

Part B – Health Facility Briefing & Design

255 Pharmacy Unit



*i*HFG

International Health Facility Guidelines

2026

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255 Pharmacy Unit

1 Executive Summary

This Functional Planning Unit (FPU) covers the requirements of a Pharmacy Unit. The purpose of the Pharmacy Unit is to provide all inpatient and outpatient pharmaceutical services including dispensing, preparation of non-sterile and sterile commodities as required, conducting clinical trials as needed, reporting on adverse drug reactions and the provision of drug information and education.

The size and type of service to be provided in the Pharmacy Unit will depend upon the type of drug distribution system used, number of patients to be served, and extent of shared or purchased services.

The Pharmacy Unit is arranged in Functional Zones that include the Counter/ Reception, Dispensing Areas, Preparation Areas, Support Areas and Staff Areas. The Counter/ Reception may be dual purpose and serve as the point of medication distribution to Inpatient Units while also serving as a public dispensing point to Outpatients. Within the Unit Staff Areas should have controlled access to areas including Assembly and Preparation Areas, Bulk Stores, Drug Safe and Sterile Preparation Areas.

The Functional Zones and Functional Relationship Diagrams indicate the ideal external relationships with other key departments and hospital services. For the Pharmacy Unit this includes a relationship with Inpatient and Outpatient Areas. Optimum Internal relationships are demonstrated in the diagram by the juxtaposition of rooms and areas, with arrows indicating the path of travel.

Design Considerations address a range of important issues including Accessibility, Acoustics, Safety and Security, Building Services Requirements and Infection Control. This FPU describes the minimum requirements for support spaces of a typical Pharmacy Unit at Role Delineation Levels 3 to 6.

The typical Schedule of Accommodation is provided using Standard Components (typical room templates) and quantities for all Role Delineation Levels (RDL).

Further reading material is suggested at the end of this FPU but none are mandatory.

Users who wish to propose minor deviations from these guidelines should use the Non-Compliance Report (in Part A appendices) to briefly describe and record their reasoning based on models of care and unique circumstances.

The details of this FPU follow overleaf.

2 Introduction

The purpose of the Pharmacy Unit is to provide all Inpatient and Outpatient Pharmacy services including dispensing drugs, preparation of non-sterile and sterile commodities, providing drug information and education, conducting clinical trials as needed and reporting on adverse drug reactions.

The size and type of services provided by the Pharmacy Unit will be dependent on the type of drug distribution system used, the number of patients to be served and the extent of drugs to be administered. The Operational Policy will have references to the above to assist in determining the requirement of a Pharmacy.

Facilities (including satellites, if applicable) and equipment shall be as necessary to accommodate the requirements of the Operational Policy. If unit dose procedure is used, additional space and equipment for supplies, packaging, labelling, and storage for the carts become necessary.

The Pharmacy Unit may include all or some of the following functions:

- Dispensing for Inpatients and Outpatients (separate for each)
- Sterile Preparation and Non-Sterile Preparation
- Controlled storage, recording and distribution of narcotics and other controlled drugs
- Drug utilization monitoring, review, and reporting
- Management of drugs for clinical trials
- Patient advisory services (for outpatients in health facilities)
- Assess the status of the patient's health problems and determine whether the prescribed medications are optimally meeting the patient's needs and goals of care
- Education and Training

In addition to these Guidelines, the relevant Ministry of Health regulations (if any) must be complied with.

3 Functional and Planning Considerations

Operational Models

A Pharmacy may extend its service from a single healthcare facility to outlying facilities. Specific design requirements for packing, storage and dispatch of goods shall be considered for different operational models.

Inpatient Pharmacy

A hospital will require a central inpatient pharmacy as a minimum, to cater for the needs of all patients including emergency, inpatient areas, critical care areas, operating theatre recovery, ambulatory care areas and other similar areas. The inpatient pharmacy should be available throughout the day, and special provisions should be made available for access during the night.

Decentralized Pharmacies

A Hospital may choose to have one or more smaller pharmacies, which work in conjunction with the facility's central pharmacy. In this model, pharmacists could be brought closer to the patient care areas. Decentralized Pharmacy includes satellite pharmacies located remotely from the central pharmacy and within other patient care areas such as the Emergency Unit, Outpatient areas, Critical Care areas and Inpatient Areas. This model is more likely in larger RDL 5/6 hospitals.

Unit Dose Systems

The Unit Dose System is a medication dispensing method where individual doses are pre-packaged into blister packs, ensuring consistent and convenient administration for patients. This system requires dedicated space and specialized equipment for supplies, packaging, labeling, and storage to maintain efficiency and organization.

Retail Pharmacy/ Outpatient Pharmacy

Stand-alone Retail Pharmacy/ Outpatient Pharmacy is intended for outpatients, repeat prescriptions and retail pharmaceutical goods.

Optionally an Outpatient pharmacy may be located back-to-back with an Inpatient Pharmacy, sharing the staff and the stock. However, the dispensing area of outpatient pharmacy should be kept separate from the dispensing area of the inpatient pharmacy.

Planning Models

Integrated Pharmacy

This refers to Pharmacy as part of a larger medical facility, mostly hospitals. The main Pharmacy for Inpatients and Outpatients are collocated back-to-back. Assembly, sorting, preparation and storage areas will be restricted for staff access. As far as possible the pharmacy resources can be shared including delivery, storage and amenities but not the dispensing.

A dedicated area for Outpatient dispensing with Waiting Areas should be located away from areas which are restricted for staff only.

Central Inpatient Pharmacy

A central, dedicated Inpatient Pharmacy may be located on any level of the facility including the basement with good access to all patient floors via lifts and restricted staff-only corridors.

Optionally the Inpatient Pharmacy may deliver a range of drugs to the inpatient areas via a Pneumatic Tube System. The Ministry of Health may have restrictions on the delivery of certain types of drugs via the PTS, which should be considered.

Unit/ Department-Based Pharmacy Areas

This refers to medication areas located within an Inpatient Unit and may include automated dispensing. Medication storage may be located in locked cupboards and safes within dedicated Medication Rooms in an Inpatient Unit.

The facilities may include secured drug storage, refrigerated drug storage, space for medication trolleys and computer access for pharmacy personnel.

Automated systems referred to as Medication Management units, if used, must be located in dedicated Medication Rooms.

Unit/Department-based pharmacy areas are managed by the unit nurses.

Satellite Pharmacy Units

Satellite Pharmacy Units refer to a room or unit in a hospital which is remotely positioned from the main Pharmacy and yet managed by the staff of the central Pharmacy. The need of a Satellite Pharmacy Unit may be due to distance of travel to the Main Pharmacy and other logistic issues. After-hours Drug store may also be provided within a Satellite Pharmacy.

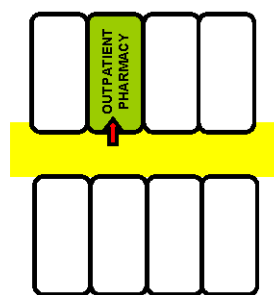
Dedicated Retail or Outpatient Pharmacy

Stand-alone Retail or Outpatient Pharmacies may be provided in any location permitted by the Municipality including in commercial, retail, residential and healthcare buildings. Consumer products may also be sold in outpatient or retail pharmacies; however, prescription drugs must be separated behind counters.

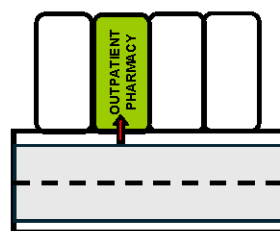
Within healthcare facilities such as hospitals, a Retail or Outpatient Pharmacy should ideally be located on street level or the ground floor. If this cannot be achieved due to restrictions on the building footprint, then the next best position would be an upper level adjacent to the outpatient departments. The Outpatient Pharmacy can also be back to back with the Inpatient Pharmacy.

If located on the ground level of a healthcare facility, the Retail/ Outpatient Pharmacy may have doors from either inside, outside, or both. Such pharmacies may be regarded as a tenancy and leased to an external pharmacy operator, separate from the healthcare facility operator.

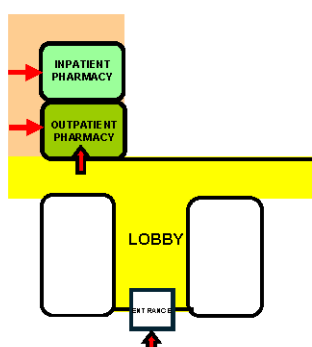
If situated in a complex such as a commercial centre or mall, a Retail Pharmacy may be located on a higher floor to suit the public flows.



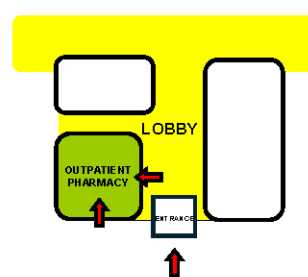
TENANCY IN A
COMMERCIAL/ RETAIL
BUILDING



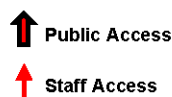
TENANCY IN STREET SHOP



IN A HOSPITAL BACK-TO-
BACK WITH INPATIENT
PHARMACY



IN A HOSPITAL OR CLINIC
WITH POSSIBLE INTERNAL
AND/ OR EXTERNAL ACCESS



Functional Areas

The functional areas of a Pharmacy Unit may be sub-divided into two types – “restricted” and “accessible” as follows:

Restricted Areas

- Dispensing Areas which may include separate areas for Inpatients and Ambulatory patients (outpatients)
- Preparation and manufacturing areas of non-sterile goods
- Active store for imprest stock storage, including assembly and dispatch areas with space allocated for trolley parking
- Goods Receipt area for receiving deliveries of pharmaceuticals, unpacking and checking deliveries
- Bulk stores
- Quarantine Holding Area for non-conforming deliveries, recalls, temperature-excursion products, and items pending verification. This may be a dedicated room or a secure, clearly segregated area within the store, sized according to the operational policy
- Secured stores for accountable drugs, refrigerated stores and flammable goods storage. All accountable drugs must be stored in a lockable storage unit. For narcotic drugs, they must be stored in a metal drug safe mounted inside a lockable cupboard. Size of the drug safe to suit the volumes of narcotic drugs being stored. In the case of large quantities of narcotics to be held on site of a facility, strong room construction from bricks, blocks or concrete should be

provided.

- Dispatch area for deliveries to other Units including Inpatient Units if located within the hospital
- After-hours drug store with access by authorized personnel only (within a 24-hour zone of the hospital). This should be ideally located on the perimeter of the Unit with dual access where one entry is directly from outside the Pharmacy Unit and one from inside. Alternatively, the after-hours drug store may be as a satellite pharmacy closer to the Inpatient areas.
- Staff areas including Offices, Workstations, Meeting Rooms, Staff Room, Change Rooms and Toilets

Accessible Areas

- Reception and Waiting areas for outpatients.
- Patient counselling and consult areas. When outpatient dispensing is provided, a confidential patient counseling room is required

Depending on the Role Delineation and Operational Policy, the Pharmacy may also include:

- Sterile preparation which may include sterile and cytotoxic manufacturing suites, along with support facilities including Anterooms, Change Rooms and Storage
- Facilities for clinical trials, which may include dispensing areas, secured storage and records area and workstations. This should be a separate area for facilities at RDL 6 only.
- Extemporaneous manufacturing area which requires extra space for compounding products

Sterile Preparation Area

The preparation area is a specialized space designed for the preparation of sterile medications. These areas must adhere to strict cleanroom standards to prevent contamination and ensure patient safety.

Unit Dose Preparation Area

Unit dose preparation area is a dedicated space where individual doses of medications are packaged, labelled, stored, and prepared for patient administration using unit dose packaging systems, quality control measures, and strict organizational protocols to ensure accurate dispensing, minimize medication errors, and enhance efficiency in healthcare settings.

Aseptic Room (Sterile Manufacturing)/ Cytotoxic Room (Cytotoxic Manufacturing)

The Aseptic Room and the Cytotoxic Room are cleanrooms designed for sterile medication manufacturing. The room will contain laminar flow cabinets and/ or pharmaceutical isolators, including cytotoxic cabinets, to ensure sterility in the manufacturing process. Robotic compounding systems may be used as required. Aseptic preparation areas shall be designed with a defined pressure cascade to protect product and maintain cleanliness. The areas must be accessed via an Anteroom and airlock. Air lock shall be provided for pressure balancing and the Anteroom shall be used for scrubbing and gowning. Both rooms should remain separate from each other. Cytotoxic preparation areas shall be designed with a defined containment strategy to protect staff and adjacent areas, including controlled pressure differentials, monitored airflow direction, and alarmed pressure performance.

The Aseptic preparation area shall be located on the perimeter of the facility.

The following features shall be considered while designing sterile manufacturing facility:

- Electronic interlock door system should be provided to prevent the opening of both doors in the Anteroom at the same time
- Handwashing facilities should be provided immediately outside the Aseptic (Clean) Rooms in the adjoining Anteroom. Hand basins are not to be located within the Aseptic (Clean) Rooms.
- An intercom system should be provided between Aseptic (Clean) Room and Anteroom.
- High-resolution CCTV cameras for remote monitoring should be provided.
- The facility must comply with the room requirements set forth in relevant International Clean Room standards for sterile and cytotoxic manufacturing.
- Work benches are to be freestanding and in Stainless Steel. Stainless Steel trolleys can be provided for minimal storage.

- High performance 2-coat epoxy paint must be applied to the gypsum ceilings and walls. Alternatively, wall vinyl with welded joints may be used.
- Homogeneous vinyl flooring (or similar) with hot-welded joints is acceptable. High performance 2-coat epoxy paint to the floor is also acceptable.

Clinical Trials Dispensing

The Clinical Trials Dispensing area should include storage, dispensing, packaging, labelling and records holding for clinical trials drugs. This requirement only applies to facilities at RDL 6, permitted to carry out Clinical and Drug trials.

The Clinical Trials facilities should be a separate area within the main Pharmacy.

Clinical Trials storage, preparation and dispensing should be located in a separate area within the Pharmacy and have ready access to patient Interview and Consultation rooms.

Clinical Trials drugs/ medications area requires the following considerations:

- Workspace with computer for Pharmacist
- Preparation bench and sink
- Lockable storage for clinical trials drugs, separate from other Pharmacy supplies
- Lockable records storage
- Staff Handwashing basin should be located in close proximity

Automated Dispensing Stations

An automated Medication Management System may be provided within inpatient areas to dispense prescription medicine for patients in that Unit. The dispensing system remains under the control of the Pharmacy Unit. Each dispensing station must have built-in electronic access control to the drug compartment(s). If narcotic drugs are stored, the dispensing station must be located inside a lockable room.

An automated dispensing station (if provided) should be equipped with:

- Automated dispensing units and refrigerated dispensing units according to manufacturer's specifications
- A bench for drug preparation adjacent to dispensing units
- Shelving for reference texts
- Handwashing facilities in close proximity

Automated dispensing stations may also be provided in critical care departments and operating theatres, as appropriate.

Satellite Pharmacy

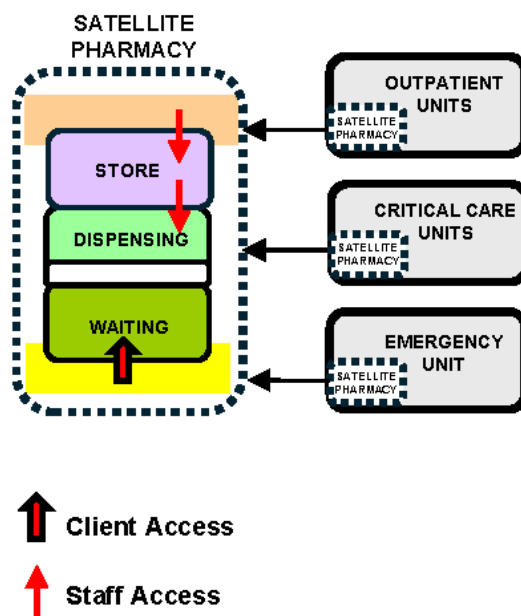
A Satellite Pharmacy Unit is a room or unit in a hospital that is located remote from the central Pharmacy Unit.

A Satellite Pharmacy requires the following, as applicable to its scope of service and operational requirements:

- A stainless steel or other impervious work bench with a sink, supplied with hot and cold water
- A dispensing bench of stainless steel or other impervious material; sized to support the required dispensing, labelling and packaging activities
- Computer workstations according to the number of pharmacists in the Satellite unit
- A private area for counselling of clients about dispensed medicines and other medication-related matters
- An area for clients to wait
- Adequate lighting and ventilation for drug preparation and dispensing
- Air temperature and humidity control suitable for the proper storage of drugs and medicines, with secure storage for controlled medicines where required
- A dedicated handwashing basin with appropriate fittings

The Satellite Pharmacy must be:

- Constructed to prevent unauthorized access by persons other than staff through doors, windows, walls and ceilings
- Fitted with a security intrusion detector alarm that is control room monitored to a central agency on a 24-hour basis



Storage

The following minimum elements, in the form of cabinets, shelves, automated carousels and/or separate rooms or closets, shall be included as required:

- Bulk storage
- Active storage
- Refrigerated storage
- Volatile fluids and alcohol storage with construction as required by the relevant regulations for substances involved
- Secure storage for narcotics and controlled drugs
- Storage for general supplies and equipment not in use
- Storage for prescriptions and any documents required by relevant legislation

Store - Refrigeration

This can be a room/ bay which consists of multiple refrigerators for storing specific medications which are required to be kept at cool temperatures. Alternatively, a commercial grade cool room can also be used.

This shall be located in proximity to assembly/ preparation area and other storage area within the Unit.

Refrigerated storage areas in the Pharmacy will require the following considerations:

- All access doors (either to room or refrigerators) shall be lockable
- Temperature monitoring system installed and connected to a centralized alarm/ warning system.

Functional Relationships

External

The Pharmacy Unit shall be located for convenient access, staff control, and security. Direct access to loading dock and bulk storage is required if not located within the main Pharmacy Unit.

Internal

Access points provided for the following personnel/ purpose shall be carefully considered:

- Visitors to the Unit
- Pharmacy Staff
- Non-Pharmacy staff to collect prescriptions and medications
- Delivery and prescription collection for outpatients
- Supplies delivery

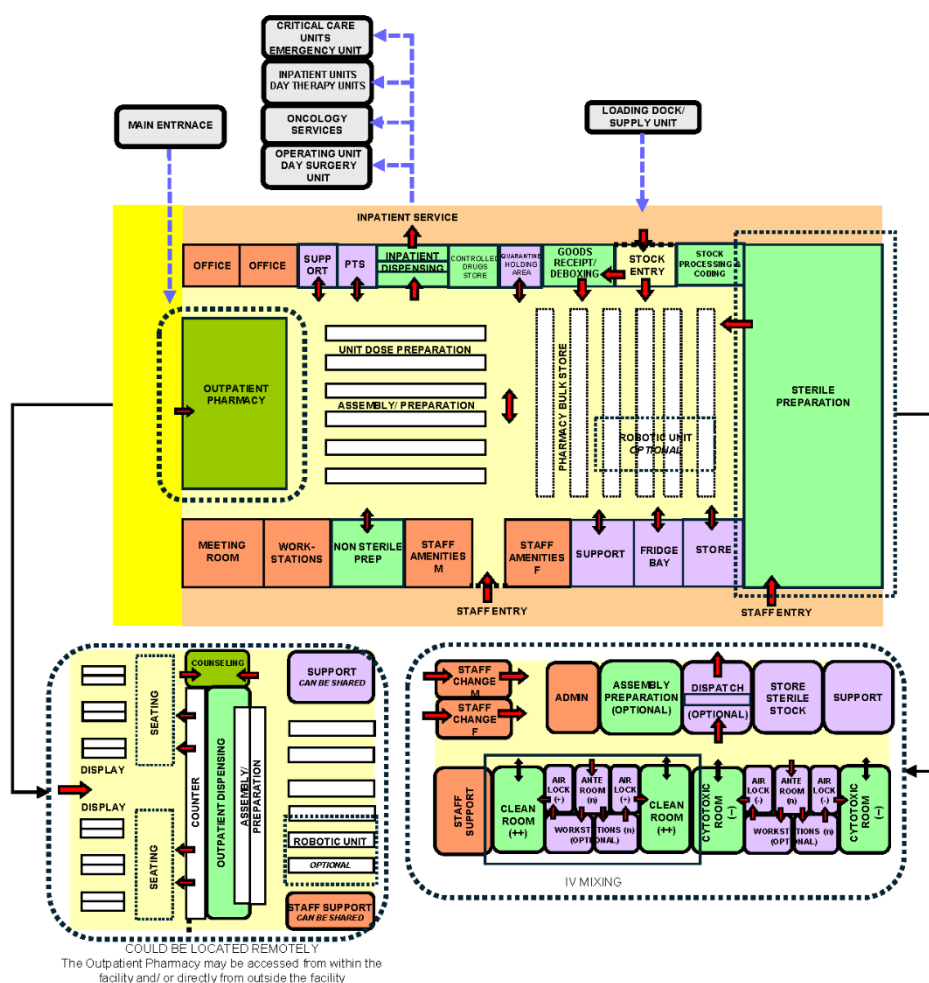
An interview/ counseling room for outpatients when provided shall have dual access – separate entries from public area and staff area. Access shall be controlled from inside of the Pharmacy.

Corridors and door openings shall provide sufficient clearance for large items and equipment from bulk stores.

Functional Relationships Diagrams

The functional relationship of a Pharmacy with various zones is demonstrated in the diagrams below. In larger Facilities, Pharmacy may be divided into Inpatient Pharmacy and Outpatient Pharmacy. In such cases, preparation and dispensing areas should be provided to each Pharmacy.

Inpatient Pharmacy Back to Back with Outpatient Pharmacy



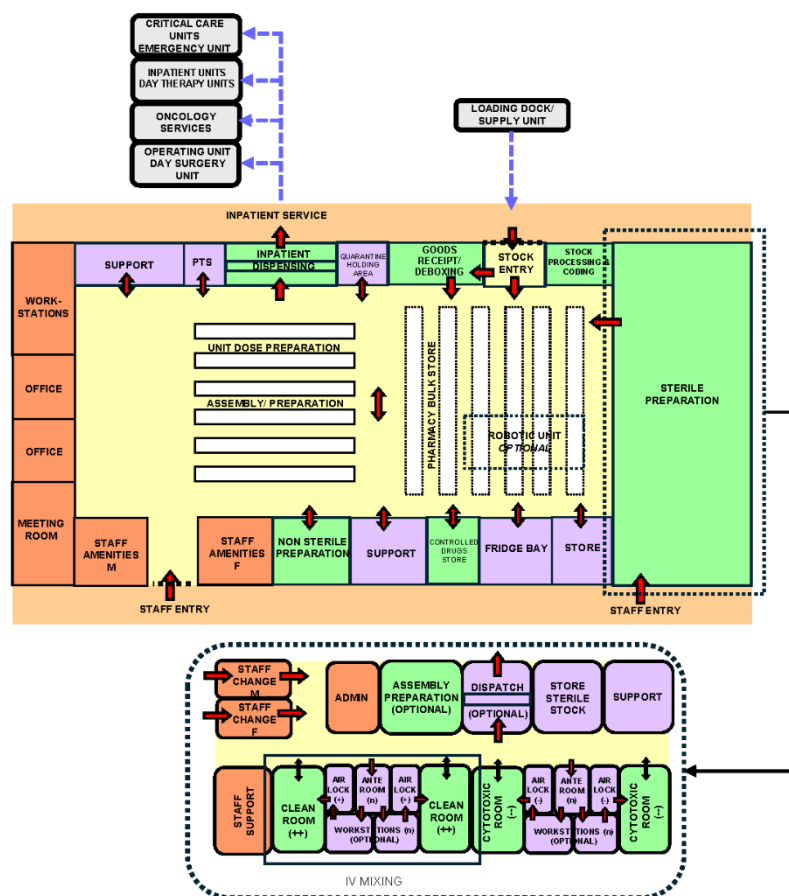
LEGEND OF PRESSURES

(+ +) STRONG POSITIVE
(+) POSITIVE
(n) NEUTRAL
(-) NEGATIVE
(- -) STRONG NEGATIVE

LEGEND

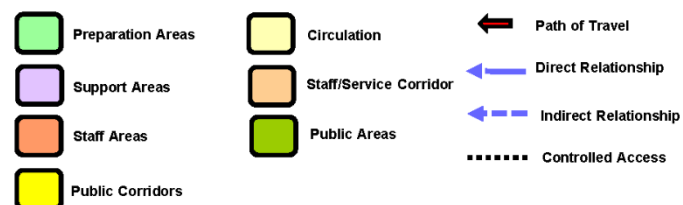
	Preparation Areas		Circulation		Path of Travel
	Support Areas		Staff/Service Corridor		Direct Relationship
	Staff Areas		Public Areas		Indirect Relationship
	Public Corridors				Controlled Access

Inpatient Pharmacy



LEGEND OF PRESSURES
 (+ +) STRONG POSITIVE
 (+) POSITIVE
 (n) NEUTRAL
 (-) NEGATIVE
 (- -) STRONG NEGATIVE

LEGEND



4 Design Considerations

General

Design may include provisions for barcode technology for patient prescription identification and tracking as well as electronic prescribing, which will require computer and scanning equipment including additional power and data outlets.

Environmental Considerations

Acoustics

Patient interview and counselling rooms will require acoustic treatment.

Natural Light

Natural light is highly desirable within the Unit as well as windows permitting outside views. However, such provisions shall not compromise the security of the Unit. Unauthorised entry and maintaining privacy of the operations of the Unit are the primary concerns in the design of the Unit. Windows shall not permit casual viewing from any adjacent public thoroughfare.

Privacy

When windows are provided, visual privacy must be considered and casual viewing from adjacent public thoroughfare must be avoided.

Unauthorized entry to the Unit must be ensured through the use of controlled access systems.

Space Standards and Components

Accessibility

Receptions, offices, meeting rooms, and waiting areas should be designed to provide access for people in wheelchairs that may include staff or visitors.

Ergonomics/ OH&S

Storage systems selected within the Unit shall be accessible to all types of staff.

Refer also to Part C – Access, Mobility, OH&S of these Guidelines.

Safety and Security

Pharmacy Units and Pharmacies must be designed and constructed to prevent unauthorized access through doors, windows, walls and ceilings. An Intrusion Detection Alarm System is required within the Unit to allow for a 24-hour monitoring by a central security team on-site.

Security measures for consideration includes the following:

- Electronic door controls
- Movement sensors
- CCTV cameras
- Duress alarms at Dispensing Counters
- Security glazing or shutters to Dispensing Counters

Positioning of Accountable Drugs Stores should avoid direct access from the perimeter of the premises or the perimeter of a Unit where public access is immediately outside the Unit. Alarm system should be provided to cupboards, drug safes and strong rooms where Accountable Drugs are stored.

CCTV cameras must be installed with an unobstructed view of the area where Accountable Drugs are stored.

Locking mechanism where required in the Pharmacy, can be in the form of controlled access cards, keypads or physical keys.

Finishes

The following factors should be considered in the selection of finishes:

- Durability

- Ease of cleaning
- Fire safety
- Heat resistance
- Infection control
- Movement of equipment

In Sterile Manufacturing Areas work surfaces should be smooth, monolithic, chemical resistant and impervious to moisture. Standard laminated benchtops are not suitable. Benchtops should be seamless to prevent contamination from spillage. Splashback or coved upturns must be provided when the benchtop abuts a wall.

Wall protection should be installed to prevent damage to walls caused by mobile equipment such as trolleys or medication cart.

Floor and walls should be anti-static, heat resistant, anti-bacterial, anti-fungal and chemical resistant. All joints in flooring must be sealed and coved at the edges (against walls or fixed joinery) where possible. Water and chemical resistant are also important characteristics of selected flooring. Walls shall be painted with lead free paint.

Wall finish treatments must not create ledges or crevices that can harbour dust and dirt.

Refer to Part C – Access, Mobility and OH&S and Standard Components of these Guidelines for more information on wall protection, floor finishes and ceiling finishes.

Fixtures, Fittings and Equipment

Window Treatments

It is advisable to provide window treatment to external windows to control sunlight and glare to Working Areas of the Pharmacy Unit. In a Pharmacy Unit, windows may not have curtains or horizontal venetian blinds. However, they may have vertical blinds, roller blinds or venetian blinds within double glazing.

Refer to Part C – Access, Mobility and OH&S of these Guidelines and Standard Components for requirements related to fixtures and fittings.

Building Service Requirements

In addition to the information below related to Building Services, a Pharmacy Unit must comply to technical details in Part E - Engineering Services of these Guidelines.

Mechanical Services (HVAC)

All Drug Storage Areas must be fitted with temperature and humidity controls.

Special air-conditioning systems that provide either positive pressure or negative pressure will be required in sterile and cytotoxic medication manufacturing.

Electrical Services

Power requirements for dedicated automated dispensing systems, unit dose packaging units, automated carousels, and other pharmacy equipment should be provided in accordance with the manufacturer's specifications.

Hydraulics/ Water Treatment

Warm water should be supplied to hand wash basins, eye-wash stations and emergency shower.

Hot and cold water should be supplied to sinks.

Refer to Part E – Engineering Services for design requirements.

Information Technology (IT) and Communications

The Unit's design should address the following Information Technology/ Communications requirements:

- Electronic Health Records (EHR)
- Health Information System (HIS)
- IT infrastructure shall support e-prescribing and medication traceability systems, including

secure connectivity, printer and scanner provision, and controlled access workstations

- DECT systems and personal telephones replacing traditional call system components
- Intercom system between positively or negatively pressurized rooms and their adjacent spaces
- Data entry including results and reporting
- Bar coding of specimens collected within the Unit
- Data and communication outlets, servers and communication room requirements
- Optional availability of Wi-Fi for staff
- Provide electrical and network resilience appropriate to the facility's operational requirements. This shall include an Uninterrupted Power Supply (UPS), or an equivalent combination of surge protection and backup power, for critical dispensing systems and storage monitoring networks. The level of resilience shall be determined based on the criticality of the systems, required availability, and operational continuity requirements of the facility

Refer to Part E – Engineering Services of these Guidelines.

Pneumatic Tube Systems

The Pharmacy Unit may include a pneumatic tube station to connect key clinical units with the main support units as determined by the facility Operational Policy. Where provided, the station should be located in the Preparation and Assembly Area of the Pharmacy under direct staff supervision. The following needs to be addressed:

- Provide defined criteria for permitted and excluded items for pneumatic tube transfer, including provisions for controlled medicines, hazardous materials, specimens, fragile items, and temperature-sensitive products
- Provide appropriate controls for PTS access and transfer, including secure user access, destination verification, and provisions for controlled manual delivery during PTS downtime or system failure

Temperature Monitoring

- All medication refrigerators, freezers, and controlled temperature stores shall have continuous temperature monitoring, calibrated sensors, alarm set points, and defined response and escalation arrangements

Infection Control

Infection Control measures applicable to the Pharmacy Unit will involve proper handling of drugs to prevent contamination of staff. Standard precautions apply to the Pharmacy Unit areas and personal protective equipment, including protective clothing, gloves, masks and eye protection, will be readily available at clean room areas.

Handbasins

Handwashing facilities shall be required in preparation, assembly, manufacturing areas and other rooms as specified by the Standard Components. Taps to Hand Basins in pharmacies should be either elbow-action taps or automatic taps (sensor/ foot operated).

Antiseptic Hand Rubs

Antiseptic Hand Rubs should be located so they are readily available for use. Although very useful and recommended, they cannot fully replace Hand Wash Bays.

Antiseptic Hand Rubs are to comply with Part D - Infection Control, in these guidelines.

Emergency Shower and Eye-wash Station

Further to personal protective equipment, RDL 5 and 6 pharmacy should have access to emergency shower and eye-wash station.

5 Components of the Unit

Standard Components

Standard Components are typical rooms within a health facility, each represented by a Room Data Sheet (RDS) and a Room Layout Sheet (RLS).

The Room Data Sheets are written descriptions representing the minimum briefing requirements of each room type, described under various categories:

- Room Primary Information; includes Briefed Area, Occupancy, Room Description/relationships and special room requirements
- Building Fabric and Finishes; identifies the fabric and finish required for the room ceiling, floor, walls, doors and glazing requirements
- Furniture and Fittings; lists all the fittings and furniture typically located in the room. Furniture and Fittings are identified with a group number indicating who is responsible for providing the item according to a widely accepted description as follows:
- Fixtures and Equipment; includes all the serviced equipment typically located in the room along with the services required such as power, data and hydraulics; Fixtures and Equipment are also identified with a group number as above indicating who is responsible for provision
- Building Services indicates the requirement for communications, power, Heating, Ventilation and Air Conditioning (HVAC), Medical Gases, Nurse/Emergency Call and Lighting along with quantities and types where appropriate. Provision of all services listed is mandatory

Group	Description
1	Provided and installed by the Builder/ Contractor
2	Provided by the Client and installed by the Builder/Contractor
3	Provided and installed by the Client

The Room Layout Sheets (RLS's) are indicative plan layouts and elevations illustrating an example of good design. The RLS indicated are deemed to satisfy these Guidelines. Alternative layouts and innovative planning shall be deemed to comply with these Guidelines provided that the following criteria are met:

- Compliance with the text of these Guidelines.
- Minimum floor areas as shown in the schedule of accommodation.
- Clearances and accessibility around various objects shown or implied.
- Inclusion of all mandatory items identified in the RDS.

The Pharmacy Unit will consist of Standard Components to comply with details described in these Guidelines. Refer also to Standard Components Room Data Sheets (RDS) and Room Layout Sheets (RLS) separately provided.

Non-Standard Components

Non-Standard rooms are identified in the Schedules of Accommodation as NS.

Dispensing

The Dispensing Area is where medications are verified and released to inpatient units. Fully prepared and pharmacist-verified medications are checked, released, and sent. Pharmacists perform the final verification and print and apply final labels. Medications are also dispensed to nurses and pneumatic tube systems. STAT medication requests are also handled in this area. Automated dispensing systems are also managed in this area.

Retail – Display

The retail display area is used to showcase items for sale, including over-the-counter medications and wellness products. It typically consists of shelving units and display stands.

Store - Refrigeration

This can be a room/bay which consists of multiple refrigerators for storing specific medications which are required to be kept at cool temperatures. This room is described in the Functional Areas section of this guideline.

6 Schedule of Equipment (SOE)

The Schedule of Equipment (SOE) below lists the major equipment for the key rooms in this FPU.

Room Name		
Controlled Drugs Store, Room Code (stdr-5-i stdr-10-i)		
Cabinet: storage, medication	Medication dispensing system: automated, refrigerator lock module (optional)	Refrigerator: drugs
Medication dispensing system: automated, narcotics (optional)		
Aseptic Clean Room, Room Code (prep-iv-i)		
Compounding system: IV, fully automated or robotic (optional)	Laminar flow hood	Shelving: stainless steel, wire mesh
Cytotoxic Clean Room, Room Code (prep-cyt-i)		
Compounding system: IV, robotic, cytotoxic (optional)	Cabinet: biological safety, cytotoxic (or cytotoxic isolator)	Shelving: stainless steel, wire mesh
Preparation Room/ Unit Dose, Room Code (prep-unit-i)		
Deblistering machine	Packaging system: unit dose medication, oral solids	Scale: pharmacy
Packaging system: unit dose medication, fully automated (optional)	Packaging system: unit dose medication, syringe	
Packaging system: unit dose medication, oral liquids	Pill counter	

7 Schedule of Accommodation

The Schedule of Accommodation (SOA) identifies the rooms required in the Unit along with the quantity and the recommended room area. The sum of these room areas is the Sub Total and Total Departmental areas with a recommended circulation percentage. The circulation percentage represents the area required for internal corridors and is a target for efficient planning. SOAs and room sizes are developed for typical units and are organized into the functional zones applicable to the Unit. Not all rooms identified are mandatory requirements and optional rooms are indicated. Quantities of rooms may need to be proportionally adjusted to suit the desired unit size and service needs.

The Schedules of Accommodation are developed for particular levels of service known as Role Delineation Level (RDL) and numbered from 1 to 6 (including in-between numbers such as 4-5). Level 1 represents uncomplicated health facilities, ascending to level 6 representing complex specialist services and hospitals. Refer to the full Role Delineation Framework in these guidelines for a full description of the RDL's identified.

The Schedule of Accommodation for an Inpatient Pharmacy and an Outpatient Pharmacy Unit in a typical hospital-based facility at RDL 3 to RDL 6 follows. The Schedule of Accommodation lists generic spaces that form a Pharmacy Unit. Quantities and sizes of some spaces will need to be determined in response to the service needs of each unit on a case-by-case basis. Pharmacy facilities for RDL 2 including a Polyclinic and possibly Day Surgery may be similar to RDL 3 Outpatient Pharmacy but sized to suit the facility.

Main Pharmacy

Room/ Space	Standard Component Room Codes	RDL 2/3 Qty x m2			RDL 4 Qty x m2			RDL 5 Qty x m2			RDL 6 Qty x m2			Remarks	
Dispensing Area															
Waiting	wait-sub-i wait-10-i wait-15-i wait-20-i	1	x	5	1	x	10	1	x	15	1	x	20	This is recommended, but not mandatory	
Pharmacy Counter	pha-co-i similar	1	x	9	1	x	9	1	x	20	1	x	20	Includes shelving for scripts; dedicated staff entry. Minimum 450 mm wide for each counter, for staff collecting medications	
Pharmacy Area															
Goods Receipt - Pharmacy	gre-6-i	1	x	6	1	x	6	1	x	15	1	x	15		
Quarantine Holding Area	stgn-5-i stgn-8-i	1	x	5	1	x	5	1	x	8	1	x	8	Either dedicated room or defined secure cage area within store, sized per Operational Policy	
Assembly/Preparation (Pharmacy)	aspr-20-i similar aspr-30-i	1	x	6	1	x	10	1	x	20	1	x	30	Allow 3m2 per pharmacist; Qty as required	
Preparation/ Unit Dose	prep-unit-i similar				1	x	15	1	x	20	1	x	30		
Preparation Room – Non-Sterile	prep-i similar	1	x	12	1	x	18	2	x	12	3	x	12	Based on 3m2 per person (optional for RDL 3 only); Qty depends on staffing establishment	
Drug Information	dri-i	1	x	1	1	x	1	1	x	1	1	x	1	For staff-use	
Dispensing	NS	1	x	6	1	x	10	1	x	12	1	x	12		
By - Pneumatic tube system	bpts-i	1	x	1	1	x	1	1	x	1	1	x	1	Optional	
Bay - Emergency Shower & Eyewash	bese-1-i							1	x	1	2	x	1	For emergency use. This is mandatory if undertaking pharmaceutical compounding	
Bay - Handwashing; Type B	bhws-b-i	2	x	1	3	x	1	3	x	1	3	x	1		
Cleaners Room	clrm-6-i	1	x	6	1	x	6	1	x	6	1	x	6		
Disposal Room	disp-5-i	1	X	5	1	X	5	1	X	5	1	X	5		
Bulk Store	stbk-20-i similar	1	x	30	1	x	50	1	x	100	1	x	150	May be remote. May include pallets; includes area for holding/ dispatch. May provide storage for IV fluids. Part of this area can be replaced with a robotics dispensing unit/s	
Store - Refrigeration	NS	1	x	6	1	x	6							Optional. Applicable to RDL 3 and 4; for RDL 5 and 6, cool rooms	
Cool Room	corm-i							2	x	10	2	x	10	Or Banks of Fridges; Applicable to RDL 5 and 6; For RDL 3 and 4, by with refrigerators will be sufficient	
Controlled Drug Store	stdr-5-i stdr-10-i	1	x	5	1	x	5	1	x	10	1	x	10	High security storage safe for controlled substances	
After Hours Drugs Store	ahdr-4-i	1	x	4	1	x	4	1	x	4	1	x	4	Optional	
Store - Files	stfs-8-i stfs-10-i	1	x	8	1	x	8	1	x	10	1	x	10	Including documents required by Regulations	
Store - General	stgn-8-i similar stgn-10-i				1	x	6	1	x	8	1	x	10	Dispensing supplies	
Staff Areas															
Meeting Room	meet-l-15-i meet-l-20-i meet-l-25-i	Shared			1	x	15	1	x	20	1	x	25		
Meeting Room - Small	meet-9-i	1	x	9	1	x	9	1	x	9	1	x	9	Optional	
Office Single Person	off-s12-i	1	x	12	1	x	12	1	x	12	1	x	12	Director	
Office Single Person	off-s9-i	1	x	9	1	x	9	1	x	9	1	x	9		

Room/ Space	Standard Component Room Codes	RDL 2/3 Qty x m2			RDL 4 Qty x m2			RDL 5 Qty x m2			RDL 6 Qty x m2			Remarks
Office - Workstation/s (Pharmacists)	off-ws-i	1	x	5.5	2	x	5.5	4	x	5.5	6	x	5.5	Qty depends on staffing establishments
Staff Lounge	srn-15-i srm-20-i srm-25-i srm-30-i	1	x	15	1	x	20	1	x	25	1	x	30	
Property Bay - Staff	prop-3-i	1	x	3	1	x	3	2	x	3	2	x	3	Lockers, may be separated into M/F areas as required; may be combined into a change room with staff toilets
Toilet - Staff	wcst-i	2	x	3	2	x	3	2	x	3	2	x	3	Separate M/ F
Sub Total		156.5			243			398			509			
Circulation %		25			25			25			25			
Total Areas		196			304			498			637			

Sterile Manufacturing (for 2 Rooms)

Room/ Space	Standard Component Room Codes	RDL 4 Qty x m2			RDL 5 & 6 Qty x m2			Remarks
Pharmacy Preparation Area (Optional)								Aseptic and/or cytotoxic clean rooms shall be provided based on the facility's operational requirements
Airlock	airl-6-i similar	2	x	5	2	x	5	
Anteroom	anrm-i similar	1	x	8	1	x	8	For Scrubbing and gowning
Aseptic Clean Room	prep-iv-l similar	1	x	20	1	x	25	Positive Pressure. Comply with international clean room standards; Comply to Part E - Engineering Services. Can be used for IV mixing. The area of 20m2 is based on two laminar flow hoods and can be resized according to the required number of hoods
Change - Staff (Male/ Female)	chst-12-i	2	x	12	2	x	12	Separate Male/ Female areas
Cytotoxic Clean Room	prep-cyt-i	1	x	15	1	x	20	Negative Pressure. Comply with international clean room standards; Comply to Part E - Engineering Services. The area of 15m2 is based on one biosafety cabinet and can be resized according to the required number of cabinets
Office – Workstation	off-ws-i	2	x	5.5	3	x	5.5	Qty to be determined by staff establishment
Store - Sterile Stock	stss-12-i similar	1	x	20	1	x	25	
Store - IV	stbk-20-i similar	1	x	20	1	x	25	May be located in the Bulk Store
Cleaners room	clrm-10-i	1	x	10	1	x	10	
Bay - Emergency Shower & Eyewash	bese-1-i	1	x	1	1	x	1	
Sub Total		139			164.5			
Circulation %		25			25			
Total Areas		174			206			

Outpatient Pharmacy

Room/ Space	Standard Component Room Codes	RDL 2/3 Qty x m2			RDL 4 Qty x m2			RDL 5 Qty x m2			RDL 6 Qty x m2			Remarks
Dispensing Area														
Waiting	wait-10-i wait-20-i wait-30-i similar	1	x	10	1	x	20	1	x	30	1	x	40	
Retail Display	NS	1	x	10	1	x	15	1	x	20	1	x	30	Optional
Cashier	cash-5-i	1	x	5	1	x	5	1	x	5	1	x	5	Collocated at the Outpatient Dispensing Counter. As per Operational policy
Pharmacy Counter (Outpatient Dispensing)	pha-co-i similar	1	x	9	1	x	20	1	x	30	1	x	30	Includes shelving for scripts; dedicated staff entry. Minimum 450 mm wide for each counter
Counselling Room	ints-i	1	x	9	1	x	9	1	x	9	1	x	9	
Dispensing/ Preparation	aspr-20-i aspr-30-i similar	1	x	20	1	x	30	1	x	40	1	x	40	
Bay - Handwashing; Type B	bhws-b-i	1	x	1	1	x	1	1	x	1	1	x	1	
Bay - PTS	bpts-i				1	x	1	1	x	1	1	x	1	Optional
Bulk Store	stbk-20-i stbk-40-i similar	1	x	30	1	x	40	1	x	50	1	x	60	Part of this area can be replaced with a robotics dispensing unit/s
Bay - Refrigerators	NS	1	x	4	1	x	6	1	x	8	1	x	8	
Store – Accountable Drugs	stad-i similar	1	x	5	1	x	5	1	x	10	1	x	10	High security storage safe for controlled substances
Store - General	stgn-8-i similar stgn-10-i similar				1	x	6	1	x	8	1	x	10	
Store - File	stfs-8-i stfs-10-i	1	x	8	1	x	8	1	x	10	1	x	10	Including documents required by Regulations
Disposal Room	disp-5-i	1	X	5	1	X	5	1	X	5	1	X	5	
Cleaner's Room	clrm-6-i	1	x	6	1	x	6	1	x	6	1	x	6	
Office – Single Room	off-s9-i	1	x	9	1	x	9	1	x	9	1	x	9	
Meeting Room	meet-9-i				1	x	9	1	x	9	1	x	9	Optional
Staff Room	srm-15-i srm-25-i	1	x	15	1	x	15	1	x	25	1	x	25	
Property Bay - Staff	prop-3-i	1	x	3	1	x	3	2	x	3	2	x	3	Lockers, may be separate M/F areas as required; may be combined into a change room with Staff Toilets
Toilet - Staff	wcst-i	2	x	3	2	x	3	2	x	3	2	x	3	Separate M/ F
Sub Total		145			194			258			280			
Circulation %		25			25			25			25			
Total Areas		182			243			323			350			

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the Standard Components.
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation.
- All the areas shown in the SOA follow the No-Gap system described elsewhere in these Guidelines.
- Exact requirements for room quantities and sizes will reflect Key Planning Units (KPU) identified in the Clinical Service Plan and the Operational Policies of the Unit.
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit.

Part B: Health Facility Briefing & Design

Pharmacy Unit

- Office areas are to be provided according to the Unit role delineation and number of endorsed fulltime positions in the unit.
- Staff and support rooms may be shared between Functional Planning Units dependant on location and accessibility to each unit and may provide scope to reduce duplication of facilities.

8 References and Further Reading

- Australasian Health Facility Guidelines, Part B Health Facility Briefing and Planning, refer to website <https://www.healthfacilityguidelines.com/GuidelineIndex/Index/Health-Facility-Briefing-and-Design>
- The Facility Guidelines Institute (US), Guidelines for Design and Construction of Health Care Facilities), refer to website <https://www.fgiguideines.org>
- NHS England, Health Building Note 14-01: Pharmacy and radiopharmacy facilities, refer to website <https://www.england.nhs.uk/estates/health-building-notes/>

9 Sample Plan

Please see overleaf.

ABBREVIATION LEGEND	
CLN	Cleaner's Room
ER	Emergency
F	Female
HWB-B	Handwashing, Type-B
M	Male
MIN	Minimum
PROP	Property
PTS	Pneumatic Tube System
SH	Shower
TOI	Toilet
WC	Water Closet

COLOR FILL LEGEND	
	Pharmacy
	Pharmacy Circulation
	Staff Circulation

