DoD Space Planning Criteria

Chapter 313: Ophthalmology and Optometry
February 18, 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 February 18, 2022 includes the following:

- Added guidance for Optical Fabrication Lab services under Section 2. Planning and Programming Requirements. Removed all Lab space criteria from this chapter .

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SECTION 1: PURPOSE AND SCOPE

This chapter outlines space planning criteria as it applies to all eligible beneficiaries/ populations receiving Ophthalmology or Optometry services. These services may be located inside or immediately adjacent to an MTF that may include inpatient care, other tertiary specialty services, or full scope ancillary departments.

Ophthalmology services are typically found in an inpatient MTFs, whereas Optometry services are often located in an ambulatory care clinic. Where both Ophthalmology and Optometry services are provided in an MTF, the planner should assume that they will be collocated to support sharing of support spaces and improve staff efficiency.

Space planning criteria for a laser eye center is included in this chapter. Optimally, the laser eye center should be collocated with the Ophthalmology service to support sharing of support spaces, and improve staff efficiency.

An operating room (OR) dedicated to Ophthalmology is not included in this chapter. If a specialty OR of this type is required, the planner must carefully coordinate with Ophthalmology and Surgical Services to program the requirements. Refer to Chapter 440; Surgical, Interventional Services and Ambulatory Surgical Center.

Requirements for an optical fabrication lab are not included in this chapter. The Navy is the DoD Exective Agent for optical fabrication. Locations for labs are based on the high-volume/short-suspense environment that exists at initial entry locations, readiness / deployment platforms where trainees and deploying personnel fall in the 'urgent' category by the Joint Ophthalmic Services regulation (AR 40-63), and to support critical strategic capabilities with a high demand. At the time of publication of this Chapter, there are 22 optical labs across the Optical Fabrication Enterprise (OFE). There are eight Army labs, four are located at the Army initial entry sites (Fort Jackson, Fort Benning, Fort Sill, and Fort Leonard Wood), and four others are located in San Antonio, Texas, Hawaii, Germany, and Korea and they serve critical strategic support missions. In addition, there are seven optometry teams with limited capabilities to fabricate optical orders in the field. The Navy maintains labs at Yorktown (NOSTRA), Quantico, Camp Lejeune, Parris Island, Mayport, Pensacola, Camp Pendleton, San Diego, Bremerton, Yokosuka, Guam, Guantanamo and Okinawa. The Air Force does not operate any optical labs and purchases optical devices from the Army and Navy labs. The planner will coordinate all new lab planning requirements and obtain final programming approval through OFE staff.

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 issue(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 Ophthalmology and Optometry and the 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.

3. Workload is utilized to generate the total number of eye exams (EYOT2) and eye lanes (EYEL2). Where Optometry services are provided to Active Duty beneficiaries who are either aviators or are being treated for Traumatic Brain Injury (TBI), the planner will deduct one EYEL2 from the total number of workload driven eye lane count and replace it with one full, 20-foot eye lane (EYEL1).

4. To enhance patient safety, provide a Medication Safety Zone for the Ophthalmology service. It can be a medication preparation room (MEDP1), or an area in the treatment/procedure room, 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 the ancillary pharmacy, and then administered to the patient by Ophthalmology staff in single, unit doses. In this instance, no medication prep room is required in the Ophthalmology area. If the Ophthalmology staff are calculating dosages, preparing the medication and administering it to the patient, an enclosed Medication Preparation Room (MEDP1) will be programmed in the Ophthalmology area.

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

6. For space criteria requirements to support Graduate Medical Education in the MTF, refer to Chapter 230: Education and Training.

7. The range of room 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) SEPS default: *Please refer to 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

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CLINICAL ENCOUNTERS / PROCEDURES	**AVERAGE LENGTH OF CLINIC ENCOUNTER (minutes)**	**ROOM UTILIZATION FACTOR**	**ANNUAL WORKLOAD PER EXAM / PROCEDURE ROOM (*)**	**MINIMUM ANNUAL WORKLOAD TO GENERATE ONE ROOM (20%)**
Eye Exam, Ophthalmology	40	80%	2,304	461
Visual Fields, Ophthalmology	20	80%	4,655	931
Diagnostic Optical Coherence Topography (OCT)	30	80%	3,072	614
Laser Procedure	30	80%	3,072	614
Electroretinography	30	80%	3,072	614
PRK / LASIK Procedure	30	80%	3,072	614
Eye Lane, Folded, Optometry	40	80%	2,304	461
Vision Screening, Optometry	15	80%	6,144	1,229

See Chapter 110: General for an example calculation.

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 Ophthalmology and Optometry Services 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. 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 technology requirements early on in design. Technology can be leveraged for safety and efficiency.

2. Consider space (temporary or fixed) and IM/IT capabilities for all team members to be able to accomplish their required documentation.

3. The clinic design shall be zoned for patient, visitor, support, and staff areas to improve efficiency. A separate flow will be created between patients and visitors (on stage) and staff (off stage) to optimize privacy, safety, and overall satisfaction. "On Stage" is defined as the Public / Reception Zone and the Patient Care / Treatment Zone. "Off Stage" is defined as the Staff / Administration Zone, the Clinic Support Zone and staff/service corridors.

4. Provide a separate staff/delivery entrance in the off-stage area of the clinics. This will be utilized for patient transport to a higher level of care in the event of an emergency, and it will accommodate an ambulance gurney and delivery carts.

5. Ideally, all Ophthalmology and Optometry services should be collocated, and the sharing of the Reception, Waiting, and support spaces can be combined in the design. See Section 8: Functional Diagram (Intradepartmental) Ophthalmology.

6. Locate Ophthalmology and Optometry Services on the ground floor near the primary building entry and parking for convenient patient access, where feasible.

7. Provide glare-free finishes for flooring.

8. Provide simple, repeating floor patterns with high contrast between flooring and base molding for patients with low vision.

9. Keep signage simple and minimize the number of signs.

10. Consider natural light and dimmable light fixtures in waiting areas. Soft light reduces glare and produces a soothing atmosphere.

3.3. RECEPTION.

1. 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.

2. To maximize speech privacy for patients at Reception, provide open, clear floor area between the waiting seats and Reception.

3. Consider flexible seating options that can accommodate greater demands during peak service hours.

4. Locate the Laser Eye Center Patient Education Room near the front of the Patient Area for patient convenience and to reduce unnecessary traffic through the clinic.

3.4. PATIENT AREA.

1. Eye Exams and Lanes: No eye exam or lane is intended to be dedicated to any specific provider; rather all eye lanes can be used at all times.

2. Provide acoustic privacy by controlling sound transmission between testing rooms, eye lanes, photography rooms, procedure rooms and wherever else patient information is exchanged.

3. Do not locate eye exams, lanes, testing rooms, imaging rooms, procedure rooms, and post-dilation sub-waiting areas at the building exterior with natural lighting from windows.

4. Provide natural lighting only at the main patient waiting area and in staff and administrative areas, whenever possible.

5. Provide dimmable lighting in eye exams, lanes, testing rooms, imaging rooms, and procedure rooms.

6. Layout the eye lanes identically with casework, furniture, and equipment in the same orientation and as similar as possible.

7. Team Workroom: Each care team shall 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.

3.5. CLINIC SUPPORT.

1. Optimize staff efficiency and performance by providing decentralized support spaces (e.g. supplies, medications and equipment). Keep staff travel distances to a minimum.

2. In all equipment storage rooms, assure adequate power is provided for all equipment housed within these rooms.

3. 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.

4. 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.

3.6. STAFF AND ADMINISTRATION.

1. 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.

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 Ophthalmology Eye Exam encounters are projected? (W)
2. How many annual Ophthalmology Visual Fields encounters are projected? (W)
3. How many annual Diagnostic Optical Coherence Topography (OCT) encounters are projected? (W)
4. How many annual Ophthalmology Laser Procedure encounters are projected? (W) (Note: includes Excimer, YAG, SLT, Tuneable red, blue, green and yellow wavelengths dye, and PDT lasers)
5. How many annual Electroretinography encounters are projected? (W)
6. Is a Laboratory / Pathology Reading Room projected to support an Ophthalmology Graduate Medical Education (GME) program? (M)
7. Will the Ophthalmology staff be calculating medication dosages, preparing the medication and administering it to the patient? (M)
8. Is a Laser Eye Center projected to support Ophthalmology services? (M)

   8.1. How many annual Laser Eye Center PRK / LASIK procedures are projected? (W)
9. How many annual Optometry Eye Lane encounters are projected? (W)
10. How many annual Optometry Vision Screening encounters are projected? (W)
11. How many hard copy records are projected to be stored in the Ophthalmology and Optometry clinic area? (Misc)

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. Ophthalmology Eye Exam Average Length of Encounter (ALOE) in Hours (Computed) (Default: .67)
6. Ophthalmology Visual Fields Average Length of Encounter (ALOE) in Hours (Computed) (Default: .33)
7. Diagnostic Optical Coherence Topography (OCT) Average Length of Encounter (ALOE) in Hours (Computed) (Default: .50)

~~21.~~8. Ophthalmology Laser Procedure Average Length of Encounter (ALOE) in Hours (Computed) (Default: .50)

~~21.~~9. Electroretinography Average Length of Encounter (ALOE) in Hours (Computed) (Default: .50)

~~9.~~10. Optometry Eye Lane Average Length of Encounter (ALOE) in Hours (Computed) (Default: .67)

~~10.~~11. Optometry Vision Screening Average Length of Encounter (ALOE) in Hours (Computed) (Default: .25)

~~10.~~12. Laser Eye Center PRK / LASIK Procedure Average Length of Encounter (ALOE) in Hours (Computed) (Default: .50)
~~14.~~10. Ophthalmology Eye Exam Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Ophthalmology Eye Exam Average Length of Encounter (ALOE) in Hours])
14. Calculated number of Ophthalmology Eye Exam rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Ophthalmology Eye Exam encounters are projected?] / [Ophthalmology Eye Exam Workload Capacity]))
15. Ophthalmology Visual Fields Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Ophthalmology Visual Fields Average Length of Encounter (ALOE) in Hours])
~~15.~~16. Calculated number of Ophthalmology Visual Fields rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Ophthalmology Visual Fields encounters are projected?] / [Ophthalmology Visual Fields Workload Capacity]))
~~15.~~17. Diagnostic Optical Coherence Topography (OCT) Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Diagnostic Optical Coherence Topography (OCT) Average Length of Encounter (ALOE) in Hours])
~~9.~~18. Calculated number of Diagnostic Optical Coherence Topography (OCT) rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Diagnostic Optical Coherence Topography (OCT) encounters are projected?] / [Diagnostic Optical Coherence Topography (OCT) Workload Capacity]))
~~21.~~19. Ophthalmology Laser Procedure Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Ophthalmology Laser Procedure Average Length of Encounter (ALOE) in Hours])
~~9.~~20. Calculated number of Ophthalmology Laser Procedure rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Ophthalmology Laser Procedure encounters are projected?] / [Ophthalmology Laser Procedure Workload Capacity]))
~~21.~~20. Electroretinography Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Electroretinography Average Length of Encounter (ALOE) in Hours])
~~22.~~21. Calculated number of Electroretinography rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Electroretinography encounters are projected?] / [Electroretinography Workload Capacity]))
~~22.~~23. Optometry Eye Lane Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Optometry Eye Lane Average Length of Encounter (ALOE) in Hours])
~~26.~~24. Calculated number of Optometry Eye Lanes based on workload (Computed) (Default: Round Up From (.5, [How many annual Optometry Eye Lane encounters are projected?] / [Optometry Eye Lane Workload Capacity]))
~~24.~~25. Optometry Vision Screening Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Optometry Vision Screening Average Length of Encounter (ALOE) in Hours])

26. Calculated number of Optometry Vision Screening rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Optometry Vision Screening encounters are projected?] / [Optometry Vision Screening Workload Capacity]))
27. Laser Eye Center PRK / LASIK Procedure Workload Capacity (Computed) (Default: ([Room Utilization Factor] x [Patient care hours per year]) / [Laser Eye Center PRK / LASIK Procedure Average Length of Encounter (ALOE) in Hours])
28. Calculated number of Laser Eye Center PRK / LASIK Procedure rooms based on workload (Computed) (Default: Round Up From (.5, [How many annual Laser Eye Center PRK / LASIK procedures are projected?] / [Laser Eye Center PRK / LASIK Procedure Workload Capacity]))
~~21.~~29. Total number of Ophthalmology rooms (Computed) (Default: [Eye Exam, Ophthalmology (EYOT2)], [Visual Fields, Ophthalmology (EYVF1)], [Treatment, Ophthalmology (TREY1)], [Photography Room, Ophthalmology (EYFC1)], [Diagnostic Optical Coherence Topography (OCT) Room (EYCT1)], [Laser Procedure, Ophthalmology (TREY2)], [Electroretinography Room (EYER1)])
~~30.~~21. Total number of Laser Eye Center rooms (Computed) (Default: [Laser Eye Center PRK / LASIK Procedure Room (TREY3)], [Laser Eye Center Optical Coherence Topography (OCT) (EYCT1)], [Laser Eye Center Exam Room (EYOT2)])
31. Total number of Optometry rooms (Computed) (Default: [Eye Lane, Folded, Optometry (EYEL2)], [Visual Fields, Optometry [(EYVF1)], [Vision Screening, Optometry (EYVS1)], [Photography Room, Optometry (EYFC1)], [Optical Coherence Tomography (OCT), Optometry (EYCT2)])
~~19.~~22. Total number of Ophthalmology and Optometry rooms (Computed) (Default: [Eye Exam, Ophthalmology (EYOT2)], [Visual Fields, Ophthalmology (EYVF1)], [Treatment, Ophthalmology (TREY1)], [Photography Room, Ophthalmology (EYFC1)], [Diagnostic Optical Coherence Topography (OCT) Room (EYCT1)], [Laser Procedure, Ophthalmology (TREY2)], [Electroretinography Room (EYER1)], [Eye Lane, Folded, Optometry (EYEL2)], [Visual Fields, Optometry (EYVF1)], [Vision Screening, Optometry (EYVS1)], [Photography Room, Optometry (EYFC1)], [Optical Coherence Tomography (OCT), Optometry (EYCT2)])

4.3. SHORTCUTS.

1. number of Eye Exams Ophthalmology: [Calculated number of Ophthalmology Eye Exam rooms based on workload]
2. number of Ophthalmology Visual Fields rooms: [Calculated number of Ophthalmology Visual Fields rooms based on workload]
3. number of Diagnostic Optical Coherence Topography (OCT) rooms: [Calculated number of Diagnostic Optical Coherence Topography (OCT) rooms based on workload]
4. number of Ophthalmology Laser Procedure rooms: [Calculated number of Ophthalmology Laser Procedure rooms based on workload]

5. number of Electroretinography rooms: [Calculated number of Electroretinography rooms based on workload]
6. number of Laser Eye Center PRK / LASIK Procedure rooms: [Calculated number of Laser Eye Center PRK / LASIK Procedure rooms based on workload]
7. number of Optometry Eye Lanes: [Calculated number of Optometry Eye Lanes based on workload]
8. number of Optometry Vision Screening rooms: [Calculated number of Optometry Vision Screening rooms based on workload]

SECTION 5: SPACE PLANNING CRITERIA OPHTHALMOLOGY

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: OPHTHALMOLOGY AND OPTOMETRY RECEPTION.

Where Ophthalmology and Optometry are not collocated, the planner will have to program separate reception areas for each service.

1. Waiting (WRC01) 120 NSF

a. Provide one
b. Provide an additional 64 NSF for every increment of four [Total number of Ophthalmology and Optometry rooms] greater than four

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

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

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Ophthalmology and Optometry rooms] greater than sixteen

3. Reception (RECP1) 100 NSF

a. Provide one
b. Provide an additional 50 NSF for every increment of eight [Total number of Ophthalmology and Optometry rooms] greater than sixteen

Minimum allocated NSF accommodates two FTEs.

5.2. FA2: OPHTHALMOLOGY PATIENT AREA.

1. Sub-Waiting, Dilation Ophthalmology (WRC03) 60 NSF

a. Provide one if [Eye Exam, Ophthalmology (EYOT2)] is at least two
b. Provide an additional 30 NSF for every increment of two [Eye Exam, Ophthalmology (EYOT2)], [Photography Room, Ophthalmology (EYFC1)] greater than two

2. Eye Exam, Ophthalmology (EYOT2) 120 NSF

a. Provide one per each [number of Eye Exams Ophthalmology]

3. Visual Fields, Ophthalmology (EYVF1) 120 NSF

a. Provide one per each [number of Ophthalmology Visual Fields rooms]

4. Vision Screening, Ophthalmology (EYVS1) 120 NSF

a. Provide one if [Eye Exam, Ophthalmology (EYOT2)] is at least two

5. Treatment, Ophthalmology (TREY1) 175 NSF

a. Provide one if [Eye Exam, Ophthalmology (EYOT2)] is at least two

Accommodates any clinical intervention that is deemed "an office procedure."

6. Photography Room, Ophthalmology (EYFC1) 120 NSF

a. Provide one if [Eye Exam, Ophthalmology (EYOT2)] is at least two

Allocated NSF provides space to perform the following imaging tests: Fluorescein Angiograms, ICG Angiography, Fundus Photos, external eye photos, Slit-Lamp and gonio photos.

7. Diagnostic Optical Coherence Topography (OCT) Room (EYCT1) 175 NSF

a. Provide one per each [number of Diagnostic Optical Coherence Topography (OCT) rooms]

This room may also accommodate ultrasound technology as well as Endothelial Cell Counts, Corneal Topography (PAR system).

8. Laser Procedure, Ophthalmology (TREY2) 180 NSF

a. Provide one per each [number of Ophthalmology Laser Procedure rooms]

Accommodates laser instruments, a laser cart, a slit lamp delivery system, safety equipment, and may include more than one laser system.

9. Electroretinography Room (EYER1) 120 NSF

a. Provide one per each [number of Electroretinography rooms]

Accommodates visual digitized equipment for conducting electro-oculographic (EOG), electroretinographic (ERG), and visual evoked cortical potential testing of retina (VER), optic nerve and visual pathway functioning with analysis.

10. Toilet, Unisex Ophthalmology (TLTU1) 60 NSF

a. Provide one
b. Provide an additional one for every increment of eight ([Total number of Ophthalmology rooms]) greater than eight

11. Laboratory / Pathology Reading Room, Ophthalmology, (LBDE1) 120 NSF

a. Provide one if [Eye Exam, Ophthalmology (EYOT2)] is at least two and [Is a Laboratory / Pathology Reading Room projected to support an Ophthalmology Graduate Medical Education (GME) program?]

Accommodates space that is required in Ophthalmology GME programs for residents to perform gross examination of specimens under the microscope.

5.3. FA3: OPTOMETRY PATIENT AREA.

1. Fitting and Dispensing Area, Eye Glass (EYFD1) 100 NSF

a. Provide one

Accommodates two fitting stations with mirrors. Patient sits on one side and optician or technician on other side. May include space for wall frame bars, frame kiosk, display shelf.

2. Storage, Contact Lens and Frames (SRS01) 100 NSF

a. Provide one

3. Fitting and Dispensing Area, Contact Lens (EYCL1) 100 NSF

a. Provide one

Accommodates space for two fitting stations with mirrors. Patient sits on one side and optician or technician on other side.

4. Sub-Waiting, Dilation Optometry(WRC03) 60 NSF

a. Provide one if [number of Optometry Eye Lanes] is at least two
b. Provide an additional 30 NSF for every increment of two [number of Optometry Eye Lanes] greater than four

5. Eye Lane, Folded, Optometry (EYEL2) 120 NSF

a. Provide one per each [number of Optometry Eye Lanes]

Refer to *Section 2, 3.* for guidance on programming a full eye lane.

6. Visual Fields, Optometry (EYVF1) 120 NSF

a. Provide one

7. Vision Screening, Optometry (EYVS1) 120 NSF

a. Provide one per each [number of Optometry Vision Screening rooms]

8. Photography Room, Optometry (EYFC1) 120 NSF

a. Provide one

Allocated NSF provides space to perform the following imaging tests: Fundus Photos, External eye photos, Slit-Lamp and, Corneal Topography (PAR system).

9. Optical Coherence Tomography (OCT), Optometry (EYCT2) 120 NSF

a. Provide one

10. Toilet, Unisex Optometry (TLTU1) 60 NSF

a. Provide one
b. Provide an additional one for every increment of eight [number of Optometry Eye Lanes] greater than eight

5.4. FA4: OPHTHALMOLOGY AND OPTOMETRY CLINIC SUPPORT.

1. Medication Room (MEDP1) 100 NSF

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

2. Utility Room, Clean (UCCL1) 100 NSF

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Ophthalmology rooms] greater than eight

3. Utility Room, Soiled (USCL1) 90 NSF

a. Provide one
b. Provide an additional one for every increment of sixteen [Total number of Ophthalmology and Optometry rooms] greater than sixteen

4. Storage, Equipment (SRSE1) 100 NSF

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Ophthalmology and Optometry rooms] greater than eight

5. Alcove, Wheelchair (SRLW1) 15 NSF

a. Provide one
b. Provide an additional one for every increment of sixteen [Total number of Ophthalmology and Optometry rooms] greater than sixteen

5.5. FA5: OPHTHALMOLOGY AND OPTOMETRY STAFF AND ADMINISTRATION.

1. Office, Ophthalmology Supervisor (OFA04) 100 NSF

a. Provide one

2. Team Workroom Ophthalmology (WKTM1) 380 NSF

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Ophthalmology rooms] greater than eight

Accommodates two providers and one RN work spaces at 50 NSF each, four LPN work spaces and two shared hot desks for techs/medics at 30 NSF each, and a collaboration area. Adjust the size based on the number of providers and support staff on the team. The planner must determine whether each type of specialty will have a dedicated team workroom or if specialties with fewer staff members can be combined in one team workroom with other specialty staff.

3. Office, Optometry Supervisor (OFA04) 100 NSF

a. Provide one

4. Team Workroom Optometry (WKTM1) 380 NSF

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Optometry rooms] greater than eight

Accommodates two providers and one RN work spaces at 50 NSF each, four LPN work spaces and two shared hot desks for techs/medics at 30 NSF each, and a collaboration area. Adjust the size based on the number of providers and support staff on the team.

5. Storage, Patient Records (FILE1) 100 NSF

a. Provide one if [How many hard copy records are projected to be stored in the Ophthalmology and Optometry clinic area?] is at least 3804
b. Provide an additional 8 NSF for every increment of 317 [How many hard copy records are projected to be stored in the Ophthalmology and Optometry clinic area?] greater than 3804

6. 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.

5.6. FA6: LASER EYE CENTER.

FA Condition: [Is a Laser Eye Center projected to support Ophthalmology services?]

Where the Laser Eye Center is shared with, or immediately adjacent to an Ophthalmology service, the planner should evaluate sharing of the following clinic support spaces: medication room, clean and soiled utility rooms, equipment storage, the wheelchair alcove, and record storage.

1. Waiting (WRC01) 120 NSF

a. Provide one
b. Provide an additional 64 NSF for every increment of four [Total number of Laser Eye Center rooms] greater than four

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

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

a. Provide one
b. Provide an additional one for every increment of eight [Total number of Laser Eye Center rooms] greater than sixteen

3. Reception (RECP3) 50 NSF

a. Provide one

4. Alcove, Wheelchair (SRLW1) 15 NSF

a. Provide one

5. Discharge Lounge (WRF01) 120 NSF

a. Provide one
b. Provide an additional 64 NSF for every increment of four [Laser Eye Center PRK / LASIK Procedure Room (TREY3)] greater than two

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

6. Toilet, Unisex (TLTU1) 60 NSF

a. Provide one

Locate adjacent to the Discharge Lounge.

7. Nurse Station, Discharge Lounge (NSTA3) 50 NSF

a. Provide one

The purpose of this Nurse Station is for the observation and monitoring of patients post-procedure. Locate adjacent to the Discharge Lounge.

8. Laser Eye Center Group Education Room (CLSC3) 240 NSF

a. Provide one

9. Laser Eye Center Exam Room (EYOT2) 120 NSF

a. Provide one for every increment of two [Laser Eye Center PRK / LASIK Procedure Room (TREY3)] greater than two

10. Laser Eye Center Optical Coherence Topography (OCT) (EYCT1) 175 NSF

a. Provide one

This room may also accommodate ultrasound technology as well as Endothelial Cell Counts, Corneal Topography (PAR system).

11. Laser Eye Center PRK / LASIK Procedure Room (TREY3) 360 NSF

a. Provide one per each [number of Laser Eye Center PRK / LASIK Procedure rooms]

12. Laser Eye Center Instrument Decontamination Room (CSDE1) 120 NSF

a. Provide one

This room, as part of a two-room suite, is utilized for initial decontamination. There should be a pass-back window between Decontamination and Sterilization.

13. Laser Eye Center Instrument Sterilization Room (CSSS4) 100 NSF

a. Provide one

This room, as part of a two-room suite with the Instrument Decontamination Room, is utilized for Instrument Sterilization.

14. Medication Room (MEDP1) 100 NSF

a. Provide one

15. Utility Room, Clean (UCCL1) 100 NSF

a. Provide one

16. Utility Room, Soiled (USCL1) 90 NSF

a. Provide one

17. Storage, Equipment (SRSE1) 100 NSF

a. Provide one

18. Locker / Changing, Male Staff (LR002) 100 NSF

a. Provide one

19. Locker / Changing, Female Staff (LR002) 100 NSF

a. Provide one

20. Toilet / Shower, Laser Eye Center Staff (TLTS1) 60 NSF

a. Provide two

21. Office, Laser Eye Center Supervisor (OFA04) 100 NSF

a. Provide one

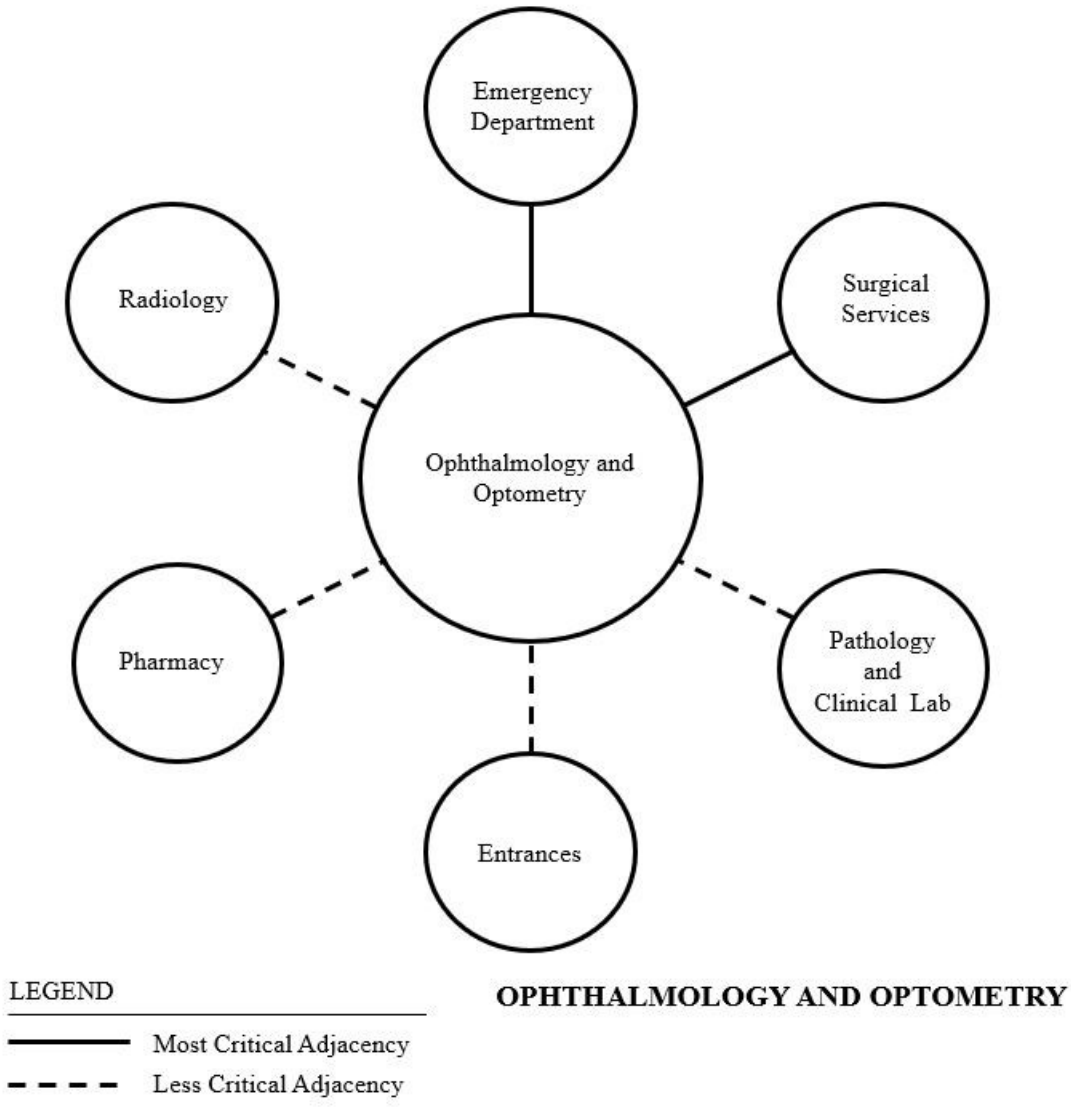
22. Team Workroom (WKTM1) 270 NSF

a. Provide one
b. Provide an additional one for every increment of four [number of Laser Eye Center PRK / LASIK Procedure rooms] greater than four

Accommodates one provider and one RN work space at 50 NSF each, two LPN work spaces and two shared hot desks for techs/medics at 30 NSF each, and a collaboration area.

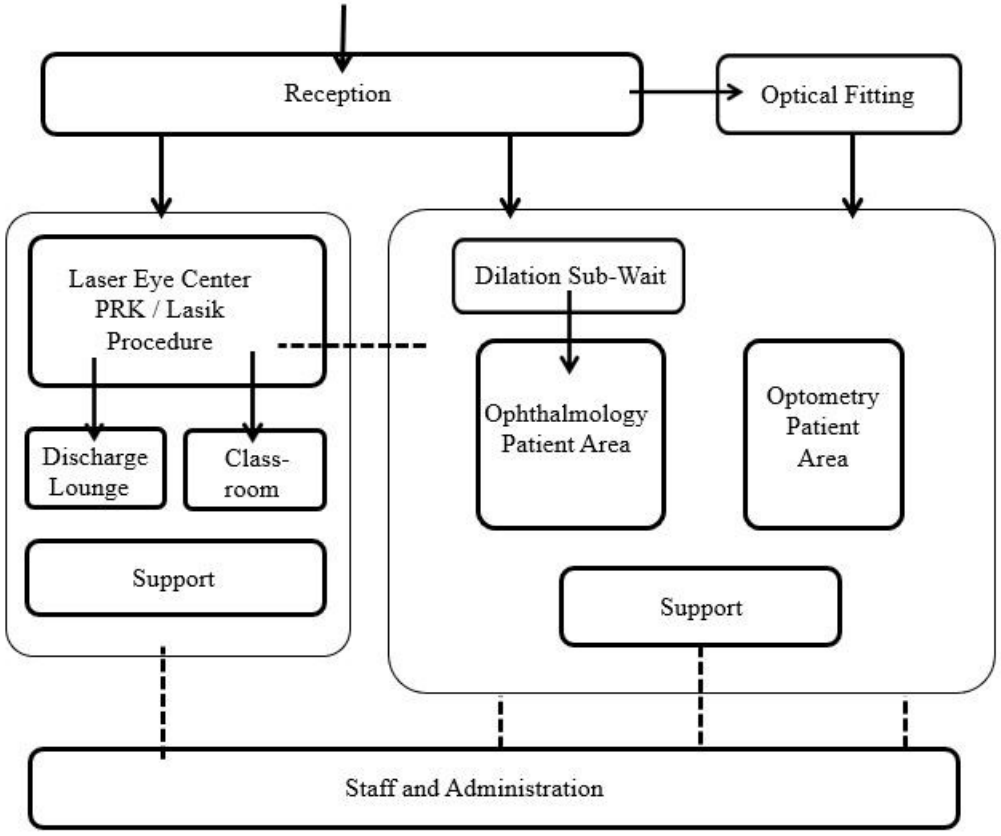
SECTION 6: FUNCTIONAL RELATIONSHIPS (INTERDEPARTMENTAL): OPHTHALMOLOGY AND OPTOMETRY

The Ophthalmology Clinic will rely on a number of other services in the MTF for patient care and support functions. The diagram below represents desirable relationships based on efficiency and functional considerations.



SECTION 7: FUNCTIONAL DIAGRAM (INTRADEPARTMENTAL): OPHTHALMOLOGY AND OPTOMETRY

The diagram below illustrates intradepartmental relationships among key areas / spaces within Ophthalmology and Optometry. 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

OPHTHALMOLOGY AND OPTOMETRY

Patient Circulation

Staff Circulation

GLOSSARY

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 an Exam / Treatment 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.

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.

Cubicle: A cubicle is a partially enclosed workspace, separated from neighboring workspaces by partitions. Staff with no supervisory responsibilities, or who do not deal with confidential information for 75% or more of their work day, as well as part-time, seasonal, and job-sharing staff will be assigned a cubicle.

Diagnostic Technology / OCT Room: This room is for evaluating eye health using various diagnostic technologies. Examples are optical coherence topography (OCT), which provides a high-definition, three-dimensional scan of the retina, and optical ultrasound scanners. The Ophthalmology Clinic and the Laser Eye Center have the potential to utilize more diagnostic equipment than the Optometry Clinic; therefore, this room is sized larger in the Ophthalmology Clinic to accommodate more equipment and is named 'Diagnostic Technology / OCT Room'. In the Optometry Clinic, this room is named 'OCT Room'; it is sized smaller and utilizes a different Room Code.

Electroretinography Room: This room is for performing electrophysiology testing which includes a battery of tests (e.g., Electroretinography), that can be used to provide information about the visual system beyond the standard clinical examination of the eye. Information obtained from these diagnostic tests in conjunction with the clinical exam and other tests helps establish the correct diagnosis or may rule out related ophthalmic diseases.

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 will take place in an exam room, or in other treatment or observation areas. Encounter volume used to generate exam room or other workload driven rooms will not include telephone encounters.

Eye Exam, Ophthalmology: This is the basic exam room used by an ophthalmologist to provide comprehensive care of the eyes and visual system. It is outfitted with equipment specific to ophthalmology, and also has some of the same equipment found in an eye lane to support evaluation of the visual system.

Eye Lane, Optometry: This is the basic exam room used by an optometrist to assess the visual system; it is also referred to as a refraction room or refraction lane. Standard refraction distance is 20 feet or equivalent from eye to chart. This can be achieved with either a full eye lane EYEL1) or an electronic "folded" eye lane (EYEL2). In the folded eye lane, the digital screen is adapted to obtain the correct refractive distance.

Full-Time Equivalent (FTE): A staffing parameter equal to the amount of time assigned to one full time employee. It may be composed of several part-time employees whose total time commitment equals that of a full-time employee. One FTE equals a 40-hour a week workload. The FTE measure may also be used for specific workload staffing parameters such as a clinical FTE; the amount of time assigned to an employee providing clinical care. For example, a 0.5 clinical FTE for a healthcare worker would indicate that the healthcare worker provides clinical care half of the time per a 40-hour work week.

Functional Area (FA): The grouping of rooms and spaces based on their function within a service. Typical Functional Areas in clinical services are Reception, Patient Exam and Treatment Area, Clinic Support, Staff and Administration.

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

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 5) set forth in this document. Input Data Statements are defined as Mission, Workload, Staffing or Miscellaneous.

Laser Eye Center: A service that is approved, staffed and equipped to correct vision (i.e. nearsightedness, farsightedness and astigmatism) via surgical procedures, often using lasers.

LASIK: The acronym for Laser-Assisted In-Situ Keratomileusis. A laser eye surgery procedure whereby a laser is used to reshape the cornea (the clear covering in the front of the eye) without invading adjacent cell layers.

Laser Room: A room specially equipped with laser instruments, a laser cart, a slit lamp delivery system and safety equipment. The Laser Room may include more than one laser system. (e.g. Excimer laser, YAG Laser, SLT Laser, Tuneable dye laser (red, blue, green and yellow wavelengths), PDT)

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 Section 3.

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.

Ophthalmologist: A physician who specializes in the comprehensive care of the eyes and visual system. An Ophthalmologist is medically trained and qualified to diagnose and treat all eye and visual system problems. A major portion of the practice is eye surgery, which may be inpatient or outpatient based.

Ophthalmology Lab / Pathology Reading Room: This is a lab that is required in GME programs for ophthalmology residents to perform gross examinations of tissues under the microscope.

Ophthalmology Services: Ophthalmology services are rendered by a physician who provides care dealing with the structure, functions and diseases of the eye, the performing of certain surgical procedures; and the counseling of patients regarding their surgical alternatives and vision needs as related to their occupations, avocations and lifestyle.

Optical Coherence Tomography (OCT): OCT is a type of imaging technology used for taking cross-sectional pictures of the retina.

Optical Fabrication Lab: This is where an optical laboratory specialist will fabricate and dispense prescription military eyewear. Repairs will also be made in this lab.

Optical Fitting Area: An area adjacent to the waiting room of the Optometry Clinic which is used to display and fit eyeglass frames and provided contact lens fitting.

Optometrist: Doctors of Optometry are independent providers who examine diagnose, treat and manage diseases and disorders of the visual system, the eye and associated structures, as well as diagnose related systemic conditions.

Optometry Services: These services are provided by an optometrist who provides comprehensive eye health and vision examinations; diagnosis and treatment of eye diseases and vision disorders, the detection of general health problems; the prescribing of glasses, contact lenses, low vision rehabilitation, vision therapy, and medications; the performing of certain surgical procedures; and the counseling of patients regarding their treatment alternatives and vision needs as related to their occupations, avocations and lifestyle.

Photography Room: Room where medical photography of the eye takes place. Specialized cameras are used to document and diagnose disease conditions of the eye. Upon completion of the photography session, the patient will either return to the doctor to go over the photos, discuss treatment (which can include laser eye treatment), or go home.

Procedure Room, Ophthalmology: The Procedure Room is designed for any treatment that requires surgical intervention that is deemed "an office procedure". Procedures commonly performed in this space are chalazion excisions, tarsorrhaphy, biopsy, eyelid tumors, suture external eyelid lacerations, and pterygium removal.

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 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.

PRK: The acronym for Photorefractive Keratectomy. A laser eye surgery procedure intended to correct a person's vision.

PRK / LASIK Procedure Room: Room where laser eye surgery for vision correction is performed.

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. Smaller clinics should assume a lower utilization factor than larger clinics, because operational issues like provider and support staff absences and seasonal demand fluctuations have more significant impacts on patient scheduling.

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).

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 equipment and instruments, and for disposal of medical waste material. It provides temporary holding for material that will be picked up by Sterile Processing or Environmental Services.

Sub-Waiting, Dilation: Prior to an eye examination, the patient may receive eye drops to dilate the pupil. This is a secondary waiting area for patients who are waiting for their eyes to dilate, and it should be located adjacent to the eye lanes.

Team Workroom: This space provides staff with an environment conducive to collaboration. The workroom 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. Usually, the telehealth room should be equipped as an exam room or as a consult room with mobile video / camera capability to support transmission of patient information to a remote receiving location.

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.

Visual Fields: Tests for determining the extent of peripheral vision and blind spots within a patient's field of vision.

Visual Screening: This is the general eye examination before refraction.

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 exam room assists planners with estimating the quantity of rooms needed to satisfy the projected workload demand.