



DoD SPACE PLANNING CRITERIA

CHAPTER 320: DENTAL SERVICES

MAY 10, 2022

Originating Component: Defense Health Agency Facilities Enterprise

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Releasability: No Restrictions

Purpose: This issuance: To provide space planning criteria guidance in support of planning, programming and budgeting for military Medical Treatment Facilities (MTFs) that fall under the authority of the Defense Health Agency (DHA).

SUMMARY of CHANGE

This revision, dated May 10, 2022 includes the following:

- Converted to SEPS compatible format.
- Sections renamed and numbered: design considerations moved to the front of the document.
- Reduced the NSF on select clinical and administrative spaces throughout the chapter.
- Removed workload driven formula example; now located in Chapter 110.
- Workload driven defaults are now fixed values for this chapter.
- The following spaces have been moved to Chapter 610 Common Areas: staff toilets, lockers, lounges, and conference rooms.
- Moved Graduate Dental Education (GDE) resident administrative spaces to Chapter 230 Education and Training.
- Added new definition of Room Utilization Factor, Private Office in Glossary, and levels of sedation.

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SECTION 1: PURPOSE AND SCOPE

This chapter outlines space planning criteria as it applies to all eligible beneficiaries/ populations receiving Dental services including General Dentistry, Dental Specialties and Dental Radiography located inside or immediately adjacent to an MTF that may include inpatient care, tertiary specialty services, or full scope ancillary departments. Dental services are often located in freestanding ambulatory care clinics.

Oral Maxillofacial Surgery (OMS) requiring sedation can be performed in an ambulatory setting provided those procedures and the staff comply with the requirements outlined in DHA-PI 6410.01. Planners shall incorporate all OMS workload requiring general anesthesia in the calculation of the number of Operating Rooms (ORs) prescribed by Space Planning Criteria (SPC) Chapter 440: Surgical / Interventional Services & Ambulatory Surgery Center.

The minimum sized dental clinic will include the following four Dental Treatment Rooms (DTR's):

- A. Three General Dentistry Treatment Rooms
- B. One Oral Hygiene Treatment Room

The space planning criteria in this chapter apply to all DHA MTFs and are based on current DHA policies and directives, established and/or anticipated best practices, industry guidelines and standards, and input from MHS Subject Matter Experts (SME) and DHA Directorates. As directed by the DHA, these space criteria are primarily workload driven; additional drivers are staffing and mission. Room Codes (RCs) in this document are based on the latest version of UFC-4-510-01, Design: Military Medical Facilities, Appendix B, Architectural and Engineering Design Requirements.

SECTION 2: PLANNING AND PROGRAMMING REQUIREMENTS

1. Planners will consider local workload projections, staffing, and anticipated services to develop a project based on these criteria. The staffing projections used by planners to program requirements must be validated and aligned with the authorized manning document for the project. When no official guidance, policy or directive exists to validate space or program requirements, the planner will consult with their supervisor, and at their supervisor's discretion, the issues(s) may be elevated to senior leadership for the determination of the final project requirements.
2. Space planning criteria have been developed on the basis of an understanding of the activities involved in the functional areas required for Dental services. 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.
3. For calculation of the number of building support spaces (Vestibules, Lobbies, -Multi-fixture Public and Staff Toilets, Staff Lounges and Locker Rooms, Conference Rooms, Lactation Rooms, Communication Closets, and Janitor Closets), please refer to Chapter 610: Common Areas.
4. The range of DTR throughput is based upon a calculation that first quantifies the full capacity of that fixed space, then estimates how many annual encounters it should support, based on other variable resources such as availability of providers, support staff, and patients.

Room default parameters:

- a. Operating Days per Year SEPS default: 240 days
- b. Hours of Operation per Day SEPS default: 8 hours
- c. Average Length of Encounter (ALOE) DTR SEPS default: See Table 1, *see Glossary for definition of ALOE*
- d. Room Utilization Factor SEPS default: 80%

Calculation of directly workload-driven room types is implemented in SEPS based on the following table and answers to the Input Data Statements:

TABLE 1: WORKLOAD PARAMETER CALCULATION

320: DENTAL SERVICES				
DENTAL SEATINGS	AVERAGE LENGTH OF DENTAL SEATING (minutes)	ROOM UTILIZATION FACTOR	ANNUAL WORKLOAD PER DENTAL CHAIR (*)	MINIMUM ANNUAL WORKLOAD TO GENERATE ONE CHAIR (20%)
General Dentistry	75	80%	1,229	246
Dental Hygiene	60	80%	1,536	307
Prosthodontics	110	80%	838	168
Endodontics	95	80%	972	194
Periodontics	110	80%	838	168
Orthodontics	60	80%	1,536	307
Oral Surgery	120	80%	768	154

See Chapter 110: General for an example calculation.

5. To support GDE programs, resident / student workload is included in the total annual workload calculations used to generate the required number of dental chairs. When workload calculations do not generate the minimum of one chair per assigned FTE resident / student, the planner will manually add the additional number and type of dental chair to support this minimum requirement.
6. Dental Treatment Rooms listed under Functional Area 2 are allocated as private single-chair DTR's, or could be configured into two or three multi-chair arrangements. The selection of chair configuration should be determined early in the planning process as it has a major effect on equipment outfitting for each DTR type. Situations where multi-chair configurations may be warranted include sites that conduct high throughput dental screening activities such as military entrance processing centers or pre and post deployment locations, or for high demand dental services such as orthodontics. A combination of single, and multi-chair configurations can be an option.
7. In locations where pediatric dental services are provided, (typically OCONUS) the planner must evaluate the types of procedures to be performed and the level of sedation to be administered to this population. Workload for any type of pediatric dental care is accounted for within a specific dental service, and is not captured as separate pediatric workload. Therefore, in lieu of a dedicated pediatric DTR(s), the planner may program comprehensive DTR(s) based on specific workload associated with pediatric procedures requiring sedation. Pediatric-specific equipment and furnishing options (i.e., television, Blu-Ray/DVD player, artwork, dental instruments, etc.) may be added to any of the general and specialty workload driven DTRs where dedicated pediatric DTR's are required.

8. To enhance patient safety, provide a Medication Safety Zone for the Dental Clinic. It can be a medication preparation room (MEDP1), or an area in a DTR support space, as well as a self-contained medication dispensing unit, an automated medication dispensing station, or another system located in the clean utility (UCCL1). The planner should determine whether medications are prepared in a pharmacy, and then administered to the patient by Dental Services staff in single, unit doses. In this instance, no medication prep room is required in the clinic area. If the Dental Services staff are calculating dosages, preparing the medication and administering it to the patient, an enclosed Medication Preparation Room (MEDP1) will be programmed in the clinic support area.
9. For space criteria requirements to support Graduate Dental Education in the MTF, refer to Chapter 230: Education and Training.

SECTION 3: 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 latest version of the World Class Checklist (<https://facilities.health.mil/home/>). Also refer to the Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospitals and Guidelines for Design and Construction of Outpatient Facilities for additional information.

3.1. NET-TO-DEPARTMENT GROSS FACTOR.

The net-to-department gross factor (NTDG) for Dental Services Clinic is **1.40**. This number when multiplied by the programmed net square foot (NSF) area determines the departmental gross square feet. This factor accounts for the space occupied by internal department circulation and interior partitions and other construction elements not defined by the net square foot area. Refer to UFC 4-510-01, and DoD Space Planning Criteria Chapter 130: Net to Gross Conversion Factors.

3.2. GENERAL DESIGN CONSIDERATIONS.

1. Consider efficiency of operations and a layout such that walking distances of the routes staff repeatedly take from the DTRs to the support areas (e.g. instrument processing, supplies, medications), back to DTRs are kept to a minimum.
2. Reduce patient anxiety and typical "dental stressors" by providing daylighting, window views of nature, nature photography and architectural features that provide positive distractions.
3. When a DTR(s) supporting pediatric dentistry is included in the requirement, consider locating in an isolated area of the patient treatment zone to minimize other patients becoming stressed from hearing crying or very vocal children.
4. The location and number of recessed or semi-recessed Automatic External Defibrillator (AED) cabinets will be determined during project design. The Designer of Record (DOR) is responsible to ensure quantity, placement, and all appropriate markings (signage) are shown in the final design solution. The DOR will coordinate with the design and construction Agent and clinical representative to ensure adequate placement and facility coverage.
5. In cases where a resuscitation cart with associated equipment and medical supplies is warranted, the planner should determine whether placement is appropriate in an alcove (RCA01) near a patient treatment zone, or if they can be added in a treatment space as part of the room code equipment contents.

6. Consider locating the specialty DTR's that have a NFPA 99 room category code of 2, within a "suite" configuration. (see UFC 4-510-01 for application of NFPA 99 to dental systems for further explanation)
7. Provide a separate staff/delivery entrance in the off-stage area of the clinic. This will be utilized for patient transport to a higher level of care in the event of an emergency, and it will accommodate supply receipt and internal distribution
8. Locate the Dental Mechanical Room (MECH1) within the main mechanical room of the facility. The intent of adding this net area to the mechanical grossing allowance is to provide mechanical space for dental specific systems (dental vacuum, dental compressed air, etc.) that are in addition to typical building mechanical systems.
9. Seating in the waiting area should be comfortable with adequate space for patients with wheelchairs and walking aids. Consider arranging seats into separate, small clusters to accommodate social distancing and enhance physical separation of patients.
10. To maximize speech privacy for patients at reception, provide open, clear floor area between the waiting seats and reception.
11. Consider flexible seating options that can accommodate greater demands during peak service hours.
12. Determine whether administrative spaces such as the Clinic Supervisor or OIC should be located towards the front of the patient care area for ease of access, or be located in the off stage administrative area.
13. The care team will be collocated in a Team Workroom rather than in individual offices. This promotes improved collaboration and coordination of care through increased communication and staff efficiency. Team Workrooms and staff areas should be located so staff members may have private conversations regarding patients and clinical matters without being heard by patients or visitors.

SECTION 4: PROGRAM DATA REQUIRED

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

1. How many annual in-person General Dentistry seatings are projected? (W)
2. How many annual in-person Dental Hygiene seatings are projected? (W)
3. How many annual in-person Prosthodontics seatings are projected? (W)
4. How many annual in-person Endodontics seatings are projected? (W)
5. How many annual in-person Periodontics seatings are projected? (W)
6. How many annual in-person Orthodontics seatings are projected? (W)
7. How many annual in-person Oral Surgery seatings are projected? (W)
 - 7.1. Will Oral Surgery patients be recovered in a dedicated Recovery DTR? (M) (Note: After oral surgery, a patient may recover in the oral surgery DTR, or the patient may be escorted to a dedicated recovery space to complete the recovery process)
8. How many Comprehensive Dentist FTE positions are projected per the authorized manning document? (S)
9. Will Cone-Beam CT Dental Radiograph services be provided in the Dental Clinic? (Misc)
10. Is a Full Service Dental Prosthodontics Laboratory projected to support the Dental Clinic? (M) (Note: A basic dental lab will be provided if a full service lab is not projected)
 - 10.1. How many Prosthodontic Laboratory Technician FTE positions are projected per the official manning document? (S)
 - 10.2. How many Prosthodontic Laboratory Technician FTE positions dedicated to Ceramic / Porcelain production are projected per the official manning document? (S)
11. How many hard copy records are projected to be stored in the Dental Clinic? (Misc)
12. Will the Dental Services staff be calculating medication dosages, preparing the medication and administering it to the patient? (M)

4.2. COMPUTED STATEMENTS.

1. Room Utilization Factor (Computed) (Default: .80)
2. Hours per day (Computed) (Default: 8)
3. Days per year (Computed) (Default: 240)
4. Patient care hours per year (Computed) (Default: [Hours per day] x [Days per year])
5. General Dentistry Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.25)
6. Dental Hygiene Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.0)
7. Prosthodontics Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.83)
8. Endodontics Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.58)
9. Periodontics Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.83)
10. Orthodontics Average Length of Encounter (ALOE) in Hours (Computed) (Default: 1.0)
11. Oral Surgery Average Length of Encounter (ALOE) in Hours (Computed) (Default: 2.0)

12. General Dentistry Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [General Dentistry Average Length of Encounter (ALOE) in Hours])
13. Calculated number of General Dentistry chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person General Dentistry seatings are projected?] / [General Dentistry Chair Workload Capacity]))
14. Dental Hygiene Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Dental Hygiene Average Length of Encounter (ALOE) in Hours])
15. Calculated number of Dental Hygiene chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Dental Hygiene seatings are projected?] / [Dental Hygiene Chair Workload Capacity]))
16. Prosthodontics Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Prosthodontics Average Length of Encounter (ALOE) in Hours])
17. Calculated number of Prosthodontics chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Prosthodontics seatings are projected?] / [Prosthodontics Chair Workload Capacity]))
18. Endodontics Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Endodontics Average Length of Encounter (ALOE) in Hours])
19. Calculated number of Endodontics chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Endodontics seatings are projected?] / [Endodontics Chair Workload Capacity]))
20. Periodontics Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Periodontics Average Length of Encounter (ALOE) in Hours])
21. Calculated number of Periodontics chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Periodontics seatings are projected?] / [Periodontics Chair Workload Capacity]))
22. Orthodontics Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Orthodontics Average Length of Encounter (ALOE) in Hours])
23. Calculated number of Orthodontics chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Orthodontics seatings are projected?] / [Orthodontics Chair Workload Capacity]))
24. Oral Surgery Chair Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Oral Surgery Average Length of Encounter (ALOE) in Hours])
25. Calculated number of Oral Surgery chairs based on workload (Computed) (Default: Round Up From (.5, [How many annual in-person Oral Surgery seatings are projected?] / [Oral Surgery Chair Workload Capacity]))
26. Total number of General Dentistry Treatment Chairs (Computed) (Default: [Dental Treatment Room (DTR), General Dentistry (DNTG1)], [Dental Treatment Room (DTR), Dental Hygiene (DNTG2)], [Dental Treatment Room (DTR), Prosthodontics (DNTP1)],

[Dental Treatment Room (DTR), Endodontics (DNTE1)], [Dental Treatment Room (DTR), Orthodontics (DNTB1)])

27. Total number of Specialty Dentistry Treatment Chairs (Computed) (Default: [Dental Treatment Room (DTR), Comprehensive Dentistry (DNTE1)], [Dental Treatment Room (DTR), Periodontics (DNTP2)], [Dental Treatment Room (DTR), Oral Surgery (DNTE1)])
28. Total number of Dental Treatment Chairs (Computed) (Default: [Total number of General Dentistry Treatment Chairs], [Total number of Specialty Dentistry Treatment Chairs])

4.3. SHORTCUTS.

1. number of General Dentistry chairs: [Calculated number of General Dentistry chairs based on workload]
2. number of Dental Hygiene chairs: [Calculated number of Dental Hygiene chairs based on workload]
3. number of Prosthodontics chairs: [Calculated number of Prosthodontics chairs based on workload]
4. number of Endodontics chairs: [Calculated number of Endodontics chairs based on workload]
5. number of Periodontics chairs: [Calculated number of Periodontics chairs based on workload]
6. number of Orthodontics chairs: [Calculated number of Orthodontics chairs based on workload]
7. number of Oral Surgery chairs: [Calculated number of Oral Surgery chairs based on workload]

SECTION 5: SPACE PLANNING CRITERIA

For calculation of the number of building support spaces (Vestibules, Lobbies, Vending Machine areas, Multi-fixture Public and Staff Toilets, Staff Lounges and Locker Rooms, Conference Rooms, Security Services, Communication Closets, and Janitor Closets), please refer to Chapter 610: Common Areas.

5.1. FA1: RECEPTION.

The spaces in this Functional Area support collocated General & Specialty Dental services.

1. **Waiting (WRC01)** **120 NSF**

- a. Provide one
- b. Provide an additional 64 NSF for every increment of two [Total number of Dental Treatment Chairs] greater than four

The minimum NSF accommodates 6 chairs at 16 NSF and 1 chair at 25 NSF.

2. **Reception (RECP1)** **100 NSF**

- a. Provide one
- a. Provide an additional 50 NSF if [Total number of Dental Treatment Chairs] is greater than sixteen

Minimum allocated NSF accommodates two FTEs.

3. **Kiosk, Patient Check-in (CLSC1)** **15 NSF**

- a. Provide one
- b. Provide an additional one for every increment of sixteen [Total number of Dental Treatment Chairs] greater than sixteen

4. **Records Distribution / Signing (MRWK1)** **30 NSF**

- a. Provide one if the number of [Total number of Dental Treatment Chairs] is at least four
- This room may be collocated with Reception or Records Storage.

5.2. FA2: GENERAL DENTISTRY.

1. **Dental Treatment Room (DTR), General Dentistry (DNTG1)** **130 NSF**

- a. Provide three
- b. Provide an additional one per each [number of General Dentistry chairs] greater than three

The total number of calculated General Dentistry chairs are programmed as single-chair rooms (DNTG1), but can also be programmed as multi-chair rooms (DNTG3 or DNTG4) to meet mission requirements. For each Comprehensive Chair (DNTC1) programmed based on an assigned FTE, manually reduce the total number general dentistry chairs by that number.

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|--|----------------|
| 2. Dental Treatment Room (DTR), Prosthodontics (DNTP1) | 140 NSF |
| a. Provide one per each [number of Prosthodontics chairs] | |
| 3. Dental Treatment Room (DTR), Endodontics (DNTE1) | 130 NSF |
| a. Provide one per each [number of Endodontics chairs] | |
| 4. Dental Treatment Room (DTR), Orthodontics (DNTB1) | 130 NSF |
| a. Provide one per each [number of Orthodontics chairs] | |
| 5. Dental Treatment Room (DTR), Dental Hygiene (DNTG2) | 130 NSF |
| a. Provide one per each [number of Dental Hygiene chairs] | |
| 6. Toilet, Unisex (TLTU1) | 60 NSF |
| a. Provide one | |
| b. Provide an additional one for every increment of sixteen [number of General Dentistry chairs], [number of Prosthodontics chairs], [number of Endodontics chairs], [number of Orthodontics chairs], [number of Dental Hygiene chairs] greater than sixteen | |

5.3. FA3: SPECIALTY DENTISTRY.

Dental treatment spaces in this functional area are classified “Category 2 – General Care Space” as defined in NFPA 99. Because sedation is often required during the procedures performed in these spaces, the facility and specific building systems will need to meet NFPA and UFC 4 510 01 requirements. Providing these spaces in a “suite” configuration allows a designer of record to apply these requirements to a smaller percentage of the overall facility, and reduce lifecycle costs.

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| 1. Dental Treatment Room (DTR), Comprehensive Dentistry (DNTE1) | 130 NSF |
| a. Provide one per each [How many Comprehensive Dentist FTE positions are projected per the authorized manning document?] | |
| The planner should determine whether more than one Comprehensive Dentistry DTR (DNTE1) is programmed per FTE position. The decision for additional comprehensive chairs should include an estimate of anticipated sedation workload. | |
| 2. Dental Treatment Room (DTR), Periodontics (DNTP2) | 130 NSF |
| a. Provide one per each [number of Periodontics chairs] | |
| 3. Dental Treatment Room (DTR), Oral Surgery (DNTE1) | 180 NSF |
| a. Provide one per each [number of Oral Surgery chairs] | |
| 4. Dental Treatment Room (DTR), General Dentistry (DNTG1) | 130 NSF |
| a. Provide one if [number of Oral Surgery chairs] is at least two | |
| b. Provide an additional one for every increment of two [number of Oral Surgery chairs] greater than two | |

Locate proximate to the Oral Surgery DTRs to support follow up assessments.

5. Nurse Station, Substation (NSTA3) 50 NSF

- a. Provide one if [Will Oral Surgery patients be recovered in a dedicated Recovery DTR?]

6. Dental, Recovery (DNTR1) 120 NSF

- a. Provide one if [Will Oral Surgery patients be recovered in a dedicated Recovery DTR?]
- b. Provide an additional one for every increment of two [number of Oral Surgery chairs] greater than two

This space is outfitted similarly to a Phase II recovery cubicle. It shall be in direct line of sight from the Nurse Substation. Planner should determine if it is to be outfitted with a gurney, patient recliner or standard dental treatment chair.

7. Dental, Support, Substerile (DNSS1) 100 NSF

- a. Provide one if the number of [Total number of Specialty Dentistry Treatment Chairs] is at least one

This room is intended to support dental care when the DTR's are arranged in a suite configuration.

8. Toilet, Unisex (TLTU1) 60 NSF

- a. Provide one if [Total number of Specialty Dentistry Treatment Chairs] is at least one
- b. Provide an additional one for every increment of eight [Total number of Specialty Dentistry Treatment Chairs] greater than eight

9. Alcove, Crash Cart (RCA01) 15 NSF

- a. Provide one if [Total number of Specialty Dentistry Treatment Chairs] is at least one

10. Alcove, Blanket / Fluid Warmer (RCA04) 15 NSF

- a. Provide one if [Total number of Specialty Dentistry Treatment Chairs] is at least one

11. Alcove, Wheelchair (SRLW1) 15 NSF

- a. Provide one if [Total number of Specialty Dentistry Treatment Chairs] is at least one

5.4. FA4: DENTAL RADIOGRAPHY.

1. Sub-Waiting, Dental Radiography (WRC03) 60 NSF

- a. Provide one

2. Dental Radiograph, Extraoral Panoramic / Cephalometric (DNXS1) 180 NSF

- a. Provide one

3. Dental Radiograph, Cone-Beam CT (DNXC1) 120 NSF

- a. Provide one if [Will Cone-Beam CT Dental Radiograph services be provided in the Dental Clinic?]

Allocated NSF accommodates Operator Console barrier wall.

5.5. FA5: DENTAL LABORATORIES.

1. Shipping and Receiving, Dental Laboratories (OFA03) 50 NSF

- a. Provide one if [Is a Full Service Dental Prosthodontics Laboratory projected to support the Dental Clinic?]

2. Laboratory Basic Service, Dental Prosthodontics (DNPL1) 240 NSF

- a. Provide one if not [Is a Full Service Dental Prosthodontics Laboratory projected to support the Dental Clinic?]

This space supports pouring impressions, model reduction CAD/CAM milling & same day crown processes, workstations for minor appliance adjustments and repairs.

3. Laboratory Full Service, Dental Prosthodontics (DNPL3) 360 NSF

- a. Provide one if [Is a Full Service Dental Prosthodontics Laboratory projected to support the Dental Clinic?]
- b. Provide an additional 25 NSF per each [How many Prosthodontic Laboratory Technician FTE positions are projected per the official manning document?] greater than two

4. Laboratory Full Service, Porcelain / Ceramics (DNPC1) 120 NSF

- a. Provide one if [Is a Full Service Dental Prosthodontics Laboratory projected to support the Dental Clinic?]
- b. Provide an additional 25 NSF per each [How many Prosthodontic Laboratory Technician FTE positions dedicated to Ceramic / Porcelain production are projected per the official manning document?] greater than one

Minimum NSF accommodates one staff workstation.

5. Storage, Dental Models (DNMS1) 100 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of eight [Total number of Dental Treatment Chairs] greater than eight

5.6. FA6: CLINIC SUPPORT.

1. Medication Room (MEDP1) 100 NSF

- a. Provide one if [Will the Dental Services staff be calculating medication dosages, preparing the medication and administering it to the patient?]

- 2. Workstation, Receiving (OFA03) 50 NSF**
 - a. Provide one
Locate with dental supply
- 3. Clean Utility, Water Production (UCCL1) 100 NSF**
 - a. Provide one
Size and configure based on the water production needs of the total facility and the type of system planned. Considerations that will affect the size of this space include the number of dental treatment chairs; number of instrument washers and sterilizers, chamber size, and daily instrument sets processed; water source quality. Minimum NSF accommodates a service sink, supply storage locker and a basic clean water system appropriate for dental use.
- 4. Dental Instrument Decontamination, Small (DNSC1) 120 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between four and ten
This room is part of a three-room suite: Decontamination, Sterilization and Storage. There should be a pass-through window between Decontamination and Sterilization.
- 5. Dental Instrument Sterilization, Small (DNSC2) 120 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between four and ten
This room is part of a three-room suite: Decontamination, Sterilization and Storage. There may be a rack return window between Sterilization and Storage.
- 6. Dental Instrument Storage, Small (DNSC3) 90 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between four and ten
This room is part of a three-room suite: Decontamination, Sterilization and Storage. The room is used to store sterile dental instrument sets and supplies.
- 7. Dental Instrument Decontamination, Medium (DNSC4) 240 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between eleven and twenty
This room is part of a three-room suite: Decontamination, Sterilization and Storage. There should be a pass-through window between Decontamination and Sterilization.
- 8. Dental Instrument Sterilization, Medium (DNSC5) 320 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between eleven and twenty
This room is part of a three-room suite: Decontamination, Sterilization and Storage. There may be a rack return window between Sterilization and Storage.
- 9. Dental Instrument Storage, Medium (DNSC6) 120 NSF**
 - a. Provide one if [Total number of Dental Treatment Chairs] is between eleven and twenty

This room is part of a three-room suite: Decontamination, Sterilization and Storage. The room is used to store sterile dental instrument sets and supplies.

10. Dental Instrument Decontamination, Large (DNSC7) 360 NSF

- a. Provide one if [Total number of Dental Treatment Chairs] is greater than twenty

This room is part of a three-room suite: Decontamination, Sterilization and Storage. There should be a pass-through window between Decontamination and Sterilization.

11. Dental Instrument Sterilization, Large (DNSC8) 400 NSF

- a. Provide one if [Total number of Dental Treatment Chairs] is greater than twenty

This room is part of a three-room suite: Decontamination, Sterilization and Storage. There may be a rack return window between Sterilization and Storage.

12. Dental Instrument Storage, Large (DNSC9) 150 NSF

- a. Provide one if [Total number of Dental Treatment Chairs] is greater than twenty

This room is part of a three-room suite: Decontamination, Sterilization and Storage. The room is used to store sterile dental instrument sets and supplies.

13. Storage, Dental Supplies (SRS01) 100 NSF

- a. Provide one
- b. Provide an additional 30 NSF for every increment of eight [Total number of Dental Treatment Chairs] greater than eight

14. Utility Room, Soiled (USCL1) 90 NSF

- a. Provide one
- b. Provide an additional one if [Total number of Dental Treatment Chairs] is greater than 50

15. Linen Room, Clean (LCCL4) 60 NSF

- a. Provide one
- b. Provide an additional 30 NSF if [Total number of Dental Treatment Chairs] greater than 50

In larger dental clinics that may occupy more than one story, planner should consider programming additional linen storage room(s) to accommodate point of use linen support on each floor versus expanding one room.

16. Linen Room, Soiled (LCSL2) 90 NSF

- a. Provide one
- b. Provide an additional 30 NSF if [Total number of Dental Treatment Chairs] is greater than 50

17. Storage, Equipment (SRSE1) 100 NSF

- a. Provide one

- b. Provide an additional 30 NSF for every increment of eight [Total number of Dental Treatment Chairs] greater than eight

18. Storage, Gas Cylinder (SRGC2) 40 NSF

- a. Provide one

19. Storage, Chemical / Corrosives (SRHM1) 40 NSF

- a. Provide one

20. Alcove, Equipment (RCA02) 15 NSF

- a. Provide one if [Total number of Dental Treatment Chairs] is at least one

This space is intended to support staging of portable equipment for use in dental care. An example of items staged here could be a CAD/CAM acquisition unit(s) or a vital signs monitor. Additional alcoves can be added depending on the size of the facility or number of DTR's.

21. Dental Equipment Mechanical Room (MECH1) 100 NSF

- a. Provide one

This space is not intended to be a separate room but an allocation of additional net area added to the mechanical gross (mechanical room) in support of dental-specific mechanical equipment (i.e. dental vacuum, dental air, etc.)

5.7. FA7: STAFF AND ADMINISTRATION.

If additional administrative spaces other than those listed in this Functional Area are required to support patient care, consider adding shared offices or cubicles, and include comments with justification in the PFD. Refer to Chapter 210: General Administration for administrative space criteria.

1. Office, Dental Supervisor (OFA04) 100 NSF

- a. Provide one

Provide one for the individual with overall responsibility for the Clinic. If there are other supervisors not accounted for anywhere else, consider adding shared offices and include comments with justification.

2. Team Workroom (WKTm1) 210 NSF

- a. Provide one

Accommodates two dentists at 50 NSF each and 2 dental support staff hot desks at 30 NSF each, and a collaboration area. Adjust the size based on the number of dentists and support staff on the team.

3. Storage, Dental Records (MRS01) 50 NSF

- a. Provide one if [How many hard copy records are projected to be stored in the Dental Clinic?] is at least 1,584
- b. Provide an additional 8 NSF for every increment of 792 [How many hard copy records are projected to be stored in the Dental Clinic?] is greater than 1,584

Minimum allocated NSF accommodates two four-post open style record storage shelving units with a capacity of 19.8 lineal filing feet per unit (40 records per linear filing foot). Collocate with Records Distribution / Signing in the Reception Area.

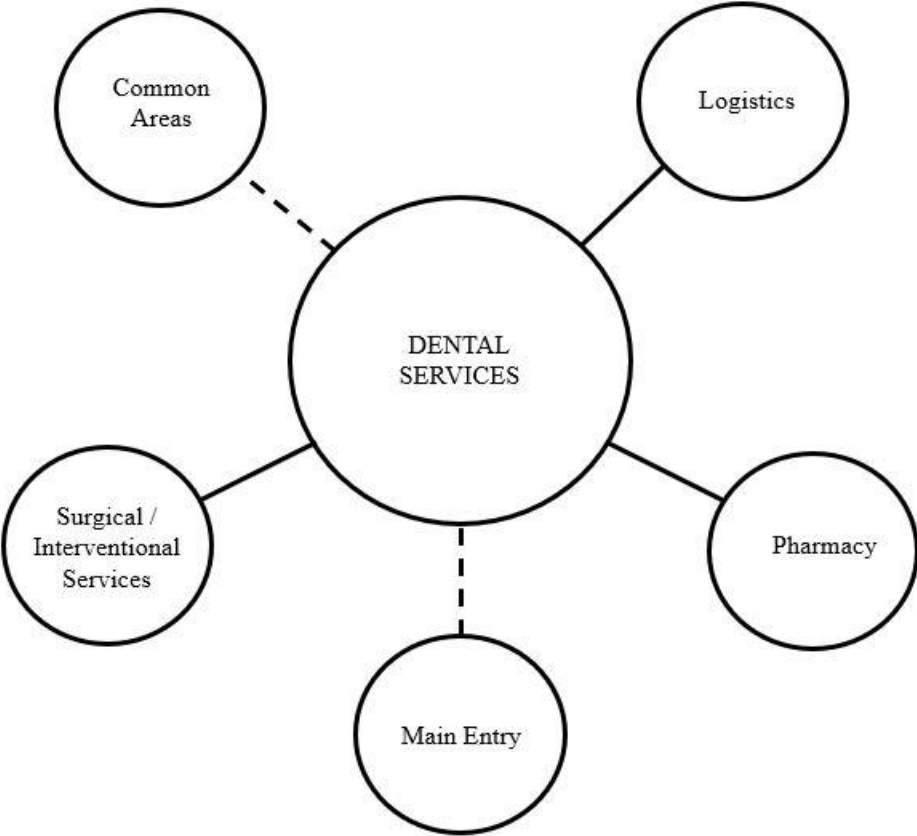
4. Copy / Office Supply (RPR01) 50 NSF

- a. Provide one

Planner must determine the availability and the volume of use of each Copy/Office Supply space within the specific service or the facility in order to share the function and optimize the space requirement for copy areas.

SECTION 6: FUNCTIONAL RELATIONSHIPS (INTERDEPARTMENTAL)

Dental Services will rely on a number of other services in a Military Treatment Facility (MTF) for patient care and support functions when not configured as a stand-alone facility. The diagram does not address Line Unit requirements. The diagram below represents desirable relationships based on efficiency and functional considerations.

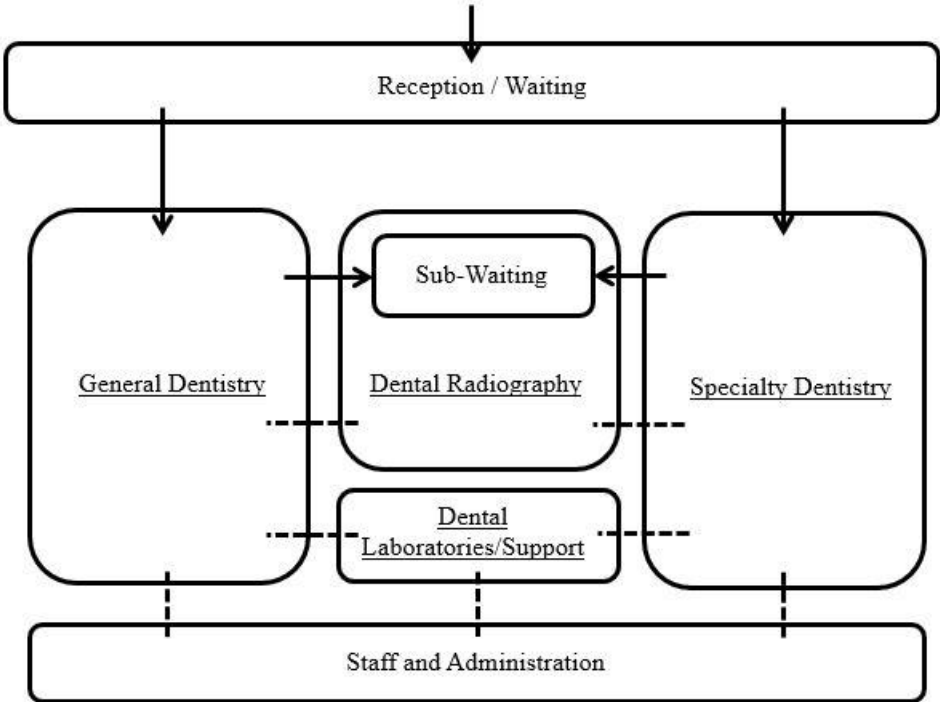


LEGEND
———— Most Critical Adjacency
- - - - Less Critical Adjacency

DENTAL SERVICES



SECTION 7: FUNCTIONAL RELATIONSHIPS (INTRADEPARTMENTAL)

The diagram below illustrates intradepartmental relationships among key areas / spaces within Dental Services. The diagram is necessarily generic. The planner shall use this as a basis for design only and shall consider project-specific requirements for each MTF.



LEGEND

DENTAL SERVICES

-  Patient Circulation
-  Staff Circulation

GLOSSARY

Ambulatory Care Center: A military Medical Treatment Facility (MTF) providing outpatient care services in both a freestanding building, as well as within or directly adjacent to an MTF that provides inpatient-based services.

American Dental Association (ADA): Founded in 1859, the not-for-profit American Dental Association represents a body of dentist members and is the leading source of oral health related information for dentists and their patients. The ADA works to advance the dental profession on the national, state and local level and is committed to the improvement of oral health for the public.

Average Length of Encounter (ALOE): Also referred to as a “Seating”; 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 Dental Treatment Room. The Average Length of Encounter or the Average Length of Seating is used to capture variations in Length of Encounter among similar clinical encounters that will take place in the Dental Treatment Room.

Cephalometric Radiograph: A type of extraoral radiograph that shows the entire side of the head. This type of x-ray is useful in examining the teeth in relation to the jaw and profile of the patient. Orthodontists and Maxillofacial surgeons use Cephalometric projections to develop their treatment plans. This image can be film-based or digital.

Clean Utility Room: This room is used for the storage and holding of clean and sterile supplies. Clean linen may be stored in a designated area in the clean utility room if space is not provided in a separate room or in an alcove.

Comprehensive Dentistry: Comprehensive dentistry is dental care which takes the entire oral system into account when diagnosing and rendering treatment. Through advanced training, to include a two year residency program and board-certification with the American Board of General Dentistry, comprehensive dentists learn how to identify the deeper causes of problems as well as their relevance and how to treat them in a “comprehensive” way in order to prevent their recurrence.

Cone Beam Computed Tomography (CT): Cone Beam 3D Radiography uses a cone-shaped beam to acquire the entire image in a single scan using only one rotation. The result is a more accurate image without missing information with a considerably lower radiation exposure.

Dental Hygiene: A dental specialty providing clinical and therapeutic services under the supervision of a licensed dentist. These services may include prophylaxis (teeth cleaning), sealants, radiography, limited medication administration, and dental education that may be performed by dental hygienists and trained Prophylaxis Technicians.

Dental Hygienist: A healthcare worker who provides clinical and therapeutic dental services under the supervision of a licensed dentist.

Dental Treatment Room (DTR): A properly outfitted room including a dental chair, dental unit, and dental light where clinical dental procedures are performed. A DTR (general dentistry) is equipped to support moderate sedation. A DTR (prosthodontics) is equipped like a DTR (general dentistry), but with additional space to accommodate equipment needed to perform certain prosthodontic laboratory procedures.

Endodontics: According to the American Dental Association (ADA), endodontics is the branch of dentistry which is concerned with the morphology, physiology, and pathology of the human dental pulp and periradicular (surrounding) tissues. Its study and practice encompass the basic and clinical sciences including biology of the normal pulp, the etiology, diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions. The most common therapeutic procedure done in Endodontics is root-canal therapy.

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 (FA): 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.

General Anesthesia: Is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

General Dentistry: The comprehensive evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical, or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body. The general dentist is responsible for the management of the overall oral healthcare needs of the patient and to a limited extent may provide various levels of dental specialty care.

Graduate Dental Education (GDE): A multi-faceted education program composed of theory and practical application that provides an expanded education and the opportunity to develop additional skill in emphasis areas.

Input Data Statement: A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD) (see definition below); based on the space criteria parameters (refer to Section 4) set forth in this document. Input Data Statements are defined as Mission, Workload, Staffing or Miscellaneous.

Laboratory, Dental Porcelain / Ceramics: This space is equipped and used for the construction and molding of dental prosthetics and ceramics, it requires special lighting and environmental controls.

Laboratory, Dental Prosthodontics: This space is equipped to fabricate oral prostheses (bridges, dentures or other artificial devices). Depending on layout, this space can be combined with the other labs in one room. Allocated NSF accommodates space required for Maxillo-Facial Laboratory.

Net Square Feet (NSF): The area of a room or space derived by multiplying measurements of the room or space taken from the inside surface of one wall to the inside surface of the opposite wall.

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 an FTE Tier 1 Supervisor who per DHA guidance, typically oversees 7-10 staff members and performs supervisory functions at least 50% of the time, or other FTE positions that directly interacts with patients for 50% or more of their work day, or require a private room for confidentiality based on their job duties. Union documents must specifically state that a specific FTE is required to have a private space.

Operating Days per Year: The number of days per calendar year a facility is operational for patient care.

Oral Maxillofacial Surgery (OMS): According to the ADA, oral maxillofacial surgery is the specialty of dentistry which includes the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects involving both the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial region.

Orthodontics and Dentofacial Orthopedics: According to the ADA, orthodontics and dentofacial orthopedics is the dental specialty that includes the diagnosis, prevention, interception, and correction of malocclusion, as well as neuromuscular and skeletal abnormalities of the developing or mature orofacial structures. Treatment includes the use of braces, retainers, headgear, and other appliances.

Panoramic Radiograph: A type of extraoral radiograph that shows the teeth in the maxilla and mandible (upper and lower jaws) on a single x-ray using a special x-ray machine. A Panoramic radiograph allows the dentist to detect the position of fully-emerged teeth, identify

impacted and partially impacted teeth, and aid in the identification of structures and diagnosis of pathology within the maxilla and mandible.

Pediatric Dentistry: According to the ADA, pediatric dentistry is an age-defined specialty that provides both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

Periodontics: According to the ADA, periodontics is the specialty of dentistry which encompasses the prevention, diagnosis, and treatment of diseases of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function and esthetics of these structures and tissues. Periodontal disease is a major cause of tooth loss in adults.

Program for Design (PFD): A listing of all of the rooms / spaces generated based on answers to the Input Data Statements (see Section 4) and the space planning criteria outlined in this document (Section 5) in SEPS. The list is organized by Functional Area and includes the Room Quantity, Room Code, Room Name, 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 the Space and Equipment Planning System (SEPS).

Prosthodontics: According to the ADA, prosthodontics is the dental specialty pertaining to the diagnosis, treatment planning, rehabilitation, and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes. These patients have missing or deficient teeth and/or oral tissues that can be rehabilitated with crowns, veneers, fixed and removable partial dentures, and implant-supported prostheses.

Provider: For the purposes of the Space Planning Criteria, a provider is an individual who examines, diagnoses, treats, prescribes medications, or manages the care of patients within the scope of their practice. Dental providers may be dentists; dental hygienists; expanded function dental assistants, or enlisted service members trained to provide care within a dental clinic.

Room Utilization factor: The percentage of time that a room is in use to the time it could be in use over the course of a year. This factor provides flexibility to accommodate variability caused by other resources and processes involved in patient encounters.

Seating: Also referred to as an “encounter” or a dental encounter between an eligible beneficiary and a provider or a technician. An encounter may consist of examination, diagnosis, treatment, evaluation, consultation or counseling or a combination of the above. As an example, one seating may include a cleaning by the dental hygienist, a panoramic radiograph and an exam or procedure by the dental provider, which may occur in one or more Dental Treatment Rooms, and equates to the Average Length of Encounter (ALOE). The Procedure Code A9999 from the Corporate Dental Application (CDA) equates to a seating.

Sedation, Minimal: Is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilatory and cardiovascular functions are unaffected.

Sedation, Moderate: Also referred to as “Conscious Sedation”, is a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.

Sedation/Analgesia, Deep: Is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

Shortcuts: Shortcuts can be used by criteria managers to make the space criteria document more readable. They are used to replace any part of a condition with more readable text.

Soiled Utility Room: This space provides an area for cleanup of medical, dental equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by instrument processing or environmental services. It should be readily accessible to staff.

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 (PRC) list for a DoD 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).

Team Workroom: This space provides staff with an environment conducive to collaboration. The workroom contains computer workstations for documentation and a table with chairs to hold meetings.

Unit Dose: A medication that is purchased or re-packaged in unit-of-use format, typically utilizing barcode technology to facilitate medication management. Unit dose medications can be dispensed directly to patients.

Workload: Space Planning Criteria per DHA Policy takes projected workload into account. In-person patient encounter projections divided by the throughput range included in this document for each DTR assists planners with estimating the quantity of rooms needed to satisfy the projected workload demand.