

CHAPTER 104: SPINAL CORD INJURY / DISORDERS CENTER

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1 PURPOSE AND SCOPE

- A. This document outlines Space Planning Criteria for Chapter 104: Spinal Cord Injury / Disorders Center. It applies to all medical facilities at the Department of Veterans Affairs (VA).
- B. A Spinal Cord Injury / Disorders Center is a specialized medical facility designed to provide care and treatment for spinal cord injury patients, and to ensure that they receive maximum benefit from trained staff in a specialized, mission-oriented facility. Spinal Cord Injury care can occur in three phases – Acute Care, Sustaining Care, and Long Term Care - and SCI/D Center designs must provide for their differing needs.

2 DEFINITIONS

- A. Concept of Operations: A user-developed guide to the functional operation of the VA healthcare facility. It defines the function of the facility and the scope of services to be provided in the new or remodeled space.
- B. Departmental Net to Gross (DNTG) Conversion Factor: A parameter, determined by the VA for each space planning criteria chapter, used to convert the programmed Net Square Foot (NSF) area to the Department Gross Square Foot (DGSF) area. The **DNTG** Departmental Conversion Factor for **Spinal Cord Injury / Disorders Center** is **1.70**.
- C. 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.
- D. 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 Educational Program Areas.
- E. 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 VA-SEPS.
- F. Lithotripsy: A procedure where kidney stones or gallstones are pulverized by means of a lithotripter.
- G. 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.

- H. Room Efficiency Factor: A factor that provides flexibility in the utilization of a room to account for patient delays, scheduling conflicts, and equipment maintenance. Common factors are in the 80 to 85% range. For acute/sustaining SCI care, a room with 85% room efficiency provides a buffer to assume that this room would be available 15% of the time beyond the planned operational practices of the room. A room efficiency factor of 95% is used for a long term care SCI Center. This factor may be adjusted based on the actual and/or anticipated operations and processes of the room / department.
- I. 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.
- J. Spinal Cord Injury / Disorders Center (SCI/D): A specialized medical facility designed to provide a full range of care for patients who have sustained a lesion of the spinal cord and/or cauda equina resulting in either tetraplegia or paraplegia. Each patient assigned to this unit typically uses a manual or electric powered wheelchair, or occasionally a gurney. The purpose of SCI/D is to provide care and treatment for spinal cord injury patients and to ensure that they receive maximum benefit from trained staff in a specialized, mission-oriented facility. Spinal Cord Injury care can occur in three phases – Acute Care, Sustaining Care, Long Term Care - and SCI/D designs must provide for their differing needs.
- K. SCI/D Acute Care (Intensive Rehabilitation): Acute care involves medical stabilization immediately after injury and usually occurs at the nearest trauma center, with transfer to an SCI/D Center as soon as possible. In an Acute (Intensive Rehab) Unit, a multidisciplinary team effort focuses on bringing the patient to the highest functional level possible. The goal is, after a period of time, to enable the patient to return to independent living. Specialized care in the Acute setting includes at least the following activities:
1. Prevention and/or treatment of medical and surgical problems associated with the spinal cord injury.
 2. Training patients to perform their own self care which includes such common activities as getting dressed, getting into and out of bed, bathing, performing toilet activities (bowel and bladder care), etc.
 3. Training in optimal mobility whether learning to walk again or effective use of a wheelchair.
 4. Providing patients with and teaching them to use any special assistive devices they may need to achieve independence.
 5. Diagnostic and surgical care of the urinary tract system.
 6. Providing patients and family with social, psychological and vocational support to deal with the consequences of the injury.
 7. Providing proper nursing care to optimize outcomes and to prevent complications such as the formation of pressure ulcers.
 8. Restoration and/or maintenance of nutritional status.

9. Providing education to empower the patient and for subsequent training of a personal care assistant, if needed.
- L. SCI/D Sustaining Care: The second phase of care for the SCI/D patient. Once back in the community, SCI/D patients may develop complications requiring hospitalization. It is the Sustaining Care Unit, which enables that patient to regain his or her independence. These units also offer to the independent patients discharged from Initial Rehabilitation Units the care needed to maintain the functional level achieved during their primary rehabilitation phase. The length of stay for inpatients may vary from several days to several months depending on the reason for admission. The more common reasons for admission include annual routine physical exams; treatment for bedsores; treatment for GU (genitourinary) complications; fractured limbs and respiratory complications; and additional rehabilitation training. The same specialized care provided for Acute (Initial Rehabilitation) is applicable to Sustaining Care.
- M. CI/D Long Term Care: The third phase of care for SCI/D patients. Those patients who cannot live outside of the SCI/D environment because of socio-economic reasons or lack of community and/or family support systems are cared for in the Long-Term SCI/D Unit. It is common for these patients to stay until the end of their lives, and thus historically this has been an elderly population. However, that is not an exclusive demographic as many SCI/D injuries occur with younger patients. Therefore, the Long Term Care population may be younger and longer termed.
- N. Urodynamics: The term that describes a series of diagnostic tests used to evaluate bladder function and voiding disorders.
- O. Workload: Workload is the anticipated number of procedures or suite stops that is processed through a department/service area. For inpatient units Workload is determined by the calculated projected number of beds. The total workload applied to departmental operational assumptions will 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 and VACO SCI/D Program input. 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 herein for identified services and modalities to determine room requirements 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 Spinal Cord Injury / Disorders Center and its relationship with other services of a medical facility. These criteria are predicated on established and/or anticipated best practice standards, as adapted to provide environments supporting the highest quality health care for Veterans.

- C. 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 Spinal Cord Injury / Disorders Center equipment is determined by VACO and upon Veterans Health Administration (VHA) anticipated medical needs.
- D. The total number of Acute Care Patient Beds is determined by the VACO SCI/D Program Office based on CARES modeling of SCI/D projected needs.
- E. The total number of Long Term Care Patient Beds is determined by the VACO SCI/D Program Office based on CARES modeling of SCI/D projected needs.
- F. The requirements for the majority of FTE positions cited in these criteria are defined in VHA Handbook 1176.1
- G. Basic Room Efficiency Factor for Spinal Cord Injury / Disorders Center is:

Acute Care: 85%.
Long Term Care: 95%
- H. The minimum number of patient beds, of all types, to generate one SCI/D Patient Care Unit is 30 beds.

4 PROGRAM DATA REQUIRED (Input Data Questions)

- A. Mission Input Data Statements:
 - 1. Is a Conference Room authorized for the Residency program? (M)
 - 2. Is a SCI/D Pharmacy authorized? (M)
 - 3. Is an On-Call Bedroom authorized (M)
 - 4. Is an SCI/D Patient Clinic authorized? (M)
 - 5. Is handling of SCI/D Medical Records in this Department authorized? (M)
 - 6. Is a Therapeutic Pool for the SCI/D Patient Therapy authorized? (M)
 - 7. Is Urodynamics treatment authorized? (M)
 - 8. Is an SCI/D Residency Program Authorized? (M)
- B. Workload Input Data Statements:
 - 1. How many annual SCI/D outpatient visits are projected? (W)
 - 2. How many SCI/D Acute Care Patient Beds are authorized? (W)
 - 3. How many SCI/D Long Term Care Patient Beds are authorized? (W)
- C. Staffing Input Data Statements (Ref. VHA Handbook 1176.1) :
 - 1. How many Activities Coordinator FTE positions are authorized? (S)
 - 2. How many Clerical Staff FTE positions are authorized? (S)
 - 3. How many Dietitian FTE positions are authorized? (S)
 - 4. How many Home Care Coordinator FTE positions are authorized? (S)
 - 5. How many Home Care Staff FTE positions are authorized? (S)
 - 6. How many Nurse Supervisor positions are authorized for the SCI/D Acute Care Patient Care Unit? (S)
 - 7. How many Nurse Supervisor positions are authorized for the SCI/D Long Term Care Patient Care Unit? (S)

8. How many Physician FTE positions are authorized? (S)
9. How many Resident FTE positions are authorized? (S)
10. How many SCI/D Clinician FTE positions are authorized? (S)
11. How many Social Worker FTE positions are authorized? (S)
12. How many Therapist FTE positions are authorized? (S)
13. How many Urologist FTE positions are authorized? (S)

D. Miscellaneous Input Data Statements

1. How many Acute Care Isolation Negative Pressure Patient Rooms are authorized? (Misc)
2. How many Long Term Care Isolation Negative Pressure Patient Rooms are authorized? (Misc)
3. Is SCI/D to be located remote from a VAMC Library facility? (Misc)

5 SPACE CRITERIA

A. FA 1: Reception Areas

1. **Entrance / Waiting (WRC01)**..... **200 NSF (18.6 NSM)**
Provide one per Spinal Cord Injury / Disorders Center (SCI/D).

This area serves as an entrance for SCI patients, families, and other visitors. Information services are provided in this area to direct patients and visitors.

2. **Information Desk (RECP3)** **100 NSF (9.3 NSM)**
Provide one per SCI/D Entrance / Waiting
3. **Toilet, Public (TLTU1)**..... **60 NSF (5.6 NSM)**
Provide two per Spinal Cord Injury / Disorders Center (SCI/D).

One for male and one for female.

4. **Consultation Room (CRA02)**..... **100 NSF (9.3 NSM)**
Provide one per SCI/D Center reception area.

B. FA 2: Acute Care (AC) Patient Care Units

1. **AC: Patient Room, One-Bed (BRMS1)**..... **210 NSF (19.6 NSM)**
Calculate the number of Patient Care Units (based on number of AC patient beds projected); deduct two AC patient beds per each AC Patient Care Unit (to account for the Isolation Beds); from the remainder; provide one each for seventy-two percent of the total number of AC patient beds projected.

This room provides space for care and treatment of one inpatient; it includes bed area and clearance around bed, wheelchair turnaround, and patient equipment including lift/transfer devices, furniture, and family visiting area.

2. **AC: Patient Room, Two-Bed (BRMS1)**..... **450 NSF (41.9 NSM)**
Calculate the number of Patient Care Units (based on number of AC patient beds projected); deduct two AC patient beds per AC Patient Care Unit (to account for the AC Isolation Beds); from the remainder; provide one each for fourteen percent

of the total number of AC patient beds projected.

This room provides space for care and treatment of two inpatients; it includes bed area and clearance around bed, wheelchair turnaround, and patient equipment including lift/transfer devices, furniture, and family visiting area.

3. **AC: Bathroom, Patient (TLTS1)**..... **120 NSF (11.2 NSM)**
Provide one per each One-Bed and two per each Two-Bed AC Patient Room.

The toilet/shower room must accommodate both independent and dependent bowel / bladder care and bathing / showering.

4. **AC: Patient Room, Isolation, Negative Pressure (BRIT1)****210 NSF (19.6 NSM)**
Provide two per each SCI/D AC Patient Care Unit.

5. **AC: Anteroom, Isolation (BRAR1)**..... **75 NSF (7.0 NSM)**
Provide two per each SCI/D AC Patient Care Unit

The isolation alcove, or anteroom, provides for medical isolation primarily for patients with a communicable disease or other condition that may compromise patients and/or staff.

6. **AC: Bathroom, Isolation Patient (TLTS1)** **120 NSF (11.2 NSM)**
Provide two per each SCI/D AC Patient Care Unit.

The toilet/shower room must accommodate both independent and dependent bowel / bladder care and bathing / showering.

7. **AC: Day Room / Lounge (DAYR1)**..... **400 NSF (37.2 NSM)**
Minimum NSF; provide an additional 25 NSF per each projected AC patient bed greater than thirty; maximum 550 NSF.

This area provides space for patients to visit with family, friends, and other patients. Unsupervised activities also occur in this area. The Day Room should not be located near the Nurse Station.

8. **AC: Nourishment Kitchen (NCWD1)** **100 NSF (9.3 NSM)**
Provide one per each SCI/D AC Patient Care Unit.

This area is accessed directly by patients and by staff as well as other caregivers for patient needs.

9. **AC: Toilet, Patient (TLTU1)**..... **60 NSF (5.6 NSM)**
Provide one per each SCI/D AC Patient Care Unit.

10. **AC: Laundry, Patient (XXYYC)** **100 NSF (9.3 NSM)**
Provide one per each SCI/D AC Patient Care Unit.

This room provides washer, dryer and folding space for personal patient laundry.

11. **AC: Quiet Room (OFA02)** **150 NSF (14.0 NSM)**
Minimum one per each SCI/D AC Patient Care Unit; provide an additional one if the number of projected AC patient beds is greater than forty-one.

This area provides space for quiet activities such as reading, writing letters, studying, etc. The space should accommodate one or two patients or one patient with family members or staff when privacy is required.

C. FA 3: Long Term Care (LTC) Patient Care Units

1. **LTC: Patient Room, One-Bed (BRMS1)** **320 NSF (29.8 NSM)**
Calculate the number of Patient Care Units (based on number of LTC beds projected); deduct the number of LTC Isolation Rooms for each LTC Patient Care Unit (to account for the LTC Isolation Beds); from the remainder; provide one each for seventy-two percent of the total number of LTC patient beds projected.

Provide one each for seventy-two percent of the total number of Long Term Care patient beds projected.

This room provides space for care and treatment of one inpatient; it includes bed area and clearance around bed, wheelchair turnaround, and patient equipment including lift/transfer devices, furniture, and family visiting area.

2. **LTC: Patient Room, Two-Bed (BRMS2)** **480 NSF (44.6 NSM)**
Calculate the number of Patient Care Units (based on number of LTC patient beds projected); deduct the number of LTC Isolation Rooms for each LTC Patient Care Unit (to account for the LTC Isolation Beds); from the remainder; provide one each for fourteen percent of the total number of LTC patient beds projected.

This room provides space for care and treatment of two inpatients; it includes bed area and clearance around bed, wheelchair turnaround, and patient equipment including lift/transfer devices, furniture, and family visiting area.

3. **LTC: Bathroom, Patient (TLTS1)** **120 NSF (11.2 NSM)**
Provide one per each One-Bed and two per each Two-Bed LTC Patient Room.

The toilet/shower room must accommodate both independent and dependent bowel / bladder care and bathing / showering.

4. **LTC: Patient Room, Isolation, Negative Pressure (BRIT1)** **320 NSF (29.8 NSM)**
Provide one per Negative Pressure Isolation Patient Room authorized for each SCI/D LTC Care Patient Care Unit.

5. **LTC: Anteroom, Isolation (BRAR1)** **75 NSF (7.0 NSM)**
Provide one per each LTC Negative Pressure Isolation Patient Room.

The isolation alcove, or anteroom, provides for medical isolation primarily for patients with a communicable disease or other condition that may compromise patients and/or staff.

6. **LTC: Bathroom, Isolation Patient (TLTS1)**..... **120 NSF (11.2 NSM)**
Provide one per each LTC Negative Pressure Isolation Patient Room.

The toilet/shower room must accommodate both independent and dependent bowel / bladder care and bathing / showering.

7. **LTC: Day Room / Lounge (DAYR1)** **400 NSF (37.2 NSM)**
Minimum NSF; provide an additional 25 NSF per projected LTC patient bed greater than thirty; maximum 550 NSF.

This area provides space for patients to visit with family, friends, and other patients. Unsupervised activities also occur in this area. The Day Room should not be located near the Nurse Station.

8. **LTC: Nourishment Kitchen (NCWD1)**..... **100 NSF (9.3 NSM)**
Provide one per each SCI/D LTC Care Patient Care Unit.

This area is accessed directly by patients and by staff as well as other caregivers for patient needs.

9. **LTC: Toilet, Patient (TLTU1)** **60 NSF (5.6 NSM)**
Provide one per each SCI/D LTC Patient Care Unit.

10. **LTC: Laundry, Patient (XXYYC)**..... **100 NSF (9.3 NSM)**
Provide one per each SCI/D LTC Patient Care Unit.

This room provides washer, dryer and folding space for personal patient laundry.

11. **LTC: Quiet Room (OFA02)**..... **150 NSF (13.9 NSM)**
Minimum one per each SCI/D LTC Patient Care Unit; provide an additional one if the number of projected LTC patient beds is greater than forty-one.

This area provides space for quiet activities such as reading, writing letters, studying, etc. The space should accommodate one or two patients or one patient with family members or staff when privacy is required.

D. FA 4: AC Patient Care Unit: Administrative and Support Areas

1. **AC: Nurse Station (NSTA1)** **300 NSF (27.9 NSM)**
Minimum NSF; provide one for each SCI/D AC Patient Care Unit; provide an additional 10 NSF per each increment of two projected SCI/D Acute Care patient beds greater than thirty; maximum 400 NSF.

The Nurse Station serves as a working and control center for nursing, physicians, other clinical staff, and administrative staff as required.

2. **AC: Ward Clerk (OFA01/02)** **80 NSF (7.5 NSM)**

Provide one per each SCI/D AC Patient Care Unit; provide OFA01 if Standard Furniture is authorized; or, OFA02 if Systems Furniture is authorized.

This area may be integral to the staff station. Provides space for personnel associated with Medical Administration Services in support of inpatient activities.

3. **AC: Medication Room (MEDP1)** **120 NSF (11.2 NSM)**
Minimum NSF; provide an additional 4 NSF for every increment of two projected SCI/D AC patient beds greater than thirty; provide one per each AC Patient Care Unit.

This area provides space for all of the medications assigned to the patient unit and medical supplies needing secured storage. Medications are kept in locked storage units that are part of an overall Medical Center pharmacy system. Refrigerated storage is provided for medications and solutions requiring controlled temperature.

4. **AC: Office, Nurse Supervisor (OFD01)** **130 NSF (12.1 NSM)**
Provide one per Nurse Supervisor FTE position authorized for each SCI/D AC Patient Care Unit.

This area provides space for the head nurse or nurse supervisor in the management of the patient unit. It is sized to accommodate SCI/D patients who may be using a litter rather than a wheelchair. The Nurse Supervisor Office may be shared by all shifts. Location should be near the Nurse Station.

5. **AC: Patient Charting (OFD01)** **150 NSF (14.0 NSM)**
Provide one per each SCI/D AC Patient Unit.

This room provides for three computer workstations and counter space.

6. **AC: Utility Room, Clean (UCCL1)** **150 NSF (14.0 NSM)**
Minimum NSF; provide an additional 5 NSF per projected AC patient bed greater than thirty; provide one per each SCI/D AC Patient Unit.

This area provides storage for sterile and non-sterile medical supplies. Designer should consider allocating calculated NSF in two rooms if total is greater than 180 NSF.

7. **AC: Utility Room, Soiled (USCL1)** **120 NSF (11.2 NSM)**
Minimum NSF; provide an additional 4 NSF per projected AC patient bed greater than thirty; provide one per each SCI/D AC Patient Unit.

This room is used for the clean up of equipment, utensils, and instruments as well as the disposal of waste material. Also, this room may be used for the temporary holding of items to be returned to SPD. Designer should consider allocating calculated NSF in two rooms if total is greater than 150 NSF.

8. **AC: Storage, Clean Linen (LCCL1)** **80 NSF (7.5 NSM)**
Provide one per each SCI/D AC Patient Care Unit.

9. **AC: Storage, Soiled Linen (LCSL1)**..... **60 NSF (5.6 NSM)**
Provide one per each SCI/D AC Patient Care Unit.

10. **AC: Storage, Litter (SRLW1)**..... **300 NSF (27.9 NSM)**
Minimum NSF; provide an additional 10 NSF per projected AC patient bed greater than thirty; maximum 360 NSF; provide one per each SCI/D AC Patient Care Unit.

This area provides space for personal transport devices such as litters and other large equipment items and devices.

11. **AC: Storage, Transfer Equipment (SRE01)** **210 NSF (13.1 NSM)**
Minimum NSF; provide an additional 7 NSF per projected AC patient bed greater than thirty; maximum 252 NSF; provide one per each SCI/D AC Patient Care Unit.

This space accommodates the safe storage of standard and electric wheelchairs, litters, lifts and mobilizers, and any other devices required for patient transport.

12. **AC: Storage, Medical Equipment (SRE01)**..... **180 NSF (16.8 NSM)**
Minimum NSF; provide an additional 6 NSF per projected AC patient bed greater than thirty; maximum 216 NSF; provide one per each SCI/D AC Patient Care Unit.

13. **AC: Storage Alcove, Stretcher / Wheelchair (SRLW1)**..... **40 NSF (3.8 NSM)**
Minimum one; provide an additional one if the number of projected AC patient beds is greater than forty-one; provide one per each SCI/D AC Patient Care Unit.

This area provides an on-unit location for the temporary holding of patient stretchers.

14. **AC: Storage, Patient (SRPB1)** **120 NSF (11.2 NSM)**
Minimum NSF; provide an additional 6 NSF per projected AC patient bed greater than thirty; provide one per each SCI/D AC Patient Care Unit.

This space is provided for patients' luggage and other items that are not needed by patients on a daily basis.

15. **AC: Housekeeping Aides Closet- HAC (JANC1)** **40 NSF (3.8 NSM)**
Provide one per each SCI/D AC Patient Unit; provide an additional one if the number of projected AC patient beds is greater than forty-one.

E. FA 5: LTC Patient Care Unit: Administrative and Support Areas

1. **LTC: Nurse Station (NSTA1)**..... **300 NSF (27.9 NSM)**
Minimum NSF; provide one for each SCI/D LTC Patient Care Unit; provide an additional 10 NSF per each increment of two projected SCI/D LTC patient beds greater than thirty for the patient care unit, maximum 400 NSF.

The Nurse Station serves as a working and control center for nursing, physicians, other clinical staff, and administrative staff as required.

2. **LTC: Ward Clerk (OFA01/02)**..... **80 NSF (7.5 NSM)**
Provide one per each SCI/D LTC Patient Care Unit; provide OFA01 if Standard Furniture is authorized; or, OFA02 if Systems Furniture is authorized.

This area may be integral to the staff station. Provides space for personnel associated with Medical Administration Services in support of inpatient activities.

3. **LTC: Medication Room (MEDP1)** **120 NSF (11.2 NSM)**
Provide one per each SCI/D LTC Patient Care Unit.

This area provides space for all of the medications assigned to the patient unit and medical supplies needing secured storage. Medications are kept in locked storage units that are part of an overall Medical Center pharmacy system. Refrigerated storage is provided for medications and solutions requiring controlled temperature.

4. **LTC: Office, Nurse Supervisor (OFD01)** **130 NSF (12.1 NSM)**
Provide one per Nurse Supervisor FTE position authorized for each SCI/D LTC Patient Care Unit.

This area provides space for the head nurse or nurse supervisor in the management of the patient unit. It is sized to accommodate SCI/D patients who may be using a litter rather than a wheelchair. The Nurse Supervisor Office may be shared by all shifts, and should be located near the Nurse Station.

5. **LTC: Utility Room, Clean (UCCL1)**..... **150 NSF (14.0 NSM)**
Minimum NSF; provide an additional 5 NSF per projected LTC patient bed greater than thirty; maximum 180 NSF; provide one per each SCI/D LTC Patient Unit.

This area provides storage for sterile and non-sterile medical supplies.

6. **LTC: Utility Room, Soiled (USCL1)**..... **120 NSF (11.2 NSM)**
Minimum NSF; provide an additional 4 NSF per projected LTC patient bed greater than thirty; maximum 144 NSF; provide one per each SCI/D LTC Patient Unit.

This room is used for the clean up of equipment, utensils, and instruments as well as the disposal of waste material. Also, this room may be used for the temporary holding of items to be returned to SPD.

7. **LTC: Storage, Clean Linen (LCCL1)** **80 NSF (7.5 NSM)**
Provide one per each SCI/D LTC Patient Unit.

8. **LTC: Storage, Soiled Linen (LSCL1)**..... **60 NSF (5.6 NSM)**
Provide one per each SCI/D LTC Patient Unit.

9. **LTC: Storage, Litter (SRLW1)**..... **300 NSF (27.9 NSM)**
Minimum NSF; provide an additional 10 NSF per projected LTC patient bed greater than thirty; maximum 360 NSF; provide one per each SCI/D LTC Patient Unit.

This area provides space for personal transport devices such as litters and other large equipment items and devices.

10. **LTC: Storage, Transfer Equipment (SRE01)**..... **210 NSF (19.5 NSM)**
Minimum NSF; provide an additional 7 NSF per projected LTC patient bed greater than thirty; maximum 252 NSF; provide one per each SCI/D LTC Patient Unit.

This space accommodates the safe storage of standard and electric wheelchairs, litters, lifts and mobilizers, and any other devices required for patient transport.

11. **LTC: Storage, Medical Equipment (SRE01)**..... **180 NSF (16.8 NSM)**
Minimum NSF; provide an additional 6 NSF per projected LTC patient bed greater than thirty; maximum 216 NSF; provide one per each SCI/D LTC Patient Unit.

12. **LTC: Stretcher / Wheelchair Alcove (SRLW1)** **40 NSF (3.8 NSM)**
Provide one per each SCI/D LTC Care Patient Unit.

This area provides an on-unit location for the temporary holding of patient stretchers.

13. **LTC: Storage, Patient (SRPB1)**..... **180 NSF (16.8 NSM)**
Minimum NSF; provide an additional 6 NSF each per projected LTC patient bed greater than thirty; maximum 216 NSF; provide one per each SCI/D LTC Patient Unit.

This space is provided for patients' luggage and other items that are not needed by patients on a daily basis.

14. **LTC: Housekeeping Aides Closet- HAC (JANC1)** **40 NSF (3.8 NSM)**
Provide one per each SCI/D LTC Patient Unit.

F. FA 6: Patient Care Units: Common Patient Areas

1. **Multipurpose Room (XXXXC)** **800 NSF (74.3 NSM)**
Minimum NSF; provide one per SCI/D Center; provide an additional 25 NSF per each projected AC and LTC patient bed greater than thirty; maximum 1600 NSF.

This room accommodates a wide variety of recreational activities and is used also by patients for self-directed activities.

2. **Storage, Multi-purpose / Activities (OFD01)**..... **100 NSF (9.3 NSM)**
Provide one per Multipurpose Room.

3. **Internet Cafe (XXXXX)**..... **240 NSF (22.3 NSM)**
Provide one per SCI/D Center if authorized.

4. **Meditation Room (RAMR1)** **150 NSF (13.9 NSM)**
Provide one per SCI/D Center; provide one additional room if the total number of projected patient beds is greater than forty-one.

This room provides for the group spiritual and meditation needs of patients, families, and visitors. It should provide a peaceful and meditative environment.

5. **Patient Education (OFD03)**..... **250 NSF (23.2 NSM)**
Provide one per SCI/D Center.

This room may serve as an Internet Café, or Computer/Assistive Technology Laboratory. It may include computer work stations as well as print, visual, and audio resources.

6. **Resident Dining / Serving (FSCD1)**..... **1600 NSF (148.6 NSM)**
Minimum NSF; provide an additional 30 NSF per each increment of two projected SCI/D Acute Care patient beds greater than thirty.

This room includes space for dining as well as a service line for meal selection and serving. Patients eat lunch and dinner here as breakfast is typically in the patient room. This area provides space for SCI/D patients to visit with family / friends.

7. **Tub Room (PTWT1)** **200 NSF (18.6 NSM)**
Minimum one; provide an additional one per every increment of two SCI/D Patient Care Units greater than two.

This space may be combined with Hydrotherapy, and located within or adjacent to the inpatient unit. The area provides space for patient bathing needs that can not be accommodated in individual patient rooms.

8. **Exam / Treatment Room (TRGM1)** **180 NSF (16.7 NSM)**
Minimum one; provide an additional one per every increment of two SCI/D Patient Care Units greater than two.

This area provides space for patient treatments and procedures that can not be conducted in the patient room.

9. **Hydrotherapy (PTWT1)**..... **380 NSF (35.4 NSM)**
Minimum one; provide an additional one per every increment of two SCI/D Patient Care Units greater than two.

This area may be combined with the Tub Room and located within or adjacent to the inpatient unit. This area provides a location for hydrotherapy facilities for SCI/D inpatients. Treatments include both muscular and skin reconditioning therapies.

G. FA 7: Patient Care Units: Common Administrative and Support Areas

1. **Visitor Lounge (WRC02)**..... **200 NSF (18.6 NSM)**
Provide one per every two SCI/D Patient Care Units.

2. **Office, Activities Coordinator (OFD01)**..... **130 NSF (12.1 NSM)**
Provide one per Activities Coordinator FTE position authorized.

The area provides office space for one patient and recreation therapy staff assigned to the SCI/D Center that provide care on the patient unit(s).

3. **Office, Veterans Service Organization - PVA (OFA01/02)** **130 NSF (12.1 NSM)**
Provide one per SCI/D Center; provide OFA01 if Standard Furniture is authorized; or, OFA02 if Systems Furniture is authorized.

This room is sized to accommodate a patient using a litter.

4. **Office, NSO-PVA Organization (OFA01/02)** **130 NSF (12.1 NSM)**
Provide one per SCI/D Center. Provide OFA01 for Standard Furniture or OFA02 for Systems Furniture.

This room is sized to accommodate a patient using a litter. Privacy is required for this office.

5. **Conference / Classroom (CRA02)** **300 NSF (27.9 NSM)**
Provide one per SCI/D Center.

This area provides for a multitude of staff needs including work area, patient treatment review sessions, and shift change report. The Conference / Classroom may be located directly adjacent to the units.

6. **Linen, Clean Holding, EMS (LCCL1)** **40 NSF (3.8 NSM)**
Minimum NSF; provide an additional 1.2 NSF per projected SCI/D bed greater than thirty.

7. **Bedroom, On-Call (DUTY1)** **120 NSF (11.2 NSM)**
Provide one per SCI/D and if On-Call Bedroom is authorized.

8. **Toilet and Shower, On-Call (TLTS1)** **80 NSF (7.5 NSM)**
Provide one per On-call Bedroom.

H. FA 8: SCI/D Patient Clinic

The SCI/D Patient Clinic is an integral part of the SCI/D Center and should be located within the SCI/D Center.

1. **Waiting (WRC01)** **320 NSF (29.8 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

2. **Reception (RECP1)** **80 NSF (7.5 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

3. **Toilet, Public (TLTU1)** **60 NSF (5.6 NSM)**
Provide one for male and one for female if SCI/D Patient Clinic is authorized.

4. **Exam / Treatment Room (TRGS1)** **180 NSF (16.7 NSM)**
Provide six if SCI/D Patient Clinic is authorized.

Exam / Treatment Rooms are used for evaluations of patients on annual consultations, examination during outpatient treatment, and after completion of therapy.

5. **Toilet, Patient (TLTU1)**..... **60 NSF (5.6 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

6. **Urodynamics: Exam / Treatment Room (EXUD1)** **180 NSF (16.8 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

This area provides space for GU exams / treatments, any preparation required for cystoscopy / Urodynamics, and for any special procedures. A urological exam table is used and a Urodynamic Measurement System with computer record is located here. Verify that this room does not duplicate space and functions available in adjacent VA Medical Center.

7. **Urodynamics: Cystoscopy (XDCY1)**..... **500 NSF (54.9 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

This room is used for Cystoscopy Examinations, procedures and for Lithotripsy. Portable / mobile equipment may assist in allowing space to be used for several purposes, provided adjacent storage space is available to park equipment when not in use.

8. **Urodynamics: Storage and Instrument Cleaning Room (SRS01)**..... **400 SF (37.2 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

This space is used to support the Cystoscopy room for exams, procedures and for lithotripsy. Portable / mobile equipment used in examinations and procedures is kept in adjacent storage space when not in use. Scopes are disinfected and cleaned in the Instrument Room.

9. **Urodynamics: Recovery (RRSS1)**..... **300 NSF (27.9 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

This room is used for the recovery of patients who have undergone Cystoscopy exams and procedures, and / or Lithotripsy. Verify that this room does not duplicate space and functions available in adjacent VA Medical Center.

10. **Urodynamics: Dressing Room / Cubicle (DR001)** **100 NSF (9.3 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

Verify that this room does not duplicate space and functions available in adjacent VA Medical Center.

11. **Urodynamics: Patient Shower (TLTS1)** **80 NSF (7.5 NSM)**
Provide one if SCI/D Patient Clinic and Urodynamics are authorized.

Verify that this room does not duplicate space and functions available in adjacent VA Medical Center.

12. **Urodynamics: Urologist Office (OFD01)**..... **130 NSF (12.1 NSM)**
Provide one per Urologist FTE position authorized and if SCI/D Patient Clinic and Urodynamics are authorized.

This room is sized to provide access for a patient using a litter. Verify that this room does not duplicate space and functions available in adjacent VA Medical Center.

13. **Urodynamics: Utility, Clean (UCCL1)**..... **120 NSF (11.2 NSM)**
Provide one if SCI/D Urodynamics Clinic is authorized.

14. **Office, SCI/D Clinician (OFD01)**..... **130 NSF (12.1 NSM)**
Provide one per SCI/D Clinician FTE position authorized.

This room is sized to accommodate a patient using a litter.

15. **Utility, Clean (UCCL1)**..... **120 NSF (11.2 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

This area provides space for storage of sterile and non-sterile medical supplies.

16. **Utility, Soiled (USCL1)** **80 NSF (7.4 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

This room is used for the clean up of equipment, utensils, and instruments as well as the disposal of waste material. The Soiled Utility may also be used for the temporary holding of items to be returned to SPD.

17. **Nurse Station (NSTA1)**..... **150 NSF (13.9 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

The staff station serves as a working area and control center for nurses and other staff working in the SCI/D Patient Clinic.

18. **SCI/D Pharmacy (PHOD1)**..... **160 NSF (14.9 NSM)**
Provide one if SCI/D Patient Clinic and an SCI/D Pharmacy are authorized.

19. **Housekeeping Aides Closet-HAC (JANC1)** **40 NSF (3.8 NSM)**
Provide one if SCI/D Patient Clinic is authorized.

I. FA 9: SCI/D Patient Therapy

1. **Physical Therapy /
Kinesiology Therapy (PTES1)** **3000 NSF (278.7 NSM)**
Provide one per SCI/D Center.

This area provides space for physical therapy treatment and gymnasium, which is provided with equipment for several functions including mats, platforms, gait

training, parallel bars, and weights as well as other resistive equipment including orthotic and prosthetic training services.

2. **Occupational Therapy (OTEV1)** **800 NSF (74.3 NSM)**
Provide one per SCI/D Center.

This room accommodates a wide variety of physical, psychosocial, and vocational evaluation and therapy equipment.

3. **LTC: Combined PT/OT/KT Occupational Therapy (XXXXX)** **800 NSF (74.3 NSM)**
Provide one per Long Term Care SCI/D Center.

4. **Activities of Daily Living (OTDL1)** **200 NSF (18.6 NSM)**
Provide one per SCI/D Center.

This space is provided for patient retraining and practice of activities that individuals need to perform in order to live independently. They include bathing, physical ambulation, grooming, dressing, feeding, and toileting. Facilities include a mock bedroom, kitchen, and bathroom.

5. **Home Environment Learning (XYYYC)**..... **660 NSF (61.4 NSM)**
Provide one per SCI/D Center.

This area is used to assess the SCI/D patient's level of independence, and to promote a successful transition from the patient care unit to the patient's home environment.

6. **Horticulture Therapy (XYYYC)** **150 NSF (13.9 NSM)**
Provide one per SCI/D Center.

This area provides space for patients to perform simple gardening activities under direct supervision of the recreational therapist.

7. **Storage, Equipment (SRE01)** **200 NSF (18.6 NSM)**
Minimum NSF; provide an additional 100 NSF if the total number of SCI/D Acute and Long Term Care beds projected is greater than sixty and if SCI/D Patient Therapy is authorized.

8. **Therapeutic Pool (PTWT1)** **2000 NSF (204.3 NSM)**
Provide one per SCI/D Center if Therapeutic Pool is authorized.

Dedicated SCI/D Pool. The Therapeutic Pool functions as a treatment area where patients may exercise, ambulate, or participate in game activities. The heated pool helps alleviate pain, increase blood circulation, and makes physical movement or motion easier to accomplish.

9. **Dressing Room, Male (DR001)** **300 NSF (29.9 NSM)**
Provide one per Therapeutic Pool.

10. **Dressing Room, Female (DR001)** **230 NSF (21.4 NSM)**
Provide one per Therapeutic Pool.
11. **Cubicle, Therapist (PTCW1)** **80 NSF (7.5 NSM)**
Provide one per Therapist FTE position authorized.
12. **Toilet, Patient (TLTU1)** **60 NSF (5.6 NSM)**
Provide one per SCI/D Patient Therapy.

J. FA 10: SCI/D Home Care

1. **Interview Room (OFDC1)** **120 NSF (11.2 NSM)**
Provide one per SCI/D Home Care.
2. **Office, Home Care Coordinator (OFA01/02)**..... **130 NSF (12.1 NSM)**
Provide one per Home Care Coordinator FTE position authorized; provide OFA01 if Standard Furniture is authorized; or, OFA02 if Systems Furniture is authorized.

This room is sized to provide access for a patient using a litter.
3. **Cubicle, SCI/D Home Care Staff (OFA03)**..... **80 NSF (7.5 NSM)**
Provide one per SCI/D Home Care Staff FTE position authorized.
4. **Storage, SCI/D Home Care (SRE01)** **30 NSF (2.8 NSM)**
Provide one per SCI/D Home Care. .

K. FA 11: SCI/D Administration

1. **Office, Chief of Service (OFM03)**..... **150 NSF (14.0 NSM)**
Provide one per SCI/D Center.
2. **Office, Secretary / Waiting (SEC01)** **120 NSF (11.2 NSM)**
Provide one per SCI/D Center.
3. **Office, Psychologist (OFDC1)** **130 NSF (12.1NSM)**
Provide one per Psychologist FTE position authorized.

This room is sized to provide access for a patient using a litter
4. **Office, Social Worker (OFDC1)**..... **130 NSF (12.1 NSM)**
Provide one per Social Worker FTE position authorized.

This room is sized to provide access for a patient using a litter.
5. **Office, Dietitian (OFA01/02)** **130 NSF (12.1 NSM)**
Provide one per Dietitian FTE position authorized; provide OFA01 if standard furniture is authorized; or, OFA02 if systems furniture is authorized.

This room is sized to provide access for a patient using a litter.
6. **Office SCI/D Nurse Administrator (OFD01)** **130 NSF (12.1 NSM)**

Provide one per SCI/D Center.

This area provides office space for nursing administrative staff dedicated to the SCI/D Center.

7. **Office, Physician (OFD01)**..... **130 NSF (12.1 NSM)**
Provide one per Physician FTE position authorized.

This room is sized to provide access for a patient using a litter.

8. **Conference Room (CRA02)**..... **300 NSF (27.9 NSM)**
Provide one per SCI/D Center.

9. **Medical Records / QA (MRS01)**..... **150 NSF (13.9 NSM)**
Provide one per SCI/D Center if handling of Medical Records at the Department Level is authorized.

This area provides work space for personnel involved in medical records and quality assurance.

10. **Cubicle, Clerical (OFA03)**..... **80 NSF (7.5 NSM)**
Provide one per Clerical FTE position authorized.

11. **Office, Administrative Officer (OFA01)**..... **150 NSF (13.9 NSM)**
Provide one per Administrative Officer FTE position authorized.

L. FA 12: Staff Lockers, Lounge, 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. Program locker space only for those FTEs without office or cubicle space.

1. **Lounge, Staff (SL001)**..... **80 NSF (7.5 NSM)**
Minimum NSF; provide an additional 15 NSF per each FTE position authorized greater than five; maximum 210 NSF.

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

2. **Locker Room, Staff (LR001)**..... **80 NSF (7.5 NSM)**
Minimum NSF if total number of Clerical FTE positions authorized is between five and thirteen. Provide an additional 6 NSF per Technician FTE position authorized greater than thirteen.

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)** **60 NSF (5.6 NSM)**
Minimum one; provide an additional staff toilet for each increment of five FTE positions authorized greater than fifteen.
4. **Shower, Staff (TLTS1)** **80 NSF (7.5 NSM)**
Provide one per SCI/D

M. FA 13: Education Areas

Education spaces to be provided only upon authorization by program officials as critical to the SCI program at the facility.

1. **Office, Residency Program Director (OFD03)** **120 NSF (11.2 NSM)**
Provided one if an SCI/D Center Residency Program is authorized.
 2. **Team Room (SL002)** **240 NSF (22.3 NSM)**
Provide two per SCI/D Center Patient Care Unit if authorized.
- This space will be used by trainees and staff for patient charting and consultation. The area will accommodate five workstations, a small conference table and personal property lockers for use by medical students.
3. **Conference / Classroom (CRA02)** **250 NSF (22.3 NSM)**
Provide one per SCI/D Center if authorized.

6 PLANNING AND DESIGN CONSIDERATIONS

- A. Departmental Net to Gross (DNTG) Conversion Factor: A parameter, determined by the VA for each space planning criteria chapter, used to convert the programmed Net Square Foot (NSF) area to the Department Gross Square Foot (DGSF) area. The DNTG Departmental Conversion Factor for Spinal Cord Injury / Disorders Center is 1.70.
- B. SCI/D patient care units are organized according to the level of SCI/D care required. Intensive Rehab and Sustaining Care patients have similar design needs and can be combined. Long-Term SCI/D Care should be physically separate because of the different requirements for that level of care.
- C. The one-bed patient room is recommended for most SCI/D patients to adequately provide for infection control, patient privacy, and effectiveness of patient treatment. Dimensions of 16' by 20' are recommended as a minimum to accommodate the SCI/D patient. Ceiling height should be 9' minimum to accommodate ceiling mounted lift equipment. 60 percent of SCI/D beds should be one-bed rooms. For example, in a 30-bed unit 73% of the rooms would be private.
- D. The two-bed patient room may be appropriate for some SCI/D patients. Dimensions of 16'-0" by 30'-0" are recommended as a minimum for the SCI/D two-bed room, when used. Ceiling height should be 9' minimum to accommodate ceiling mounted lift equipment.

- E. Typical SCI/D Patient Bathroom recommended dimensions are 10'-0" by 12'-0", with a minimum ceiling height of 9'-0" to accommodate patient lift equipment.
- F. Decentralized Nurse Stations, located near clusters of patient rooms, should be considered when planning patient care units.
- G. Centralize therapies, where practical, for more efficient use of staff. Co-treatment of patients by physical, occupational, and kinesiotherapists are best supported by contiguous therapy space. For SCI/D Centers with more than one patient unit, centralize dining off-unit, where practical, for more efficient use of resources

7 FUNCTIONAL RELATIONSHIPS

Relationship of Spinal Cord Injury / Disorders Center to Services Listed Below:

TABLE 2: FUNCTIONAL RELATIONSHIP MATRIX

SERVICE	RELATIONSHIP	REASONS
Radiology Service	2	G,H
Rehabilitation Medicine	2	G,H
Prosthetics and Sensory Aids Service	2	G,H
Nutrition and Food Service	4	A
Pharmacy	4	A
Mental Health Services	X	J,K
Long Term Care SCI/D	X	K

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 convenience
- I. Frequent contact
- J. Need for security
- K. Closeness inappropriate

8 FUNCTIONAL DIAGRAM

