



DoD SPACE PLANNING CRITERIA

CHAPTER 550: PHARMACY SERVICES

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Originating Component: Defense Health Agency Facilities Enterprise

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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 April 1, 2026, includes the following:

- Revised chapter title to read “Chapter 550: Pharmacy Services”.
- Sections renamed and numbered: design considerations moved to the front of the document.
- Incorporated USP 797/800/825 compliant spaces
- Removed Graduate Medical Education (GME) resident administrative spaces; referred to Chapter 230 Education and Training.

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SECTION 1: PURPOSE AND SCOPE

This chapter outlines space planning criteria for Pharmacy Services as it applies to a military Medical Treatment Facility (MTF) or other types of facilities that support medical services.

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 Military Health System (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 Pharmacy Operations Directorate (POD) staffing model. 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 based on an understanding of the activities involved in the functional areas required for inpatient and outpatient pharmacy services and their relationship with other services in 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 eligible beneficiaries.
3. These criteria are subject to modification relative to equipment, medical practice, vendor requirements, and subsequent planning and design. The final selection of the size and type of pharmacy equipment is determined by equipment standardization initiatives during the design process.
4. Calculations of spaces within the Outpatient Pharmacy (OP) are based on the number of prescriptions dispensed annually. Calculation of spaces within the Inpatient Pharmacy (IP) is derived from the total number of inpatient beds.
5. When programming supply management spaces, in addition to calculations based on workload metrics (annual prescriptions dispensed; number of inpatients beds), consider other mission requirements such as support to satellite MTF's, support to tactical units for deployment readiness, and other factors that may increase the logistics footprint. Early decisions on the use of high-density shelving systems are essential to ensure design can accommodate potential for increased floor loading.
6. In locations where a drive-thru pharmacy is included, the drive-thru will be treated as a dispensing window and included in the overall total dispensing window calculation. Drive-thru pharmacy site requirements will require a traffic study and careful coordination with the installation Physical Security office.
7. When a drive-thru, or walk-up option utilizes an automated delivery system (pneumatic tube, box conveyor, etc.) the planner may need to program additional space in the pharmacy for the sending and receiving station and associated support elements of the system.
8. Regarding the handling of Hazardous Drugs (HDs), the planner will coordinate sterile and HD compounding (United States Pharmacopeia (USP) 797 and USP 800) requirements with the MTF pharmacy staff to determine if they have conducted an assessment to identify if alternative methods of procuring, manipulating/compounding HDs is readily available and appropriate for the specific MTF pharmacy. Final planning requirements supporting USP

795, 797, 800, and 825 must be approved by DHA Pharmacy Operations Directorate. The planner should include a summary of the findings in the Functional Program.

9. If the Containment Primary Engineering Controls (C-PEC) used for sterile and nonsterile compounding are placed in the same room, they must be placed at least one meter apart and particle-generating activity must not be performed when sterile compounding is in process. According to USP<800> "For entities that compound both nonsterile and sterile HDs, the respective C-PEC must be placed in separate rooms, unless those C-PECs used for nonsterile compounding are sufficiently effective so that the room can continuously maintain ISO 7 classification throughout the nonsterile compounding activity."

10. Most MTF's will have some delivery of hazardous drugs. Contributing factors in determining baseline requirements for a compounding suite include the type of MTF, the mission, and Average Daily Patient Load (ADPL). The volume of sterile compounded products will determine if additional hoods are needed. Additional factors to consider are if there is a need for a Total Parenteral Nutrition (TPN) compounder, or do they need sterile compounding robotics? POD has a questionnaire available to help in determining inpatient clean room needs. Answering the Input Data Statements in this chapter will result in space requirements for one of the following compounding suite options:
 - a. Any MTF providing delivery of hazardous drugs will need separate receiving and storage spaces
 - b. Medical Center or Hospital with Oncology services will get a four-room suite
 - c. Hospital without an Oncology service will get a three-room suite
 - d. Ambulatory Surgery Center without oncology will get a three-room suite or Containment Segregated Compounding Area (C-SCA) with externally vented Containment Primary Engineering Control (C-PEC)

TABLE 1: BASELINE REQUIREMENTS FOR HAZARDOUS MEDICATIONS

Facility Type	Hazardous Medication Space Allocation
MTF with Oncology Service	Four-Room Suite
MTF without Oncology Service	Three-Room Suite
Ambulatory Surgery Center without Oncology	Three-Room Suite or negative pressure SCA with externally vented CACI
Any MTF with receipt of hazardous drugs	Dedicated receiving space and separate storage space

11. Depending on where HDs are received in the MTF, a dedicated room for receiving and unpacking HDs will be located either in the Pharmacy or Logistics. Intent is not to replicate these spaces if possible.

12. Provision of medical care may be optimized by integrating satellite pharmacies throughout the MTF, adjacent to critical MTF services such as: Emergency Department, Operating Rooms, Critical Care, and Oncology. Where a satellite pharmacy (or multiple satellites) is planned, the dispensing workload from each satellite will need to be subtracted from the total workload being used to calculate space requirements to avoid duplication. Analysis is required and determination is made if all pharmacy services should be centralized in OP or IP or integrating satellite pharmacies. Satellite pharmacies generally follow the same parameters for pharmacy design as presented in this document, but at a smaller scale. In some locations external will-call systems for outpatient dispensing (i.e., Scriptcenters, remote dispensing vending technologies) may be located within the MTF, or outside the MTF in a retail facility.

13. Increasingly, more pharmacies are using robotic and automation technology to prepare, store and track medications with the goal of improving patient safety. Robots are mechanical devices that perform programmed, complex, and repetitive manipulations which mimic human behavior without continuous input from an operator. Examples of types of robots are medication dispensing robots, IV robotics and delivery robots. For instance, robotics systems will pick, package, and dispense individual doses of pills. Also, they can compound sterile preparations of chemotherapy and non-chemotherapy doses and fill IV syringes or bags with the medications. Planners must carefully consider space requirements based on types of automation / robotics selected.

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 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 Pharmacy Services is **1.25**. 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 Design: Military Medical Facilities, and DoD Space Planning Criteria Chapter 130: Net to Gross Conversion Factors.

3.2. GENERAL DESIGN CONSIDERATIONS.

1. The Pharmacy will administer comprehensive pharmaceutical care and cognitive clinical services. The pharmacy program will ensure that the principles of: “right drug, right dose, right route, right time, and right patient” can be achieved consistently across all clinical areas. Consider the following services and recommendations:
 - a. Automated drug packaging, storage, dispensing and distribution system.
 - b. Centralized IV admixture, chemotherapy preparation; and Total Parenteral Nutrition (TPN) service, performed in a compliant USP 797/800 environment.
 - c. Management and preparation of investigational medication program supplies.
 - d. Sterile product preparation; hazardous and non-hazardous.
 - e. Extemporaneous compounding/prepackaging.
 - f. Stock medications to specialized areas.
 - g. Purchasing/inventory of all pharmaceuticals.
 - h. Drug use evaluation (DUE) service.
 - i. Drug information service; (computer-based).
 - j. Clinical services/pharmaceutical care at the point of care.
 - k. Outpatient dispensing, preparation of medications and select patient care supplies.

1. Pharmacy system computer support.
 - m. Patient / student / resident education service.
 - n. Outpatient waiting environment designed to support calm and comfortable seating arrangements and walk-up queues where implemented.
 - o. Pharmacy leadership / administration space.
2. Where possible, co-locate the IP and OP pharmacy to support operational inventory efficiencies and shared staff support areas. When IP pharmacy is not co-located with OP pharmacy, it should be near the nursing units, emergency department, ambulatory infusion care areas and the procedures/interventional suite to optimize support and minimize the requirement for satellite pharmacies.
3. The OP Pharmacy should be in an easily accessible area that is directly adjacent to the outpatient clinics.
4. Consider placement of waiting areas to take advantage of sharing opportunities with other clinics during peak workload periods, especially in smaller facilities.
5. Consider door heights / widths; floor weight capacities to facilitate movement of pharmacy automation solutions in, out, and throughout the pharmacy areas. Consider supporting network communication and power infrastructure to facilitate dynamic and changing equipment requirements.
6. Consider the following environmental design principles to enhance safety in the pharmacy:
 - a. Reduce noise with utilization of materials (e.g., flooring, ceilings and furniture systems) that are acoustically absorbent and readily maintainable.
 - b. Design so that pharmacists entering orders are shielded from surrounding noise and interruptions, while maintaining a sightline to the order fill and check areas.
 - c. Provide adequate illumination to improve accuracy and efficiency.
 - d. Create medication safety zones: Organize areas so that everything needed is within arm's reach. Consider standardization of spaces as much as possible.
 - e. Incorporate ergonomic principles: Consider appropriate heights for work counters and use of adjustable fixtures. Counter and shelf heights affect visibility and clutter.
7. An open floor design is best suited for the department. Most fixtures will be of modular design; thus, enabling easy movement and reconfiguration as the needs change.

8. Order entry stations will have private work surface space, with access to resource information and to the department's automated conveyance system station if provided. All workstations need to be well lit and have sufficient panels or sound attenuation to allow a pharmacist or technician to enter medication orders in an uninterrupted manner.
9. Adequate fill stations to supplement automated or manual picking technology will be used to fill patient drug orders. The fill stations should be configured to support multiple functions in addition to refills, individual and STAT medication orders, etc. Space should be provided to accommodate dual monitors, a label printer, and additional computer peripherals within the large fill station.
 - a. The fill stations should have close access to bulk storage, including freezer(s) and refrigerator(s).
10. Counter space should be provided for packaging tablet and liquid medications, manufacturing extemporaneous solutions, ointments, creams and some packaging of unit dose medications. Work surfaces will also be required for labeling pre-packaged purchased medications.
11. A sink is required for washing hands, cleaning glassware, bottles and other manufacturing equipment.
12. Ample work surfaces and casework storage for point of use supplies and packaging materials should be provided within the area.
13. The sterile compounding area must be in a separate but easily accessed area of the Pharmacy and be designed to meet all aspects of the current USP 797 and 800 guidelines.
14. An anteroom is required with a hand wash sink and gowning area, with storage for gowns/scrub suits, a workstation with computer terminal and printer, staging/storage area for a cart with IV solutions and supply and waste receptacles. A separate vestibule may be provided to facilitate the transition of staff into the anteroom.
15. The HD and Compounded Sterile Processing (CSP) Buffer Rooms will require laminar airflow workbenches (LAFW). The area adjacent to the LAFWs will include a work surface to accommodate production into and out of the LAFWs. A pass-through design into the CSP Buffer room from the Anteroom will support good workflow and traffic separation.
 - a. In a Medical Center or large hospital, there may be a satellite compounding pharmacy (i.e., Oncology), this other location may serve as a backup or redundancy for the LAWF
 - b. When sizing CSP and HD Buffer rooms at MTFs with a Pharmacy training mission, these rooms will need to be larger to accommodate a minimum of two trainees, plus the Pharmacy staff supporting them.

- c. All water sources in a room must be located at least one meter away from any C-PEC.
 - d. All surfaces in CSP Buffer Room should be recessed, smooth, or mounted flush to make it easily cleanable and prevent collection of particulates (ex. Recessed sprinklers, vents mounted flush)
16. Space for inventory management (receipt, security, storage, returns) should be in the same area as inventory storage and directly connected with the off-stage delivery route to the Pharmacy. The use of high-density shelving for inventory management will require structural analysis and design to accommodate for increased floor load consideration.
 17. Investigational medication program supplies should be stored and prepared physically separate from all other medications.
 18. Badging and physical locking mechanisms are the primary means for physical security. Security measures such as surveillance cameras are required to monitor entry to the department, work zones within the filling areas, and to monitor controlled substance preparation and storage.
 19. When a confidential prescription consultation room is provided, locate adjacent to the transaction window(s).
 20. Patient transaction windows should be designed to allow direct communication with patients without compromising necessary security provisions. All transaction positions should be visually accessible but physically separated from each other and the pharmacy waiting area for patient privacy.
 21. A secondary entrance will serve as a material handling portal for staff circulation, cart distribution, receiving vendor orders and for the pickup of trash and packaging materials.
 22. Consider creation of a continuous circular workflow path from receiving, storage, distribution, assembly, and checking through to direct dispensing, automated dispensing, holding, and mail-out programs, resulting in minimized traffic paths and reduced staff fatigue.
 23. Ensure that clinical staff can have access to pharmacy staff and dispensing without intruding on patient-focused activities.
 24. 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 Project Sponsor clinical representative to ensure adequate placement and facility coverage including locations in secure areas.

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. Will the MTF pharmacy have hazardous drugs? (M)
2. Is the MTF a Medical Center? (M)
3. Is the MTF a Hospital? (M)
4. Is the MTF projected to support oncology service? (M)
5. Is the MTF an Ambulatory Surgery Center? (M)
6. Is a patient check-in kiosk projected to support outpatient pharmacy? (Misc)
7. Is a private prescription consultation room projected to support outpatient pharmacy? (Misc)
8. Are automated dispensing cabinets (ADCs) projected in outpatient pharmacy? (Misc)
 - 8.1. How many automated dispensing cabinets (ADCs) are projected in outpatient pharmacy? (Misc)
9. How many annual outpatient pharmacy prescriptions are projected? (W)
10. How many outpatient pharmacy supply technician FTEs are projected per the pharmacy staffing model? (S)
11. How many outpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model? (S)
12. Is a prescription intake center projected to support outpatient pharmacy? (M)
13. Is a private office projected to support outpatient pharmacy? (Misc)
14. Is the outpatient pharmacy projected to conduct investigational studies? (M)
15. Is an automated delivery system projected for outpatient pharmacy? (M)
16. Is a robotics system projected for outpatient pharmacy? (M)
17. Will HDs be delivered directly to, and stored in the pharmacy or satellite pharmacy, bypassing the MTF logistics department? (Misc) (Note: if not, then provide an unpack space in LOG.) (Misc)
18. Is refrigerated storage projected to increase beyond use dating of HDs? (Misc)
19. How many inpatient pharmacy biological safety cabinets are projected? (Misc)
20. Are automated dispensing cabinets (ADCs) projected in inpatient pharmacy? (Misc)
 - 20.1. How many automated dispensing cabinets (ADCs) are projected in inpatient pharmacy? (Misc)
21. How many medical / surgical patient beds are projected for this facility? (W)
22. How many ICU / CCU patient beds are projected for this facility? (W)
23. How many pediatrics patient beds are projected for this facility? (W)
24. How many LDR / LDRP / antepartum / postpartum patient beds are projected for this facility? (W)
25. How many mental health patient beds are projected for this facility? (W)
26. Is the inpatient pharmacy projected to conduct investigational studies? (M)
27. Is a robotics system projected for inpatient pharmacy? (M)
28. Is an automated delivery system projected for inpatient pharmacy? (M)
29. How many inpatient pharmacy supply technician FTEs are projected per the pharmacy staffing model? (S)

30. How many inpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model? (S)
31. How many unit dose, medication transfer or crash carts are projected to be held / staged in the inpatient pharmacy? (Misc)
32. Will the MTF require an alternative hazardous drug manipulation option for hazardous drug compounding? (M) (Note: neither the four-room nor three-room suite)
 - 32.1. Will the MTF require a Containment Segregated Compounding Area (C-SCA)? (Misc)
 - 32.2. Will the MTF require a Segregated Compounding Area (SCA)? (Misc)

4.2. COMPUTED STATEMENTS.

1. Total number of inpatient beds projected (Computed) (Default: [How many medical / surgical patient beds are projected for this facility?], [How many ICU / CCU patient beds are projected for this facility?], [How many pediatrics patient beds are projected for this facility?], [How many LDR / LDRP / antepartum / postpartum patient beds are projected for this facility?], [How many mental health patient beds are projected for this facility?])

SECTION 5: SPACE PLANNING CRITERIA

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.

5.1. FA1: OP PHARMACY RECEPTION.

1. Waiting (WRC01) 120 NSF

- a. Provide one
- b. Provide an additional 64 NSF for every increment of 50,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

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

- a. Provide one if [Is a patient check-in kiosk projected to support outpatient pharmacy?]
- b. Provide an additional one for every increment of four [Patient Transaction Window (PHOD1)] greater than six

Default area provides for one check-in kiosk. Depending on waiting area layout and design solution, the basic net area increment may accommodate two kiosks. One kiosk should be able to accommodate four patient transaction windows.

5.2. FA2: OP PHARMACY DISPENSING.

1. Prescription Consultation (PHDC1) 100 NSF

- a. Provide one if [Is a private prescription consultation room projected to support outpatient pharmacy?]

Depending on the location and projected dispensing volumes, this private consultation function may be accommodated from a patient transaction window that is positioned to provide greater privacy.

2. Patient Transaction Window (PHOD1) 30 NSF

- a. Provide two
- b. Provide an additional one for every increment of 50,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

An additional transaction window may be required where the pharmacy service is supporting more than just active-duty patients. Planners should consider local workstream variables that may require more than the two windows as the initial starting increment. Assumes that each transaction window can accommodate a pharmacist or pharmacy tech, with an expected throughput of 50K annual prescriptions, dual computer monitors and signature pad. Design should accommodate unobstructed staff access to the window closure mechanism.

3. Dispensing Area, Will Call (PHOD2) 55 NSF

- a. Provide one

- b. Provide an additional 30 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

The initial increment will accommodate three automated prescription storage and retrieval units and a single-door refrigerator.

4. Automated Delivery System Station (NT001) 15 NSF

- a. Provide one if [Is an automated delivery system projected for outpatient pharmacy?]

5. Preparation Work Area, Repackaging (PHMP1) 50 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

Depending on dispensing volume, planners should consider additional automation/robot/packager dispensing units to support this function, in addition to manual fill workspace.

6. Preparation Work Area, Extemporaneous Compounding (PHIV1) 40 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

This area includes equipment and the appropriate water source for the prescription reconstitution workstream. The requirement is to have access to filtered water (i.e., a bottle/jug). However, if the site has a high demand (i.e., pediatric population, high volume) consider adding a water system suitable for use in reconstituting oral suspension medications. Planners should consult pharmacy staff to determine if bottled water or a water filtering system will be used.

7. Workstation, Pharmacist or Pharmacy Tech (PHEV1) 30 NSF

- a. Provide two
- b. Provide an additional one for every increment of 50,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

These spaces are intended to support prescription order entry, manual filling, validation, etc. When considering operational variables, ensure to account for supply or administrative positions, ambulatory and specialty care clinics, whether the facility includes an emergency department, and staffing requirements from a DHA Pharmacy Staffing Model.

8. Prescription Assembly Area, Manual Pick Station (PHUD1) 30 NSF

- a. Provide one
- b. Provide an additional 30 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

9. Prescription Intake Center (OFA03) 150 NSF

- a. Provide one if [Is a prescription intake center projected to support outpatient pharmacy?]

- b. Provide an additional 50 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

Minimum area supports three administrative workstations supporting a patient queuing and notification system for prescription intake activities. Initial allocation is for two administrative staff and one pharmacist.

5.3. FA3: OP PHARMACY CONTROLLED DRUG PRESCRIPTION PREPARATION.

1. Preparation Work Area, Controlled Substances (SSS01) 50 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

The minimum net area includes a dedicated preparation workstation and the automated controlled substance dispensing solution (CII safe or equivalent).

5.4. FA4: OP PHARMACY ROBOTICS / AUTOMATION AREA.

1. Automated Dispensing Cabinet Support (PHMP1) 40 NSF

- a. Provide one if [Are automated dispensing cabinets (ADCs) projected in outpatient pharmacy?]
- b. Provide an additional 40 NSF per each [How many automated dispensing cabinets (ADCs) are projected in outpatient pharmacy?] greater than one

Net area allocation provides additional scope for whichever automation solution is selected. Planners should consult with the Pharmacy Operations Directorate (POD) for determination of automation manufacturer and delivery solutions. Not all potential automated dispensing solution suppliers have the same net area requirements per system component.

2. Robot, Prescription Preparation, Order Collation and Support (PHR01) 125 NSF

- a. Provide one if [Is a robotics system projected for outpatient pharmacy?]
- b. Provide an additional 100 NSF for every increment of 125,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 250,000

5.5. FA5: OP PHARMACY SUPPORT.

1. Receiving, Breakdown Area (PHBS1) 100 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

Space includes the receiving admin workstation.

2. Receiving, Trash Holding (UTC01) 90 NSF

- a. Provide one

3. Storage, Bulk, IV Fluids / Non-Injectables / General Supplies (PHBS2) 150 NSF

- a. Provide one
- b. Provide an additional 50 NSF for every increment of 50,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

This space includes all short and long-term storage requirements for the OP pharmacy unless otherwise identified. Space includes a cabinet for flammable storage. The intent is not to replicate this space in logistics. The total space requirement may be divided between logistics and pharmacy. Where availability of net area may be limited consider high-density shelving system(s).

4. Supply Tech Admin Workstation (OFA03) 30 NSF

- a. Provide one per each [How many outpatient pharmacy supply technician FTEs are projected per the pharmacy staffing model?]

Additional workstations (supply or administrative) based on the following parameters (as applicable): production volume (increments of 50,000), number of operating rooms supported, ambulatory and special clinics, emergency department, and staffing requirements from the DHA Pharmacy Staffing Model. If additional administrative workstations are required to support outpatient pharmacy services consider adding admin cubicles, and include comments with justification in the PFD. Refer to Chapter 210: General Administration for administrative space criteria.

5. Storage, Investigational Drugs / Research (PHBS3) 50 NSF

- a. Provide one if [Is the outpatient pharmacy projected to conduct investigational studies?]

May need to segregate this storage area from the general pharmacy bulk storage area. May need to include a preparation workstation, automated controlled substance dispensing solution or lockable cabinet and refrigerator in this space.

6. Storage, Refrigerated (SRR02) 40 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of 100,000 [How many annual outpatient pharmacy prescriptions are projected?] greater than 100,000

Minimum NSF supports two single-door refrigerators.

7. Storage, Freezer (SRF02) 20 NSF

- a. Provide one

Minimum NSF supports one single-door freezer.

8. Storage, Hazardous Waste Holding (SRHM1) 40 NSF

- a. Provide one

9. Janitor's Closet (JANC1)

40 NSF

- a. Provide one

10. Toilet, Staff (TLTU1)

60 NSF

- a. Provide one
- b. Provide an additional one for every increment of fifteen [How many outpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] greater than fifteen

5.6. FA6: OP PHARMACY STAFF AND ADMINISTRATION.

If additional administrative spaces other than those listed in this Functional Area are required to support OP Pharmacy Services, consider adding shared offices or cubicles, and include comments with justification in the PFD. Refer to Chapter 210: General Administration for administrative space criteria and Chapter 610: Common Areas for employee support and conference room requirements.

1. Office, Pharmacy Supervisor (OFA04)

100 NSF

- a. Provide one if [Is a private office projected to support outpatient pharmacy?]

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

2. Staff Lounge (SL001)

120 NSF

- a. Provide one if [How many outpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] is at least ten
- b. Provide an additional 4 NSF for each [How many outpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] greater than 10 (maximum 300 NSF)

5.7. FA7: IP PHARMACY DISPENSING.

FA Condition: [Is the MTF a Medical Center?] or [Is the MTF a Hospital?]

1. Vestibule (PHVS1)

50 NSF

- a. Provide one

2. Preparation Work Area, Unit Dose Packaging (PHUD1)

100 NSF

- a. Provide one
- b. Provide an additional 50 NSF for every increment of 100 [Total number of inpatient beds projected] greater than 100

3. Workstation, Inpatient Pharmacy (PHEV1)

30 NSF

- a. Provide three
- b. Provide an additional one for every increment of twenty [Total number of inpatient beds projected] greater than twenty

Space is intended to support IP pharmacists, IP pharmacy techs, and prescription validation functions. Additional operational variables to consider should be based on, number of operating rooms supported, ambulatory and specialty clinics, emergency department, and manpower requirements from the approved DHA Pharmacy Staffing Model.

4. Automated Delivery System Station (NT001) 15 NSF

- a. Provide one if [Is an automated delivery system projected for inpatient pharmacy?]

5. Prescription Assembly Area, Manual Pick Station, STAT & Special Orders (PHUD1) 30 NSF

- a. Provide one
- b. Provide an additional 30 NSF for every increment of 100 [Total number of inpatient beds projected] greater than 100

6. Cart, Medication, Unit Dose, Holding / Staging Area (MMCR2) 15 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of three [How many unit dose, medication transfer or crash carts are projected to be held / staged in the inpatient pharmacy?] greater than three

7. Automated Dispensing Cabinet Support (PHMP1) 40 NSF

- a. Provide one if [Are automated dispensing cabinets (ADCs) projected in inpatient pharmacy?]
- b. Provide an additional 40 NSF per each [How many automated dispensing cabinets (ADCs) are projected in inpatient pharmacy?] greater than one

Growth allocation includes front and rear access to the ADC. Planners should determine the total number of ADCs, in accordance with the authorized equipment standards (per centralized contract), to determine the amount of space increase required. Not all potential ADC suppliers have the same footprint requirement per system.

5.8. FA8: IP PHARMACY CONTROLLED DRUG PREPARATION.

FA Condition: [Is the MTF a Medical Center?] or [Is the MTF a Hospital?]

1. Preparation Work Area, Controlled Substances (SSS01) 50 NSF

- a. Provide one
- b. Provide an additional 25 NSF for every increment of twenty [Total number of inpatient beds projected] greater than twenty

The minimum net area includes a dedicated preparation workstation and the automated controlled substance dispensing solution (CII safe or equivalent).

5.9. FA9: IP PHARMACY ROBOTICS / AUTOMATION AREA.

FA Condition: [Is a robotics system projected for inpatient pharmacy?]

1. Prescription Assembly Area, Robotics / Automation (PHR01) 125 NSF

a. Provide one

There are few locations where Inpatient Pharmacy robotics are necessary. Robotic system could include unit dose machine and/or automation for discharge dispensing.

5.10. FA10: IP PHARMACY SUPPORT.

FA Condition: [Is the MTF a Medical Center?] or [Is the MTF a Hospital?]

1. Receiving Area (PHBS1) 100 NSF

a. Provide one

b. Provide an additional 50 NSF if [Total number of inpatient beds projected] is greater than 50

Space includes the receiving admin workstation.

2. Receiving, Trash Holding (UTC01) 90 NSF

a. Provide one

3. Storage, Bulk, IV Fluids / Non-Injectables / General Supplies / Working Inventory (PHBS2) 350 NSF

a. Provide one

b. Provide an additional 50 NSF for every increment of 25 [Total number of inpatient beds projected] greater than 100

This combined storage space is intended to support short and long-term storage requirements. May be subdivided as necessary for specific workstream requirements. Examples of supplies to consider include drugs -bottle, bags, fluids, pills, all dose forms and volumes, medication supplies (needles/syringes), returns / expired and the corresponding boxes, med-safe bags, pharmacy workflow supplies (printer paper, labels, cartridges, etc.), IV room cleaning supplies - general cleaning supplies, hand sanitizer, trash bags, etc. Space includes a cabinet for flammable storage. Where availability of net area may be limited consider high-density shelving system(s).

4. Supply Tech Admin Workstation (OFA03) 50 NSF

a. Provide one per each [How many inpatient pharmacy supply technician FTEs are projected per the pharmacy staffing model?]

Additional workstations (supply or administrative) based on the following parameters (as applicable): production volume, inpatient beds, number of operating rooms supported, ambulatory and specialty clinics, emergency department, and staffing requirements from the DHA Pharmacy Staffing Model. Where additional admin workstations are needed to support inpatient pharmacy services, consider adding admin cubicles, and include comments with

justification in the PFD. Refer to Chapter 210: General Administration for administrative space criteria.

5. Storage, Investigational Drugs / Research (PHBS3) 50 NSF

- a. Provide one if [Is the inpatient pharmacy projected to conduct investigational studies?]

May need to segregate this storage area from the general pharmacy bulk storage area. May need to include a preparation workstation, automated controlled substance dispensing solution or lockable cabinet and refrigerator in this space.

6. Storage, Refrigerated (SRR02) 40 NSF

- a. Provide one
b. Provide an additional 25 NSF for every increment of 50 [Total number of inpatient beds projected] greater than 100

Minimum NSF supports two single-door refrigerators. Other factors that may influence refrigeration requirements include clinic demand, MEDLOG capabilities, operational requirements (can an MTF handle the surge in influenza vaccines or all the vaccines and biologics that surface during a pandemic).

7. Storage, Freezer (SRF02) 20 NSF

- a. Provide one

Minimum NSF supports one single-door freezer.

8. Storage, Flammable (SRHM1) 40 NSF

- a. Provide one

9. Storage, Hazardous Waste Holding (SRHM1) 40 NSF

- a. Provide one

When the pharmacy is designated as a satellite hazardous waste accumulation site, additional net area may be needed based on the volume of stored material and holding duration. General trash and “non-hazardous” waste are collected and held in the receiving and trash holding room (UTC01)

10. Janitor’s Closet (JANC1) 40 NSF

- a. Provide one

11. Toilet, Staff (TLTU1) 60 NSF

- a. Provide one
b. Provide an additional one for every increment of fifteen [How many inpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] greater than fifteen

5.11. FA11: HAZARDOUS MEDICATION RECEIVING AND STORAGE SPACE PLANNING

FA Condition: [Will the MTF pharmacy have hazardous drugs?]

1. HD Receiving / Unpacking Room (PHHR1) 50 NSF

- a. Provide one if [Will HDs be delivered directly to, and stored in the pharmacy or satellite pharmacy, bypassing the MTF logistics department?]

This room contains a stainless-steel work surface with computer to document receipt of pharmaceuticals and one stainless steel shelf (M2100). This room must be neutral or negative pressure relative to the surrounding areas.

2. Storage, Hazardous Drugs (SRHM2) 50 NSF

- a. Provide one
- b. Provide an additional 20 NSF if [Is refrigerated storage projected to increase beyond use dating of HDs?]

Minimum NSF accommodates two stainless steel shelves (M2100) and a pass through. Totes are brought into the room, set on a shelf and unpacked, and then taken from the room. The additional NSF accommodates a small, upright refrigerator (R6900). This room is externally ventilated, negative-pressure, and has a minimum of 12 air changes per hour and must meet standards IAW USP <800>.

5.12. FA12: COMPOUNDING, HAZARDOUS DRUGS, FOUR ROOM SUITE.

FA Condition: [Is the MTF a Medical Center?] or [Is the MTF a Hospital] and [Is the MTF projected to support oncology service?]

1. ISO Class 7 Anteroom, Sterile Hazardous Drug Compounding (PHAR1) 100 NSF

- a. Provide one

Minimum NSF accommodates one stainless steel shelf (M2100) and one cart (E0987) for storage of sterile compounding supplies behind the red line, a donning/doffing area, and a handwashing sink. The planner must adjust the rooms NSF by adding 10 NSF per each additional shelf or cart. Room must meet standards IAW USP <797/800>.

2. ISO Class 7 Anteroom, Sterile Drug Compounding (PHAR1) 100 NSF

- a. Provide one

Minimum NSF accommodates one stainless steel shelf (M2100) and one cart (E0987) for storage of sterile compounding supplies behind the red line, a donning/doffing area, and a handwashing sink. The planner must adjust the rooms NSF by adding 10 NSF per each additional shelf or cart. Room must meet standards IAW USP <797/800>.

3. ISO Class 7 Buffer Room, Compounding Hazardous Drugs (PHC01) 100 NSF

- a. Provide one

- b. Provide an additional 30 NSF per each [How many inpatient pharmacy biological safety cabinets are projected?] greater than one

The minimum NSF accommodates one BSC. If condition b. is met, then a second BSC (L2320) will need to be added to the room contents. Room must meet standards IAW USP <797/800>.

4. ISO Class 7 Buffer Room, Compounding Sterile Preparations (CSP) (PHIV2) 130 NSF

- a. Provide one

This room contains two six-foot laminar air flow workstations (LAFW) for backup, redundancy. Where there is also a satellite compounding suite in the MTF, only one LAFW is required, and the room can be reduced by 30 NSF. Room must meet standards IAW USP <797>.

5.13. FA13: COMPOUNDING, HAZARDOUS DRUGS, THREE ROOM SUITE

FA Condition: [Is the MTF a Hospital?] or [Is the MTF an Ambulatory Surgery Center?] and not [Is the MTF projected to support oncology service?] and not [Will the MTF require an alternative hazardous drug manipulation option for hazardous drug compounding?]

1. ISO Class 7 Anteroom, Shared Sterile Hazardous Drug and non-HD Compounding (PHAR1) 100 NSF

- a. Provide one

Minimum NSF accommodates one stainless steel shelf (M2100) and one cart (E0987) for storage of sterile compounding supplies behind the red line, a donning/doffing area, and a stainless steel/surgical handwashing sink located at least 1 meter from the entrance to the HD buffer room. The planner must adjust the rooms NSF by adding 10 NSF per each additional shelf or cart.

2. ISO Class 7 Buffer Room, Compounding Hazardous Drugs (PHC01) 100 NSF

- a. Provide one
- b. Provide an additional 30 NSF per each [How many inpatient pharmacy biological safety cabinets are projected?] greater than one

The minimum NSF accommodates one BSC. If condition b. is met, then a second BSC (L2320) will need to be added to the room contents. Room must meet standards IAW USP <797/800>.

3. ISO Class 7 Buffer Room, Compounding Sterile Preparations (CSP) (PHIV2) 130 NSF

- a. Provide one

This room contains two six-foot laminar air flow workstations (LAFW) for backup, redundancy. Where there is also a satellite compounding suite in the MTF, only one LAFW is required, and the room can be reduced by 30 NSF. Room must meet standards IAW USP <797>.

5.14. FA14: HAZARDOUS DRUG CONTAINMENT SEGREGATED COMPOUNDING AREA (C-SCA) AND SEGREGATED COMPOUNDING AREA (SCA)

FA Condition: [Will the MTF require an alternative hazardous drug manipulation option for hazardous drug compounding?]

1. Compounding Room, Hazardous Drug, C-SCA (PHC01) 100 NSF

- a. Provide one if [Will the MTF require a Containment Segregated Compounding Area (C-SCA)?]

For use as an alternative option to a hazardous drug compounding suite that utilizes an ante and buffer room. Provide one room with fixed walls, non-recirculated air, at least 12 air changes per hour (ACPH), negative pressure of 0.010 to 0.030 to adjacent space (rooms used only for storage of hazardous drugs require at least 0.010 negative pressure to adjoining spaces). Space accommodates one C-PEC: Containment Ventilated Enclosure (CVE), Biological Safety Cabinet (BSC), or Containment Aseptic Compounding Isolator (CACI) that is vented to the building exterior.

2. Sterile Compounding Room, Hazardous Drug, CSP (PHIV2) 130 NSF

- a. Provide one if [Will the MTF require a Segregated Compounding Area (SCA)?]

For use as an alternative option to a non-hazardous sterile compounding suite that uses an ante and buffer room. Provide one room with fixed walls, located away from unsealed windows and doors that connect to the outdoors, and traffic flow. Space includes one Primary Engineering Control (PEC) device or enclosure, a sink near the SCA, or can be placed inside the perimeter of the SCA. The sink must not be within one meter of the PEC. The area within one meter of the PEC should be dedicated only to sterile compounding (e.g., not storage, hand hygiene, or garbing). The SCA and all surfaces within the SCA (e.g., walls, floors, counters, and equipment) must be clean, uncluttered, and dedicated to compounding. Surfaces should be smooth, impervious, free from cracks and crevices, and non-shedding, and be able to withstand cleaning and disinfecting with a sporicidal agent.

5.15. FA15: IP PHARMACY STAFF AND ADMINISTRATION.

FA Condition: [Is the MTF a Medical Center?] or [Is the MTF a Hospital?]

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

space criteria and Chapter 610: Common Areas for employee support and conference room requirements.

1. Office, Pharmacy Supervisor (OFA04) 100 NSF

- a. Provide one

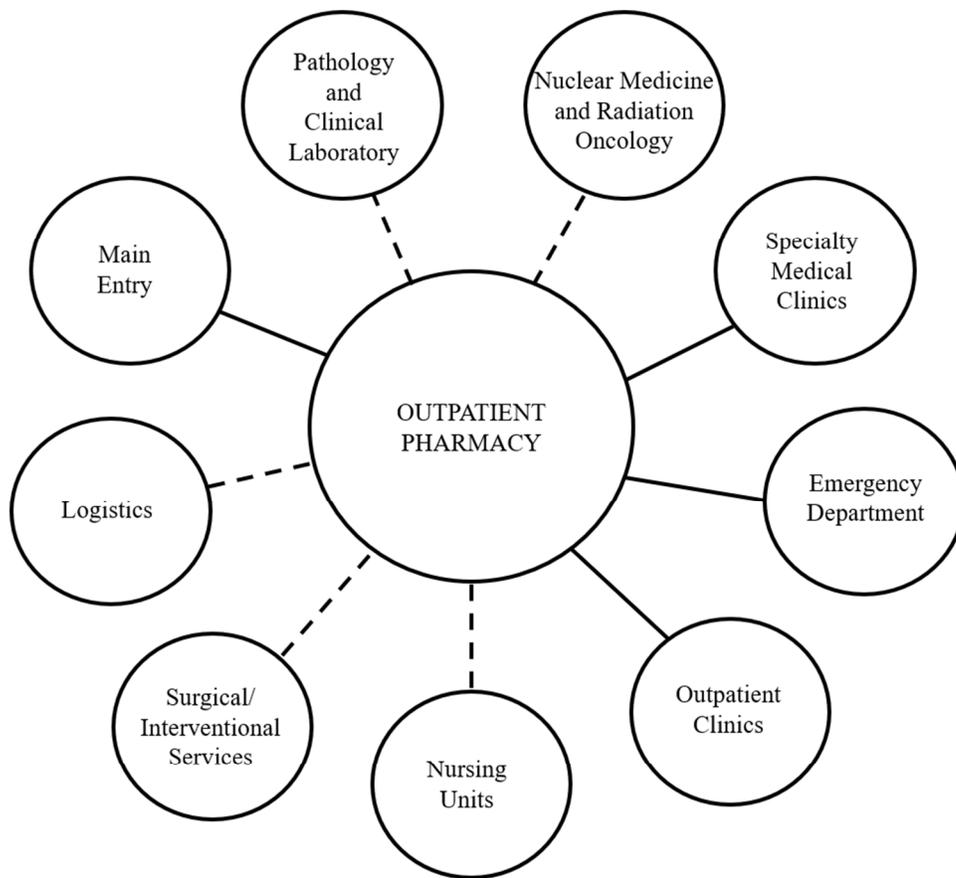
Provide one for the individual with overall responsibility for the service. If there are other staff positions not accounted for anywhere else, consider adding shared offices and include comments with justification.

2. Staff Lounge (SL001) 120 NSF

- a. Provide one if [How many inpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] is at least ten
- b. Provide an additional 4 NSF for each [How many inpatient pharmacy FTEs are projected on peak shift per the pharmacy staffing model?] greater than 10 (maximum 300 NSF)

SECTION 6: FUNCTIONAL RELATIONSHIPS (INTERDEPARTMENTAL): OUTPATIENT PHARMACY SERVICES

Outpatient Pharmacy will rely on several other services in the MTF for patient care and support functions. The diagram below represents desirable relationships based on efficiency and functional considerations.



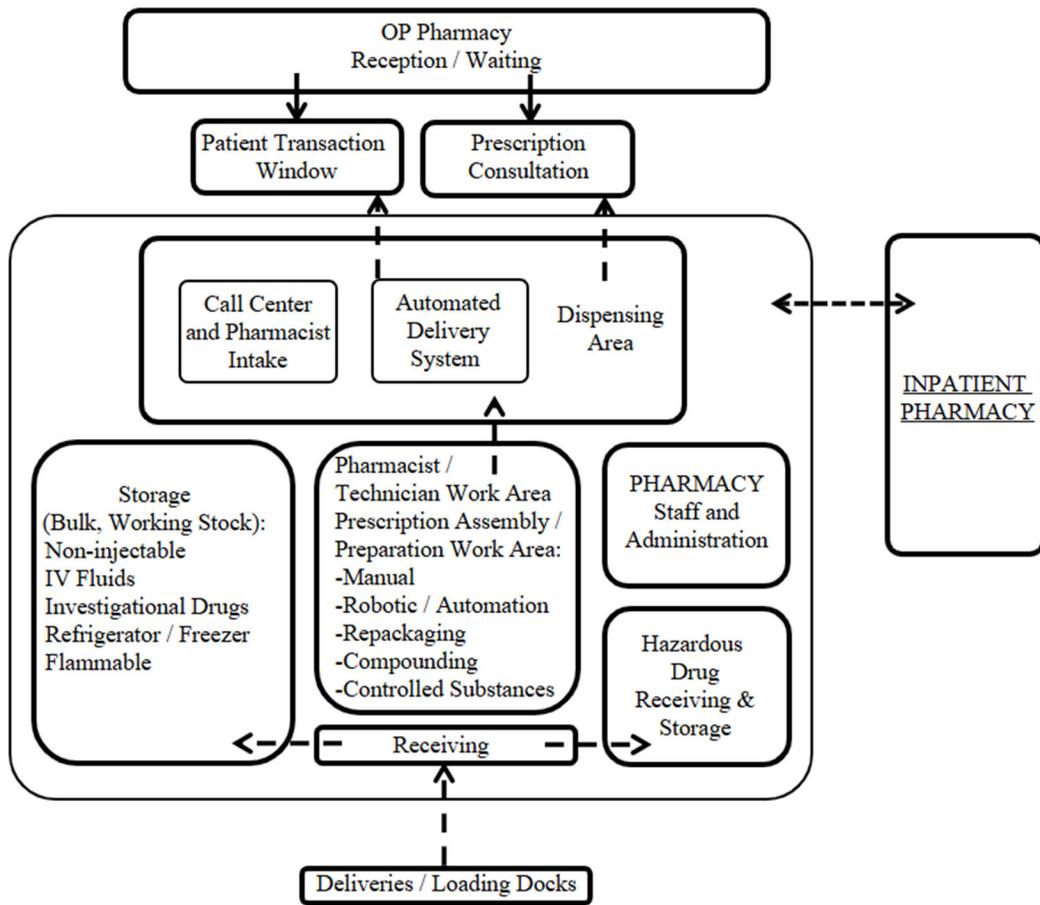
LEGEND

- Most Critical Adjacency
- - - - - Less Critical Adjacency

OUTPATIENT PHARMACY (OP)

SECTION 7: FUNCTIONAL DIAGRAM (INTRADEPARTMENTAL): OUTPATIENT PHARMACY SERVICES

The diagram below illustrates intradepartmental relationships among key areas / spaces within Outpatient Pharmacy. 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.

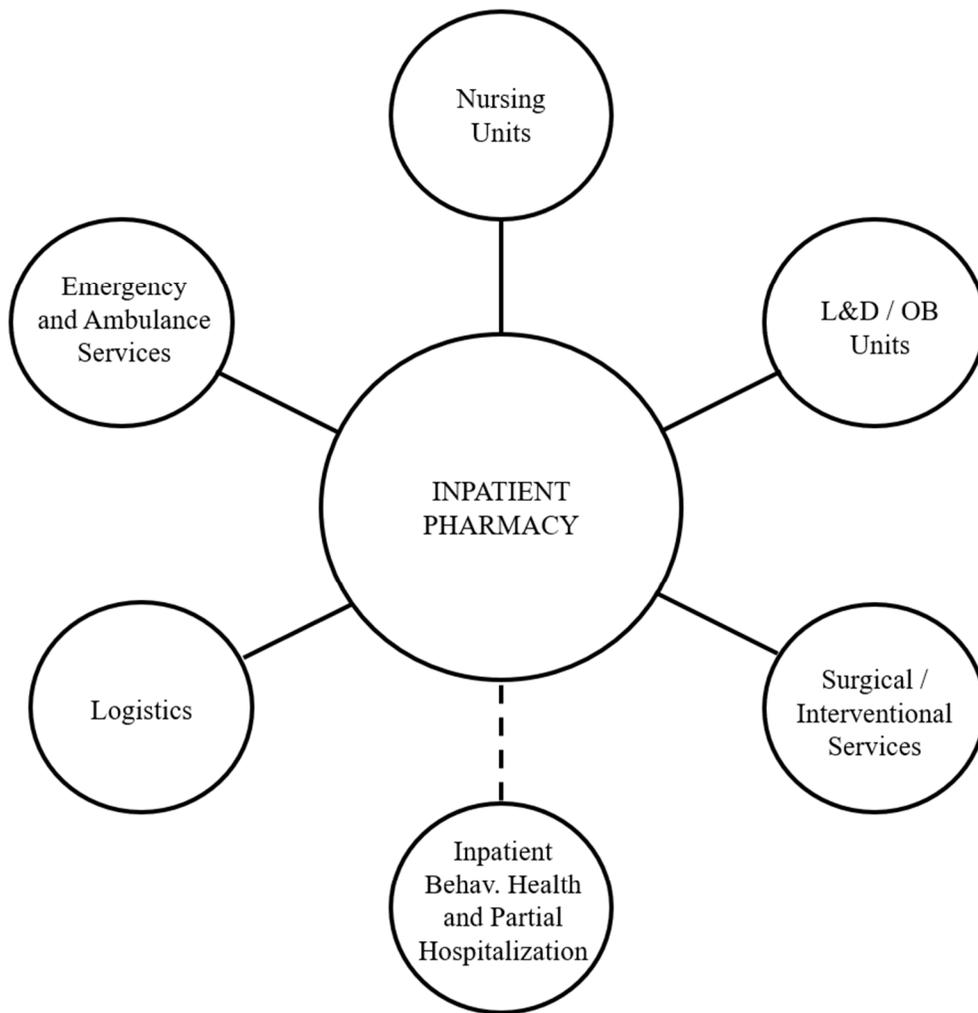


LEGEND **OUTPATIENT PHARMACY (OP)**

———→ Patient Circulation - - - -> Movement of Materials
 ←- - - -> Staff Circulation

SECTION 8: FUNCTIONAL RELATIONSHIPS (INTERDEPARTMENTAL): INPATIENT PHARMACY SERVICES

Inpatient Pharmacy will rely on several other services in the MTF for patient care and support functions. The diagram below represents desirable relationships based on efficiency and functional considerations.



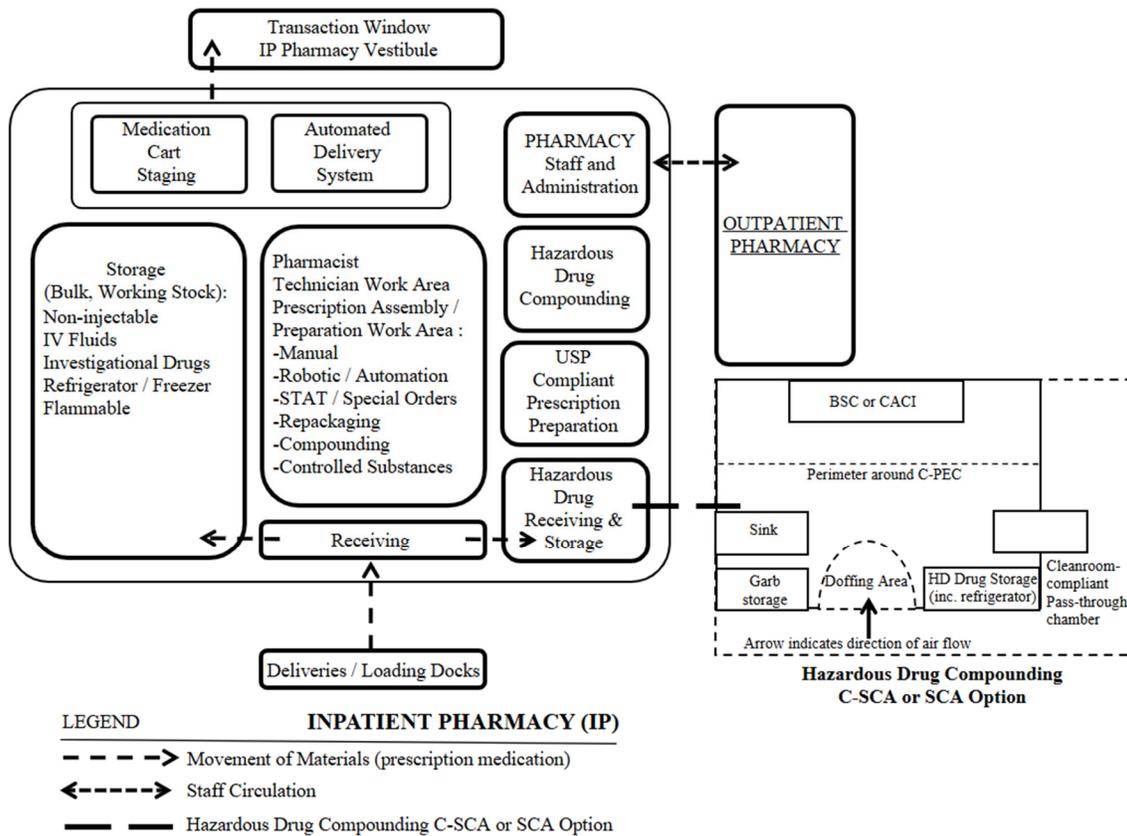
LEGEND

- Most Critical Adjacency
- - - - - Less Critical Adjacency

INPATIENT PHARMACY (IP)

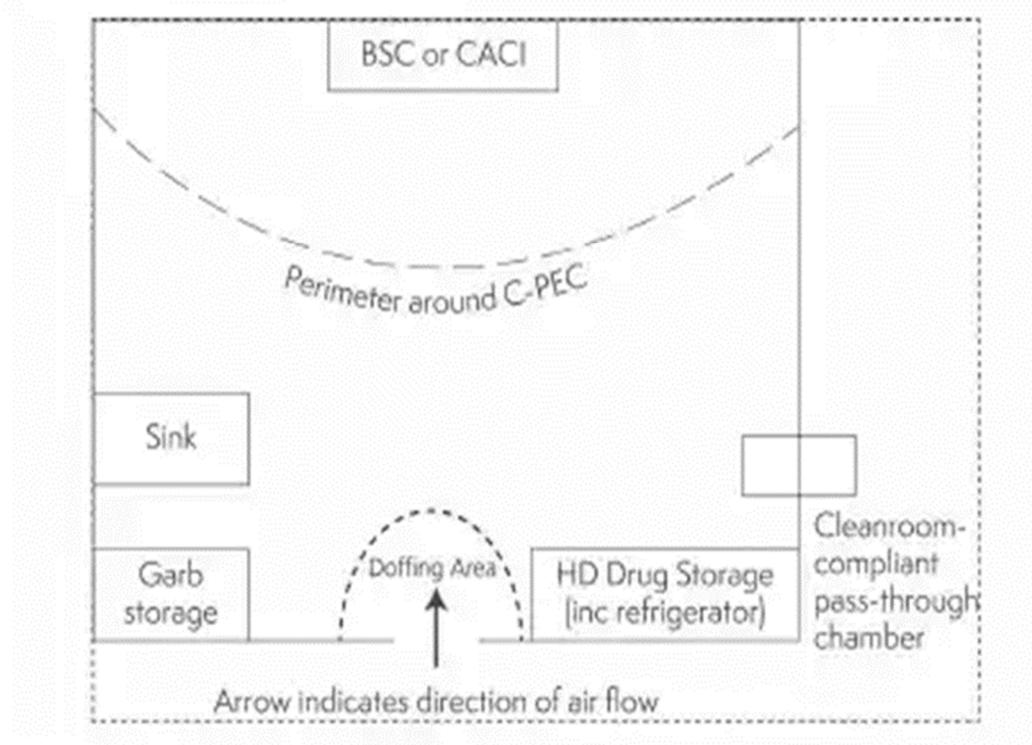
SECTION 9: FUNCTIONAL DIAGRAM (INTRADEPARTMENTAL): INPATIENT PHARMACY SERVICES

Inpatient Pharmacy will rely on several other services in the MTF for patient care and support functions. The diagram below represents desirable relationships based on efficiency and functional considerations. The C-SCA or SCA optional solution is for locations with low volume hazardous drug compounding.



SECTION 10: FUNCTIONAL DIAGRAM HAZARDOUS DRUG COMPOUNDING C-SCA OR SCA OPTION

The C-SCA or SCA optional solution is for locations with low volume hazardous drug compounding.



GLOSSARY

Assembly-Line (In and Out) Dispensing Method: A pharmacy staff member notes the prescription to be filled for the patient, gives the patient a ticket, and sends the prescription to a separate filling station.

Automated Delivery System: The term refers to the use of technology, including software, artificial intelligence (AI), robotics, and sensors, to manage, streamline, and execute the transportation of goods from one location to another with limited or no human intervention. Examples of systems used in healthcare facilities include pneumatic tube, box conveyor, and autonomous delivery vehicles.

Automated Dispensing Units (ADU): A device designed for the secure and accurate dispensing of oral medications. The technology provides inventory control, security, accountability, and effective patient medication management. ADUs are deployed within medication rooms in a variety of patient care settings, including inpatient nursing units, emergency department, surgical services, clinics, and other departments as determined by the MTF.

Automated Queuing System: An integrated system provided in Outpatient Pharmacies that ensures the patient does not have to stand in line (or queue) at reception. With this system, the patient arrives and gets a number or ticket at a self-service kiosk. This system can provide estimated waiting time and improve patient experience. It also provides tracking capabilities. The Pharmacy staff can see how many appointments are in the queue and who is next.

Beyond Use Date (BUD): This is the time after which a compounded preparation cannot be used or stored. Compounded preparations that have a 12-hour or less BUD have less restrictive requirements for the classification of the room where the compounding occurs. This is described in the Containment Segregated Compounding Area (C-SCA) section.

Bank-Teller Dispensing Method: Patients receive a priority number based on military status, the type of prescription, and whether their case is urgent; when a patient's number is announced, an attendant fills prescription for that patient.

Batch-Fill Dispensing Method: The pharmacy periodically prints all outstanding electronic prescription orders and fills them; patients pick up their prescriptions on a first-come, first-served basis.

Biological Safety Cabinet (BSC): A containment unit suitable for the preparation of low to moderate risk agents when there is a need for personnel and environmental protection, according to ISO 14644-1.

Compounded Sterile Preparations (CSPs): The mixing of one or more sterile products using aseptic technique; subject to extensive USP <797> guidelines for determining the risk levels and appropriate procedures related to their preparation. The risk levels are designated as low, medium and high.

Compounding Aseptic Containment Isolators (CACI): Is a controlled environment that's used to compound hazardous drugs in an aseptic manner. It's designed to protect workers from exposure to airborne drugs and to prevent hazardous materials from entering or exiting the work area. CACIs are suitable for applications involving antineoplastic, cytotoxic, or hazardous materials compounding.

Containment Primary Engineering Control (C-PEC): This is the device commonly referred to as the hood, where compounds are mixed. The C-PEC includes containment ventilated enclosures (CVE) known as powder hoods, biological safety cabinet (BSC), and compounding aseptic containment isolators (CACI).

Containment segregated compounding area (C-SCA): A type of C-SEC with nominal airflow (12 ACPH) and room pressurization requirements (negative pressure between 0.01 – 0.03 inches of water column) as they pertain to HD compounding.

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 workday.

Cytotoxic: A pharmaceutical that has the capability of killing living cells. These agents shall include, but are not limited to, agents classified as cancer chemotherapeutic, carcinogenic, mutagenic and antineoplastic.

Drug Information Service: Documentation in hard copy or digital formats that offers complete drug information, upon request, to physicians and other medical staff members. This function may be facilitated through subscribing to an authorized drug information service, and disseminated electronically via computer terminals, hand-held devices, or written text.

Extemporaneous Compounding: The art or science of assembling individual chemical components into a usable drug. Typically, this is done by an individual physician seeking a drug that is otherwise unavailable from commercial pharmaceutical manufacturers.

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.

Hazardous Drug (HD): The USP <800> utilizes the list of HDs identified by the National Institute for Occupational Safety and Health (NIOSH). Drugs are classified as hazardous if they possess any of the following characteristics: genotoxicity, organ toxicity, teratogenicity or

development toxicity, reproductive toxicity, and carcinogenicity. Healthcare facilities are required to develop and keep a list of HDs utilized at their facility on file and available for surveyors.

Input Data Statement: A set of questions designed to elicit information about the healthcare project 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.

International organization for Standardization (ISO): Classifications define air cleanliness based on the maximum number of allowable particles per cubic meter of air. USP 797 and USP 800 rely on these ISO standards to ensure sterile compounding environments are sufficiently controlled to protect patients and staff. These classes are defined by ISO 14644-1 standards. Specific ISO classifications are as follows:

- i. ISO 5 (Class 100): The cleanest level typically used in compounding. It allows no more than 3,520 particles ($\geq 0.5 \mu\text{m}$) per cubic meter. It usually requires 240–480 air changes per hour (ACH).
- ii. ISO 6 (Class 1,000): A transitional level allowing up to 35,200 particles per cubic meter. It is rarely a standalone requirement in compounding and usually acts as a buffer between ISO 7 and ISO 5.
- iii. ISO 7 (Class 10,000): Allows up to 352,000 particles per cubic meter. It typically requires at least 30 ACH.

Laminar Airflow Hood: An apparatus designed to provide Class 5, 6 or 7 environments, as spelled out in ISO 14644-1 for preparation of sterile products using air circulation in a defined direction that passes through a HEPA filter to remove the initial particles and particles generated within the controlled environment.

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

Net-to-Department Gross Factor (NTDG): A parameter used to calculate the Department Gross Square Foot (DGSF) area based on the programmed Net Square Foot (NSF) area. Refer to 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 workday 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.

Open Concept Pharmacy Design: An open design concept which minimizes fixed walls, provides good lines of sight, and optimizes travel between functional areas and achieves

flexibility. Flexibility is a critical design aspect for the Pharmacy which requires an open floor plan and flexible systems which can adapt to changes in technology and workflows.

Program for Design (PFD): A listing of all 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 the Space and Equipment Planning System (SEPS).

Robotics: Mechanical devices that perform programmed, complex, and repetitive manipulations which mimic human behavior without continuous input from an operator. Increasingly, more pharmacies are becoming automated, using robotic technology and electronics to prepare and track medications with the goal of improving patient safety. Examples of types of robots are medication dispensing robots, IV robotics and delivery robots. For instance, robotics systems will pick, package, and dispense individual doses of pills. Also, they can compound sterile preparations of chemotherapy and non-chemotherapy doses and fill IV syringes or bags with the medications. Planners must carefully consider space requirements based on types of automation / robotics selected.

Satellite Pharmacy: Decentralized pharmacy locations that supplement and support the main inpatient and/or outpatient pharmacies, by placing appropriate resources closer to critical patient care area that requires a higher level of service, thereby facilitating improved workflow and ultimately better patient care.

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).

Sterile Preparations Compounding: Also called sterile compounding, it involves the dilution, mixing, and injection of various medication products using aseptic technique.

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.

USP 795: Chapter <795> of the United States Pharmacopeia, describes the minimum standards for preparing quality nonsterile compounded medications for humans and animals

USP 797: Chapter <797> of the United States Pharmacopeia, more commonly known as USP 797, sets practice standards regarding the preparation of sterile compounds.

USP 800: Chapter <800> of the United States Pharmacopeia, more commonly known as USP 800, sets practice standards regarding the handling and storage of hazardous drugs in healthcare settings.

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.