an extensive sports medical examination is a key component of many sports disciplines. The goal is the exact specification of the individual's physical capacity. This helps atheletes reach their personal performance peak and allows amateur athletes and sports beginners exercise at their appropriate level and adequate speed without having to fear implications from unnecessary overstraining.

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.

Physical Medicine and Rehabilitation (PM&R): Also called physiatry, is the branch of medicine emphasizing the prevention, diagnosis, and treatment of disorders – particularly related to the nerves, muscles, and bones that may produce temporary or permanent impairment. Rehabilitation physicians have completed training in PM&R and are sometimes referred to as PM&R physicians or physiatrists.

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.

Podiatry: Branch of medicine devoted to the study of, diagnosis and medical treatment of disorders of the foot, ankle, and lower extremity.

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.

Project Room Contents (PRC): A listing of the assigned contents (medical equipment, FF&E, etc.) for each room in a PFD generated by SEPS.

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.

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).

Simulation Motion Lab: Also Sports Biomechanics Lab. This type of lab is designed to be able to simulate real-life sports environments such as a pitcher's mound, golfing tee box, batting cage or running track so that one can study the motion of the athlete's body and the forces acting at their joints.

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.

Sports Medicine: Sports Medicine is the study and practice of medical principles related to the science of sports, particularly in the areas of Sports Injury Diagnosis and Treatment, Sports Injury Prevention, and Sports Training and Athletic Performance, including: Exercises and Workouts, Sports Nutrition and Sports Psychology. U.S. military physicians are increasingly turning to Sports Medicine to treat the injuries soldiers sustain on the battlefield and in basic training.

Spinal Decompression: Spinal decompression is the release of pressure on the spinal cord or nerve roots. Non-surgical spinal decompression therapy is a noninvasive form of spine rehabilitation that is similar to traction therapy. This therapy, which requires daily treatment over the course of about a month, plus ongoing maintenance treatments in some cases, uses pressure and positioning to get the injured disc to slip back into its normal position. Therapy is performed on a special decompression table, and other chiropractic treatments, such as heat therapy and electric stimulation, are often simultaneously used.

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

Sub-Waiting, Post-Procedure: Depending on procedure performed, patient may need extra time to sit up in a chair post-procedure prior to going home.

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.

Utilization Factor: Also known as capacity utilization rate, this factor provides flexibility in the utilization of a room to account for patient delays, scheduling conflicts and equipment maintenance. A room with an 80% utilization factor provides a buffer to assume that this room would be available 20% of the time beyond the planned operational practices for this room.

Workload: Space Planning Criteria per DHA Policy shall be workload driven. Workload projections divided by the throughput determined in this document for each workload driven room determines the quantity of rooms needed to satisfy the projected workload demand.