

## CHAPTER 402: EDUCATIONAL FACILITIES

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## 1 PURPOSE AND SCOPE

This document outlines Space Planning Criteria for Chapter 402: Educational Facilities. It applies to all medical facilities of the Department of Veterans Affairs (VA).

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.

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, work spaces, workrooms, team rooms, classrooms, and conference areas. This space will be utilized by employees, departmental educational staff, and administrative and clinical trainees.

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

Accredited Educational Programs for Trainees:

- A. Medical/ Dental Programs: Healthcare academic programs in allopathic and osteopathic medicine or dentistry.
- B. Associated Health Education Programs: Educational programs other than allopathic and osteopathic medicine and dentistry.
- C. 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.

Accessible: A site, building, facility, or portion thereof that complies with provisions outlined in the Architectural Barriers Act of 1968 (ABA).

Architectural Barriers Act (ABA): A set of standards developed to insure that all buildings financed with federal funds are designed and constructed to be fully accessible to everyone. This law requires all construction, renovation, or leasing of sites, facilities, buildings, and other elements, financed with federal funds, to comply with the Architectural Barriers Act Accessibility Standards (ABAAS). The ABAAS replaces the Uniform Federal Accessibility Standards (UFAS).

Affiliated: 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.

Clinic Stop: 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.

Educational Facilities: 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).

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 hours per week.

Functional Area: 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.

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.

MTOT: Acronym for Maximum Number of Trainees Typically on Duty at one Time. The number of clinical trainees being instructed in the Department of Veterans Affairs (VA) medical center at the same time.

Program for Design (PFD): A space program based on criteria set forth in this document and specific information about Concept of Operations, workload projections and staffing levels authorized.

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.

SEPS (VA-SEPS): Acronym for Space and Equipment Planning System, a digital tool developed by the Department of Defense (DoD) and the Department of Veterans Affairs to generate a Program for Design (PFD) and 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.

Trainees: 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.

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 health care for Veterans.
- C. Educational Facilities include space for administration, professional conferences, offices, work spaces, 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 INPUT DATA STATEMENTS

##### A. Mission Input Data Statements

- 1. Is an Educational Auditorium authorized? (M)
  - a. Is a Stage / Instructional Area authorized? (M)
- 2. Is a Computer Lab authorized? (M)
- 3. Is a Conference Room in the Education Laboratory Area authorized? (M)
- 4. 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 Employee Education Director FTE positions are authorized? (S)
- 4. How many Education Administrative Assistant 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 Instructor FTE positions are authorized? (S)
- 12. How many House Staff -for the whole facility- FTE positions are authorized? (S)
- 13. 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 an office or work space? (Misc)

**5 SPACE CRITERIA**

**A. FA 1: Staff and Administrative Area:**

1. **Workstation, Designated Learning Officer (DLO) (OFA07)..... 56 NSF (5.3 NSM)**  
*Provide one per each Designated Learning Officer FTE position authorized.*
2. **Office, Educational Facilities Associate Chief of Staff (ACOS) (OFA09)..... 100 NSF (9.3 NSM)**  
*Provide one per each ACOS FTE position authorized.*
3. **Office, Employee Education Director (OFA09) ..... 100 NSF (9.3 NSM)**  
*Provide one per each Employee Education Director FTE position authorized.*
4. **Workstation, Education Administrative Assistant (OFA07) ..... 56 NSF (5.3 NSM)**  
*Provide one per each Education Administrative Assistant FTE position authorized.*
5. **Waiting (WTG03)..... 80 NSF (7.5 NSM)**  
*Provide one for Education Facilities.*  
  
Allocated space accommodates one standard chair @ 9 NSF, one bariatric chair @ 14 NSF, one accessible space @ 10 NSF, and circulation; total three people.
6. **Workstation, Secretary (OFA07) ..... 56 NSF (5.3 NSM)**  
*Provide one for Education Facilities.*
7. **Workstation, Educator / Instructor (OFA07)..... 56 NSF (5.3 NSM)**  
*Provide one per each Educator and Instructor FTE position authorized.*
8. **Workstation, Workforce Development Coordinator (OFA07)..... 56 NSF (5.3 NSM)**  
*Provide one per each Workforce Development FTE position authorized.*
9. **Workstation, High Performance Development Coordinator (HPDM) (OFA07)..... 56 NSF (5.3 NSM)**  
*Provide one per each High Performance Development Coordinator FTE position authorized.*
10. **Workstation, Education Technician (OFA07)..... 56 NSF (5.3 NSM)**  
*Provide one per each Education Technician FTE position authorized.*
11. **Conference Room (CFR01)..... 240 NSF (22.2 NSM)**  
*Provide one for Education Facilities.*  
  
Allocated NSF accommodates six conference chairs @ 7.5 NSF each, two 5'-0" x 2'-0" tables at 10 NSF each, one credenza @ 8 NSF, and circulation; total six people.
12. **Storage Room (SRS01) ..... 80 NSF (7.5 NSM)**  
*Provide one for Education Facilities.*

13. **Lounge, Staff (SL001) .....80 NSF (7.5 NSM)**  
*Minimum NSF; provide an additional 15 NSF per each Educational Facilities FTE position working on peak shift greater than five; maximum 210 NSF.*

14. **Locker Room, Staff (LR001) .....80 NSF (7.5 NSM)**  
*Minimum NSF if total number of Educational Facilities FTE positions not authorized to have office or work space is between five and thirteen; provide an additional 6 NSF per each Educational Facilities FTE position not authorized to have office or work space is greater than thirteen.*

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

15. **Toilet, Staff (TNPG1) .....60 NSF (5.6 NSM)**  
*Minimum one; provide an additional one for every increment of fifteen Educational Facilities FTE positions working on peak shift greater than fifteen.*

Allocated NSF accommodates one accessible toilet @ 25 NSF, one wall-hung lavatory @ 12 NSF, ABA clearances, and circulation.

**B. FA 2: Nursing Education and Training Area:**

1. **Office, Associate Chief for Nursing Education (OFA09) .....100 NSF (9.3 NSM)**  
*Provide one per each Associate Chief for Nursing Education FTE position authorized.*

2. **Waiting (WTG03).....80 NSF (7.5 NSM)**  
*Provide one for Nursing Education and Training.*

Allocated space accommodates one standard chair @ 9 NSF, one bariatric chair @ 14 NSF, one accessible space @ 10 NSF, and circulation; total three people.

3. **Workstation, Secretary (OFA07) .....56 NSF (5.3 NSM)**  
*Provide one for Nursing Education and Training.*

4. **Workstation, Nursing Instructor (OFA07) .....56 NSF (5.3 NSM)**  
*Provide one per each Nursing Instructor FTE position authorized.*

5. **Training Room, Staff (CLR10) .....545 NSF (50.7 NSM)**  
*Provide one if the projected number of inpatient beds is equal or less than three hundred and fifty; provide CLR11 if the projected number of inpatient beds is greater than three hundred and fifty*

CLR10: Allocated NSF accommodates sixteen task chairs @ 7.5 NSF each, eight 5'-0" x 2'-0" tables at 10 NSF each, one credenza @ 8 NSF, one lectern @ 9 NSF, and circulation; total sixteen people.

CLR11: Allocated NSF accommodates twenty-four task chairs @ 7.5 NSF each, twelve 5'-0" x 2'-0" tables at 10 NSF each, two credenzas @ 8 NSF, one lectern @ 9 NSF, and circulation; total twenty-four people.

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.

6. **Storage Room (SRS01) .....100 NSF (9.3 NSM)**  
*Provide one for Nursing Education and Training.*

**C. FA 3: Education Auditorium Area:**

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 center wide 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 (see Table 1).*

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 / Instruction Area (AUD01) ..... (Table 2)**  
*Provide one if Educational Auditorium is authorized (see Table 2).*

**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 an Educational Auditorium is authorized.*
- 4. Storage, Equipment (SRE01)..... 120 NSF (11.2 NSM)**  
*Provide one if an Educational Auditorium is authorized.*
- 5. Storage, Moveable Furniture (SRS02) ..... 300 NSF (NSM)**  
*Provide one if an Educational Auditorium is authorized.*
- 6. Multipurpose Room (CLR10) ..... 545 NSF (50.7 NSM)**  
*Provide one if an Educational Auditorium is authorized.*

Allocated NSF accommodates sixteen task chairs @ 7.5 NSF each, eight 5'-0" x 2'-0" tables at 10 NSF each, one credenza @ 8 NSF, one lectern @ 9 NSF, and circulation; total sixteen people.

- 7. Toilet, Male Public (TNPM1)..... 205 NSF (19.1 NSM)**  
*Provide one if the total number of projected seats is between twenty and one hundred; provide TNPM2 if the total number of projected seats is between one hundred one and two hundred; provide TNPM3 if the total number of projected seats is between two hundred one and three hundred; provide TNPM4 if the total number of projected seats is greater than three hundred.*

TNPM1: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, one accessible urinal @ 10 NSF, two accessible counter lavatories @ 16 NSF each, ABA clearances, and circulation.

TNPM2: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, one standard toilet stall @ 15 NSF, one accessible urinal @ 10 NSF, two accessible counter lavatories @ 16 NSF each, ABA clearances, and circulation.

TNPM3: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, three standard toilet stalls @ 15 NSF each, one accessible urinal @ 10 NSF, two accessible counter lavatories @ 16 NSF each, ABA clearances, and circulation.

TNPM4: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, four standard toilet stalls @ 15 NSF each, two accessible urinals @ 10 NSF each, two accessible counter lavatories @ 16 NSF each, ABA clearances, and circulation.

**8. Toilet, Female Public (TNPF1).....205 NSF (19.1 NSM)**

*Provide one if the total number of projected seats is between twenty and one hundred; provide TNPF2 if the total number of projected seats is between one hundred one and two hundred; provide TNPF3 if the total number of projected seats is between two hundred one and three hundred; provide TNPF4 if the total number of projected seats is greater than three hundred.*

TNPF1: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, one standard toilet stall @ 15 NSF, two accessible counter lavatories @ 16 NSF each, one chair @ 9 NSF, ABA clearances, and circulation.

TNPF2: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, two standard toilet stalls @ 15 NSF each, two accessible counter lavatories @ 16 NSF each, one chair @ 9 NSF, ABA clearances, and circulation.

TNPF3: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, four standard toilet stalls @ 15 NSF each, two accessible counter lavatories @ 16 NSF each, one chair @ 9 NSF, ABA clearances, and circulation.

TNPF4: Allocated NSF accommodates one accessible toilet stall @ 33 NSF, five standard toilet stalls @ 15 NSF each, two accessible counter lavatories @ 16 NSF each, one chair @ 9 NSF, ABA clearances, and circulation.

**9. Housekeeping Aides Closet (HAC) (JANC1).....60 NSF (5.6 NSM)**

*Minimum one; provide an additional one if total number of FTE positions authorized is greater than 150.*

**D. FA 4: Education Laboratory Area:**

**1. Computer Lab (CMP01).....400 NSF (37.2 NSM)**

*Provide one if a Computer Lab is authorized.*

**2. Conference Room (CFR02).....300 NSF (27.9 NSM)**

*Provide one if a Conference Room in the Education Laboratory Area is authorized.*

Allocated NSF accommodates ten conference chairs @ 7.5 NSF each, four 5'-0" x 2'-0" tables at 10 NSF each, one credenza @ 8 NSF, and circulation; total ten people.

**3. Simulation Lab (CLR50).....535 NSF (49.8 NSM)**

*Provide one if a Simulation Lab is authorized.*

Allocated NSF accommodates simulation training. Contents are assigned based on the type of simulation training occurring in the space.

**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 RELATIONSHIPS

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 Neurological	3	K (Staff Convenience)
Nursing Units: Mental Health, Behavior Sciences, Substance Abuse	3	K (Staff Convenience)
Director Suite	3	K (Staff Convenience)
Pathology and Laboratory	3	K (Staff Convenience)

Legend:

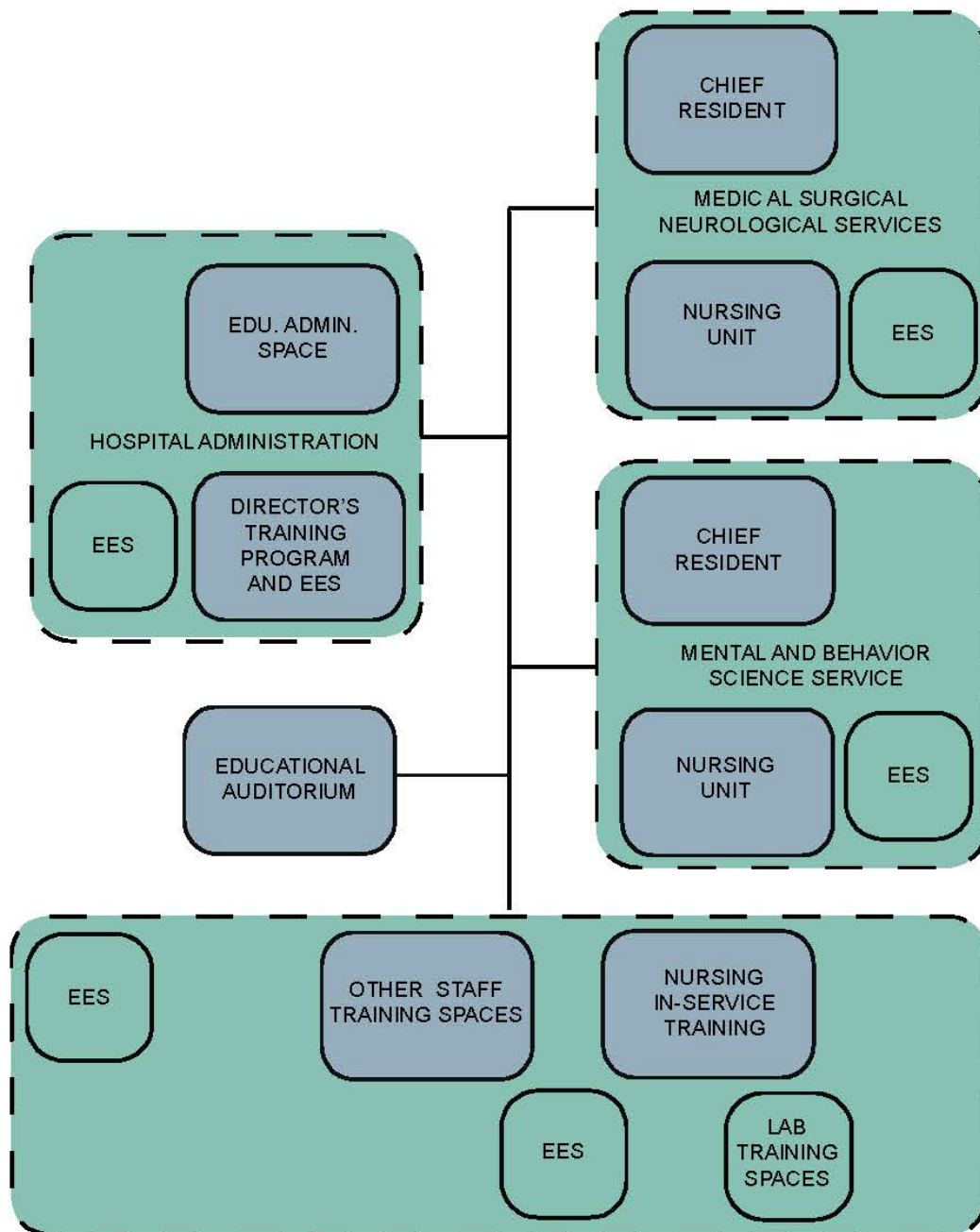
Relationship:

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

Reasons:

- 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