CHAPTER 402: EDUCATIONAL FACILITIES

1	Purpose and Scope	402-2
2	Definitions	402-2
3	Operating Rationale and Basis of Criteria	402-4
4	Program Data Required (Input Data Questions)	402-5
5	Space Criteria	402-6
6	Planning and Design Considerations	102-11
7	Functional Relationships	102-13
8	Functional Diagram	102-14

1 PURPOSE AND SCOPE

- A. This document outlines Space Planning Criteria for Chapter 402: Educational Facilities. It applies to all medical facilities of the Department of Veterans Affairs (VA).
- B. This chapter describes space for the facility Educational Program. This includes administration, large conferencing areas such as auditoriums, specialized education space such as simulation areas and demonstration and computer classrooms, satellite reception and other centralized educational facilities. Educational facilities described in this chapter are not otherwise accounted for in the separate departmental chapters.
- C. Space planning criteria for educational facilities within the Clinical, Clinical Support, and Administrative Support Chapters (NAMES of the 3 Types of chapter grouping here) are generally provided at the departmental (chapter) level. Each separate chapter has a functional area for education which includes space for offices, workrooms, team rooms, classrooms, and conference areas. This space will be utilized by employees, departmental educational staff, and administrative and clinical trainees.
- D. Guidance for Planners: Provide clinical, departmental educational space either at the departmental (chapter) level or alternatively in this chapter. Do not duplicate space.

2 DEFINITIONS

- A. Accredited Educational Programs for Trainees:
 - 1. Medical/Dental Programs: Healthcare academic programs in allopathic and osteopathic medicine or dentistry.
 - 2. Associated Health Education Programs: Educational programs other than allopathic and osteopathic medicine and dentistry.
 - 3. Non-clinical Programs: Programs in which trainees are not involved directly with patient care but may train in patient care areas and have incidental patient contact.
- B. <u>Affiliated</u>: An arrangement whereby a VA signs an affiliation agreement with an education institution or program sponsor in order to have trainees receive clinical training in the VA.
- C. <u>Clinic Stop</u>: A clinic stop is one encounter of a patient with a healthcare provider. Per these criteria, the clinic stop is the workload unit of measure for space planning. One individual patient can have multiple clinic stops in a single visit or in one day.
- D. <u>Concept of Operations</u>: A user-developed guide to the functional operation of the VA healthcare facility. It defines the function of the facility and the scope of medical services, or Educational Facilities, to be provided in the new or remodeled space.
- E. <u>Educational Facilities</u>: A variety of space configurations for employee or trainee education. These are designed to provide for a variety of training modalities such as face-to-face conferences, workgroup sessions, demonstrations/simulations, clinical care with trainees present, satellite broadcasts, V-Tel, single or multiple computer

- workstations configured to receive web-based training and CDN (Content Distribution Network).
- F. <u>Full-Time Equivalent (FTE)</u>: 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 hours per week.
- G. <u>Functional Area</u>: The grouping of rooms and spaces based on their function within a clinical service. Typical Functional Areas are Reception Areas, Patient Areas, Support Areas, Staff and Administrative Areas, Residency and / or Externship Program Areas.
- H. House staff (residents): Graduate physicians who are following accredited training programs leading to competence or specialization in a particular field. The term "residents" includes lower level residents such as interns, and higher level residents such as fellows.
- Input Data Statement: A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD) based on the criteria parameters set forth in this document. Input Data Statements could be Mission related, based in the project's Concept of Operations; and Workload or Staffing related, based on projections and data provided by the VHA or the VISN about the estimated model of operation. This information is processed through mathematical and logical operations in SEPS.
- J. <u>MTOT</u>: Acronym for <u>Maximum Number of <u>Trainees Typically on Duty at one Time</u>. The number of clinical trainees being instructed in the Department of Veterans Affairs (VA) medical center at the same time.</u>
- K. <u>Program for Design (PFD)</u>: A space program based on criteria set forth in this document and specific information about Concept of Operations, workload projections and staffing levels authorized.
- L. Room Efficiency Factor: A factor that provides flexibility in the utilization of a room to account for delays, scheduling conflicts, and equipment maintenance. Common factors are in the 80 to 85% range. A room with 80% room efficiency provides a buffer to assume that this room would be available 20% of the time beyond the planned operational practices of the room. This factor may be adjusted based on the actual and/or anticipated operations and processes of the room / department.
- M. <u>SEPS (VA-SEPS)</u>: Acronym for Space and Equipment Planning System, a digital tool developed by the Department of Defense (DoD) and the Department of Veterans Affairs to generate a Program for Design (PFD) and an Equipment List for a VA healthcare project based on specific information entered in response to Input Data Questions. VA-SEPS incorporates the propositions set forth in all VA space planning criteria chapters. VA-SEPS has been designed to aid healthcare planners in creating a space plan based on a standardized set of criteria parameters.
- N. <u>Trainees</u>: A general term to describe all undergraduate, graduate and advanced students, interns, residents, fellows and VA special fellows; at a variety of pre- and post- baccalaureate and pre- and post- doctoral levels who spend all or part of their

- clinical training time at VA facilities. Some trainees may also rotate in non-clinical training areas.
- O. Workload: Workload is the anticipated number of procedures or suite stops that is processed through a department/service area. The total workload applied to departmental operational assumptions to determine overall room requirements by modality.

3 OPERATING RATIONALE AND BASIS OF CRITERIA

- A. Workload Projections or planned services / modalities for a specific VA medical center, hospital or satellite outpatient clinic project are provided by the VA Central Office (VACO) / VISN CARES Capacity Projection Model. The workload projections are generated by methodology based upon the expected veteran population in the respective market / service area. Healthcare planners working on VA medical center, hospital or satellite outpatient clinic projects will utilize and apply the workload based criteria set forth for identified services and modalities to determine room requirements for and staffing for each facility.
- B. Space planning criteria have been developed on the basis of an understanding of the activities involved in the functional areas of Educational Facilities 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 heath care for Veterans.
- C. Educational Facilities include space for administration, professional conferences, offices, workrooms, simulation/demonstration classrooms, computer classrooms, interview / consultation classrooms, study areas, educational auditorium and facilities to accommodate distance learning program equipment needs.
- D. These criteria are subject to modification relative to development in the equipment, medical practice, vendor requirements, and subsequent planning and design. The selection of the size and type of Educational equipment is determined by VACO and upon Veterans Health Administration (VHA) anticipated medical needs.

4 PROGRAM DATA REQUIRED (Input Data Questions)

- A. Mission Input Data Statements
 - 1 Is an Employee Education Director FTE position authorized? (M)
 - 2 Is an Educational Auditorium authorized? (M)
 - a. Is a Stage / Instructional Area authorized? (M)
 - 3 Is a Computer Lab authorized? (M)
 - 4 Is a Video Conference Room authorized? (M)
 - 5 Is a Simulation Lab authorized? (M)

B. Workload Input Data Statements

1 How many inpatient beds are projected? (W)

C. Staffing Input Data Statements

- 1 How many Designated Learning Officer FTE positions are authorized? (S)
- 2 How many Associate Chief of Staff (ACOS) for Education FTE positions are authorized? (S)
- 3 How many Education Administrative Assistant FTE positions are authorized? (S)

- 4 How many ACOS Secretary FTE positions are authorized? (S)
- 5 How many Educator FTE positions are authorized? (S)
- 6 How many Instructor FTE positions are authorized? (S)
- 7 How many Workforce Development Coordinator FTE positions are authorized? (S)
- 8 How many High Performance Development Coordinator FTE positions are authorized? (S)
- 9 How many Education Technician FTE positions are authorized? (S)
- 10 How many Associate Chief for Nursing Education FTE positions are authorized? (S)
- 11 How many Nursing Education Secretary FTE positions are authorized? (S)
- 12 How many Nursing Instructor FTE positions are authorized? (S)
- 13 How many House Staff -for the whole facility- FTE positions are authorized? (S)
- 14 How many MTOT (Students / Trainees) -for the whole facility- are projected? (S)
- D. Miscellaneous Input Data Statements
 - 1 How many FTEs will work on peak shift? (Misc)
 - 2 How many FTE positions are not authorized to have office or cubicle space? (Misc)

5 SPACE CRITERIA

- A. FA 1: Staff and Administrative Areas:
 - 1. **Designated Learning Officer (DLO) (OFC02)......150 NSF (14.0 NSM)**Provide one per each Designated Learning Officer FTE position authorized.

 - 3. Office, Director, Employee Education (OFCO2)......150 NSF (14.0 NSM) Provide one per Employee Education Director FTE position authorized.
 - 4. Office, Education
 Administrative Assistant (OFA01/OFA02)120 NSF (11.2 NSM)
 Provide one per each Education Administrative Assistant FTE position authorized;
 provide OFA01 if standard furniture is authorized; or, OFA02 if systems furniture is authorized.
 - 5. Office, Secretary / Waiting (SEC01)120 NSF (11.2 NSM) Provide one per each ACOS Secretary FTE position authorized.
 - 6. Office, Educator / Instructor (OFA01/OFA02)......120 NSF (11.2 NSM) Provide one per each Educator and Instructor FTE position authorized.
 - 7. Office, Workforce
 Development Coordinator (OFA01/OFA02)120 NSF (11.2 NSM)
 Provide one per each Workforce Development FTE position authorized.

8. Office, High Performance Development Coordinator (HPDM) (OFA01/OFA02) 120 NSF (11.2 NSM) Provide one per each High Performance Development Coordinator FTE position authorized. 9. Cubicle, Education Technician (OFA03)80 NSF (7.5 NSM) Provide one per each Education Technician FTE position authorized. 10. Conference Room (CRA02)......250 NSF (23.2 NSM) Provide one per Education Facilities. 11. Storage Room (SRS01)......80 NSF (7.5 NSM) Provide one per Education Facilities B. FA 2: Nursing Education and Training 1. Office, Associate Chief Nurse for Education (OFA01/OFA02)150 NSF (14.0 NSM) Provide one per Associate Chief for Education FTE position authorized; provide OFA01 if standard furniture is authorized; or, OFA02 if systems furniture is authorized. 2. Office, Secretary/Waiting (SEC01)......120 NSF (11.2 NSM) Provide one per Secretary FTE position authorized. 3. Office, Nursing Instructor (OFA01/OFA02)120 NSF (9.3 NSM) Provide one per Nursing Instructor FTE position authorized; provide OFA01 if standard furniture is authorized; or, OFA02 if systems furniture is authorized. 4. Conference/Classroom (CLR02).......400 NSF (37.2 NSM) Minimum NSF; provide an additional 370 NSF if total number of projected number of inpatient beds for the facility is greater than three hundred and fifty. This space is used for classes dealing with ongoing educational requirements, e.g. CPR training, mandatory classes per employee in areas of fire and safety. patient abuse and assaultive behavior. 5. Storage (SRS01)......100 NSF (9.3 NSM) Provide one per Nursing Education and Training.

C. FA 3: Education Auditorium:

Each VA Medical Center should have access to an auditorium capable of seating the projected number of employees and trainees for such activities as medical centerwide conferences, grand rounds lectures, in-service orientation, and training programs.

1. Educational Auditorium (AUD01)(Formula Below and Table 1)

Provide one if an Educational Auditorium is authorized.

Total FTE positions authorized for the facility = Total Number of Seats Maximum: 300 Seats Minimum of 50? Multifunctional space

TABLE 1: SEATING CALCULATION

NUMBER OF SEATS	NSF PER SEAT
20 - 100	4 NSF
100 – 200	Additional 7 NSF
200 - 300	Additional 9 NSF

2. Stage or Instruction Area (AUD01).....(Table 2)

Provide one if Educational Auditorium is authorized.

TABLE 2: SEATING CALCULATION

NUMBER OF SEATS	NSF PER SEAT	
20 - 200	2 NSF	
200 - 300	Additional 1.5 NSF	

- 3. **Media Control Room (XXYYC)......120 NSF (11.2 NSM)**Provide one if Educational Auditorium is authorized.
- 4. Storage, Equipment (SRE01)......120 NSF (11.2 NSM) *Provide one if Educational Auditorium is authorized.*
- 5. **Storage, Moveable Furniture (SRS02)**300 NSF (NSM) *Provide one if Educational Auditorium is authorized.*
- 6. Multipurpose Room (CRA02)......200 NSF (18.6 NSM) Minimum NSF, provide an additional 2.5 NSF per each FTE position authorized greater than fifty.
- 8. **Toilet, Female Public (TLTF2)......100 NSF (9.3 NSM)**Minimum NSF if total number of projected seats is between twenty and one hundred; provide an additional 40 NSF for every increment of one hundred seats greater than one hundred.
- 9. Housekeeping Aides Closet HAC (JANC1)40 NSF (3.8 NSM) Minimum one; provide an additional one if total number of FTE positions authorized is greater than 150.

D. FA 4: Other Education Areas:

- 1. Computer Lab (CMP01)......400 NSF (37.2 NSM) Provide one if authorized.
- 2. Video Conference Room (CRA02)......300 NSF (27.9 NSM) Provide one if authorized.

Allocates area includes storage.

E. FA 5: Staff Lounge, Lockers and Toilets:

The spaces below provide programming of Lounge, Lockers, and Toilets at department / service / chapter level. Alternatively, sum all departments/services data for Lockers, Lounges and Toilets, and program space in Chapter 410-EMS Lockers, Lounges, Toilets and Showers. Either/or – do not duplicate space. Provide locker space only for those FTEs without office or cubicle space.

For less than five FTE combine Lounge facilities with adjacent department or sum in chapter 410.

Provide locker space only for those FTEs without assigned office or cubicle space. For less than five FTE combine Locker Room facilities with adjacent department or sum in chapter 410.

3. **Toilet, Staff (TLTU1).......55 NSF (5.1 NSM)** *Minimum one; provide an additional staff toilet for each increment of five projected FTEs on peak shift greater than thirteen.*

6 PLANNING AND DESIGN CONSIDERATIONS

- A. Departmental net-to-gross gross factor **(DNTG)** for Educational Facilities is **1.30**. This number when multiplied by the programmed net square foot (NSF) area determines the departmental gross square feet.
- B. Space shall be configured and available to provide for both individual and interactive group education.
- C. Space to contain the basic computer / software configuration to host satellite broadcasts, video to the desk-top, V-tel, and web-based learning.
- D. Space to be provided away from individual work-stations so employees can have uninterrupted time devoted to education.
- E. Clinical trainees, such as physician residents on inpatient rotations, who are involved in direct patient care, to have workrooms configured to support all types of education and defined medical and information technology to support the treatment of patients. This space should be in close proximity to patient care areas (i.e., in or near the

- assigned inpatient units or wards). Each assigned resident should have sufficient space to accommodate a computer work-station.
- F. Space to be provided in close proximity to other designated educational personnel such as in Library and Medical Media to allow for professional guidance. Refer to Chapter 400: Library Service: and Chapter 248: Medical Media Service.
- G. Space to be provided should be integrated and flexible to allow for multi-staff use, to accommodate individual or group educational activities in a variety of capacities. The range of capacities should be designed for maximum efficiency and effectiveness.
- H. Space for educational activities must be flexible and available throughout the facility to provide multiple options for all employees.
- I. Physician residents and other clinical trainees who are required to take in-hospital "call" must be provided with suitable on call sleeping quarters and other appropriate space (e.g., bathrooms with showers, eating facilities) within proximity to the sleeping quarters and within the hospital. On call space to be assigned must include space for computer terminals or workstations. See Chapter 98: Quarters On Call.
- J. Clinical areas in which trainees are normally present along with supervising or attending practitioners should be designed to accommodate more than one practitioner, while taking into account the need for patient privacy. Such areas may include procedure rooms, operating rooms, or clinic exam rooms, in which teaching occurs in conjunction with the provision of clinical care on a regular basis. In most clinical areas, team rooms are required to facilitate the supervision of trainees while ensuring the confidentiality of patient information.

7 FUNCTIONAL RELATIONSHIP

Relationship of Educational Facilities to services listed below:

TABLE 3: FUNCTIONAL RELATIONSHIP MATRIX

SERVICE	RELATIONSHIP	REASON
Ambulatory Care	3	K (Staff
•		Convenience)
Nursing Units: Medical, Surgical, and	3	K (Staff
Neurological	3	Convenience)
Nursing Units: Mental Health, Behavior	3	K (Staff
Sciences, Substance Abuse	3	Convenience)
Director Suite	2	K (Staff
Director Suite	3	Convenience)
athology and Laboratory	3	K (Staff
		Convenience)

Legend:

Relationship

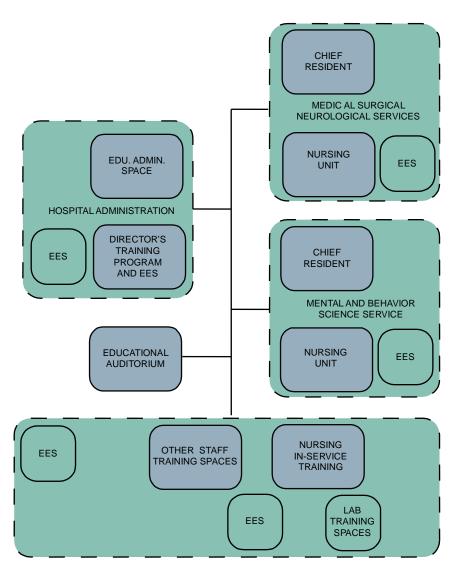
- 1. Adjacent
- 2. Close / Same Floor
- 3. Close / Different Floor Acceptable
- 4. Limited Traffic
- X. Separation Desirable

Reasons:

(Use as many as appropriate)

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

8 FUNCTIONAL DIAGRAM



EES: Employee Education spaces