

19.0 Inpatient Accommodation Unit

19.1 Introduction

19.1.1 General

The prime function of the Inpatient Unit is to provide appropriate accommodation for the delivery of health care services including diagnosis, care and treatment to inpatients.

The Unit must also provide facilities and conditions to meet the needs of patients and visitors as well as the workplace requirements of staff.

19.1.2 Description

The Inpatient Accommodation Unit is for general medical and surgical patients. In larger health facilities this Unit includes specialist medical and surgical patients, for example, cardiac, neurology/ neurosurgery, integrated palliative care and obstetric patients. Patients awaiting placement elsewhere may also be accommodated in this type of facility.

19.2 Planning

19.2.1 Models of Care

Models of Care for an Inpatient Unit may vary dependent upon the patients' acuity and numbers of, and skill level of the nursing staff available.

Examples of the models of care that could be implemented include:

- patient allocation
- task assignment
- team nursing
- case management
- primary care (comprehensive range of generalist services by multidisciplinary teams that include not only GPs and nurses but also allied health professionals and other health workers) or
- a combination of these

The physical environment should permit of a range of models of care to be implemented, allowing flexibility for future change.

LEVELS OF CARE

The levels of care will range from highly acute nursing and specialist care (high dependency), with a progression to intermediate care prior to discharge or transfer (self care).

Patients requiring 24 hour medical intervention or cover will generally not be nursed or managed within a general inpatient unit.

19.2.2 Planning Models

BED NUMBERS AND COMPLEMENT

Each Inpatient Unit may contain up to 32 patient beds and shall have Bedroom accommodation complying with the Standard Components.

For additional beds up to 16 as an extension of a standard 32 bed Unit, this may be permitted with additional support facilities in proportion to the number of beds, for example 1 extra Sub Clean Utility, Sub Dirty Utility and storage.

For additional beds of more than 16, additional support facilities for a full unit (32 beds) will be required, located to serve the additional beds.

The preferred maximum number of beds in an acute Inpatient Unit in Maternity or Paediatric



Units is 20-25 beds.

A minimum of 10 % of the total bed complement may be provided as Single Bedrooms in an Inpatient Unit used for overnight stay for Isolation of patients. The current trend is to provide a greater proportion of single bed rooms largely for infection control reasons.

SWING BEDS

For flexibility and added options for utilisation it may be desirable to include provisions for Swing Beds. This may be a single bed, a group of beds that may be quickly converted from one category of use to another. An example might be long-stay beds which may be converted to acute beds.

At any given time, swing beds are part of an Inpatient Unit in terms of the total number of beds and the components of the unit. For example:

- Ward A + Swing Beds = One Inpatient Unit as per these Guidelines.
- Alternatively: Ward B + the same Swing Beds = One Inpatient Unit as per these Guidelines.

Facility design for swing beds will often require additional corridor doors and provision for switching patient/ nurse call operation from one Staff Station to another. Security is also an issue, for example, converting General/Medical beds to Paediatric beds.

UNIT PLANNING OPTIONS

There are a number of acceptable planning options for Inpatient Units including:

- Single Corridor; Patient and support rooms are clustered along a single corridor
- Double Corridor – racetrack; patient rooms are located on the external aspects of the space and support rooms are clustered in the central areas in a racetrack configuration
- Combinations: - L, T & Y shaped corridors, patient rooms are located along external aspects, support areas may be located in a central core area

19.2.3 *Functional Areas*

The Inpatient Accommodation Unit will comprise the following Functional Areas or zones:

- Patient Areas - areas where patients are accommodated or facilities specifically serve patients
- Staff Areas - areas accessed by staff, including utility and storage areas
- Shared Areas - areas that may be shared by two or more Inpatient Units

19.2.4 *Functional Relationships*

EXTERNAL

Principal relationships with other Units include:

- Easy access from the Main Entrance of a facility
- Inpatient Units must not be located so that access to one Unit is via another
- Ready access to diagnostic facilities such as Medical Imaging and Pathology
- Ready access to Emergency and Critical Care Units
- Surgical Units require ready access to Operating/ Day Procedures Units
- Ready access to staff amenities.

INTERNAL

Optimum internal relationships include:

- Patient occupied areas as the core of the unit
- The Staff Station and associated areas need direct access and observation of Patient Areas
- Utility and storage areas need ready access to both patient and staff work areas
- Public Areas should be on the outer edge of the Unit
- Shared Areas should be easily accessible from the Units served



19.3 Design

19.3.1 Environmental Considerations

ACOUSTICS

The Inpatient Unit should be designed to minimise the ambient noise level within the unit and transmission of sound between patient areas, staff areas and public areas.

Consideration should be given to location of noisy areas or activity away from quiet areas including patient bedrooms and selection of sound absorbing materials and finishes.

Acoustic treatment will be required to the following:

- patient bedrooms,
- interview and meeting rooms
- consult rooms
- staff rooms
- toilets and showers

Please refer to Part C, 9.2 “Acoustic Solutions for Healthcare Facilities”

NATURAL LIGHT

The use of natural light should be maximised throughout the Unit. Natural light must be available in all bedrooms.

OBSERVATION AND PRIVACY

The design of the Inpatient Unit needs to consider the contradictory requirement for staff visibility of patients while maintaining patient privacy. Unit design and location of staff stations will offer varying degrees of visibility and privacy. The patient acuity including high dependency, elderly or intermediate care will be a major influence.

Factors for consideration include:

- use of windows in internal walls and/or doors
- location of beds that may affect direct staff visibility
- provision of bed screens to ensure privacy of patients undergoing treatment;
- location of sanitary facilities to provide privacy for patients while not preventing observation by staff.

19.3.2 Space Standards and Components

ROOM CAPACITY AND DIMENSIONS

Maximum room capacity shall be eight beds, although six is preferred.

Minimum dimensions, excluding such items as ensembles, built-in robes, alcoves, entrance lobbies and floor mounted mechanical equipment shall be as follows:

ROOM TYPE	WIDTH	LENGTH
SINGLE BED ROOM	3450 mm	3600mm
TWO BED ROOM	3450 mm	5600 mm
FOUR BED ROOM	6100 mm	5600 mm
SIX BED ROOM	6500 mm	6750 mm

Minimum room dimensions are based on overall bed dimensions (buffer to buffer) of 2250 mm long x 1050 mm wide. Minor encroachments including columns and hand basins that do not interfere with functions may be ignored when determining space requirements

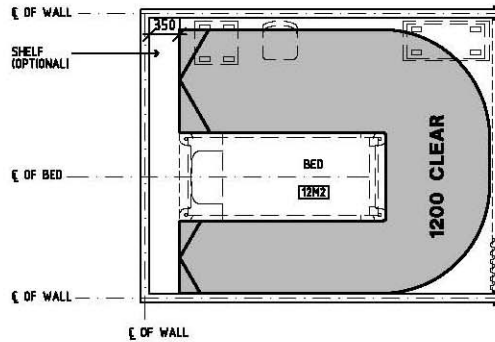
BED SPACING / CLEARANCES

Bed dimensions become a critical consideration in ascertaining final room sizes. The dimensions noted in these Guidelines are intended as minimums and do not prohibit the use of larger rooms where required.

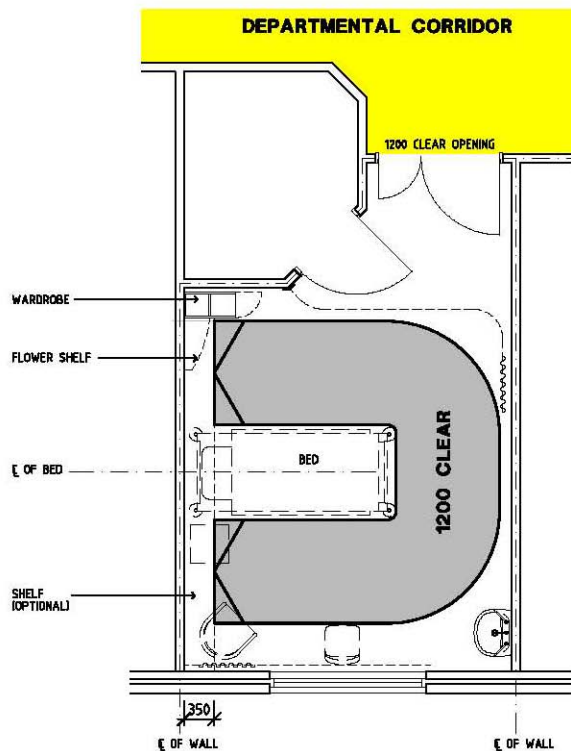


In bed rooms there shall be a clearance of 1200 mm available at the foot of each bed to allow for easy movement of equipment and beds. This is represented diagrammatically below:

 **NO FIXED OBJECTS IN CLEAR CIRCULATION ZONE**



1. TYPICAL BED BAY



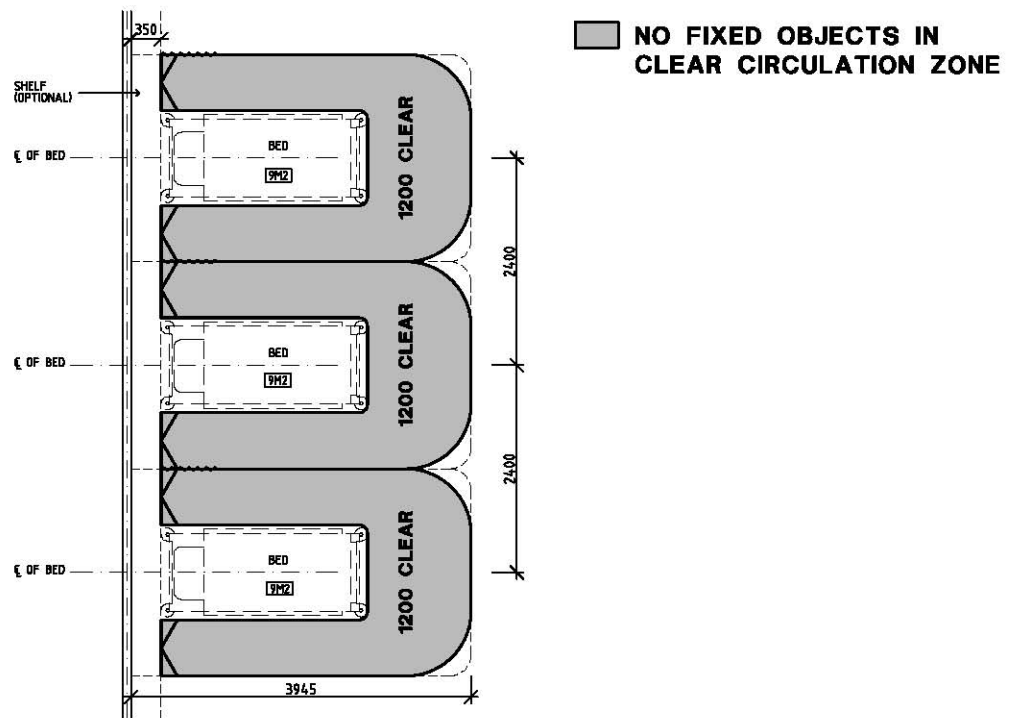
2. TYPICAL BED ROOM

In multiple-bed rooms, the minimum distance between bed centre lines shall be mm.

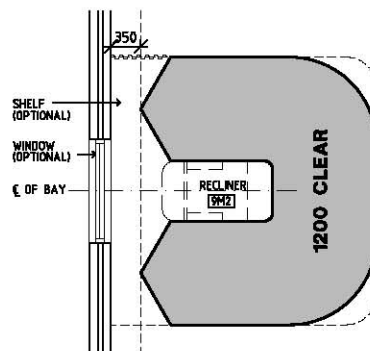
Paediatric bedrooms that contain cots may have reduced bed centres, but consideration must be given to the spatial needs of visiting relatives. To allow for more flexible use of the room the 2400 mm centre line is still recommended. Consider allowing additional floor area within the room for the children to play.



The clearance required around beds in multiple-bed rooms and chair spaces is represented diagrammatically below:



3. TYPICAL OPEN PLAN BED BAYS



4. TYPICAL CHAIR SPACE

19.3.3 Access, Mobility & OH&S (Occupational Health & Safety)

Patient wheelchair access bedrooms and ensuites should enable normalisation of activity for wheelchair dependant patients, as opposed to patients who are in a wheelchair as a result of their hospitalisation.

19.3.4 Infection Control

HAND BASINS

Hand-washing facilities shall not impact on minimum clear corridor widths. At least one is to be conveniently accessible to the Staff Station. Handbasins are to comply with Standard Components - Bay - Hand-washing and Part D - Infection Control.



ISOLATION ROOMS

At least one 'Class S - Standard' Isolation Room shall be provided for each 32 bed Inpatient Unit. At least one 'Class N - Negative Pressure' Isolation Room shall be provided for each 100 beds in facilities of level 4 and above. These beds may be used for normal acute care when not required for isolation.

19.3.5 *Safety and Security*

An Inpatient Unit shall provide a safe and secure environment for patients, staff and visitors, while remaining a non-threatening and supportive atmosphere conducive to recovery.

The facility, furniture, fittings and equipment must be designed and constructed in such a way that all users of the facility are not exposed to avoidable risks of injury.

Security issues are important due to the increasing prevalence of violence and theft in health care facilities.

The arrangement of spaces and zones shall offer a high standard of security through the grouping of like functions, control over access and egress from the Unit and the provision of optimum observation for staff. The level of observation and visibility has security implications

DRUG STORAGE

Each Inpatient Accommodation Unit shall have a lockable storage area or cupboard containing:

- Benches and shelving
- Lockable cupboards for the storage of restricted substances
- A lockable steel cabinet for the storage of drugs of addiction
- A refrigerator, as required; to store restricted substances, it must be lockable or housed within a lockable storage area
- Space for medication trolley

Note: Storage for dangerous drugs must be in accordance with the relevant legislation.

19.3.6 *Finishes*

Finishes including fabrics, floor, wall and ceiling finishes, should be selected with consideration to infection control, ease of cleaning and fire safety, while avoiding an institutional atmosphere.

In areas where clinical observation is critical such as bedrooms and treatment areas, colour selected must not impede the accurate assessment of skin tones.

19.3.7 *Fixtures & Fittings*

BED SCREENS

In multiple-bed rooms, visual privacy from casual observation by other patients and visitors shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, toilet or shower.

CURTAINS / BLINDS

Each room shall have partial blackout facilities (blinds or lined curtains) to allow patients to rest during the daytime.

19.3.8 *Building Services Requirements*

INFORMATION TECHNOLOGY/ COMMUNICATIONS

Unit design should address the following Information Technology/ Communications issues:

- Paperless records



- Hand-held computers
- PACS
- Paging and personal telephones replacing some aspects of call systems
- Data entry including scripts and investigation requests
- Email
- Bar coding for supplies and X-rays / Records.

NURSE CALL

Hospitals must provide an electronic call system that allows patients and staff to alert nurses and other health care staff in a discreet manner at all times.

19.4 Components of the Unit

19.4.1 *Standard Components*

The Inpatient Unit will consist of Standard Components which must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets



19.5 Schedule of Accommodation

19.5.1 Inpatient Accommodation Unit Generic Schedule of Accommodation

Schedule of Accommodation for a 30 Bed Unit at all RDS Levels follows. Although categorised by level of service, this does not necessarily lead to different physical requirements.

The Schedule of Accommodation lists generic spaces that form an Inpatient 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.

ROOM / SPACE	Standard Component				All RDLs Qty x m2	Remarks
1 BED ROOM	yes				1 x 15	Mix and no. depend on service demand
1 BED ROOM - LARGE	yes				1 x 18	Optional
1 BED ROOM - ISOLATION	yes				1 x 15	Class N or P + associated Anterooms; as required by service demand
1 BED ROOM - VIP	yes				1 x 30	Optional; Provide according to demand
2 BED ROOM	yes				2 x 25	Mix and no. depend on service demand
4 BED ROOM	yes				1 x 42	Mix and no. depend on service demand
6 BED ROOM					4 x 44	Mix and no. depend on service demand
ENSUITE - STANDARD	yes				6 x 5	For 1 Bed, 2 Bed & 4 Bed Rooms
ENSUITE - SUPER	yes				1 x 6	Locate with 1 Bed Room - Special
ENSUITE - VIP	yes				2 x 8	Provided for VIP rooms
LAUNDRY - PATIENT	yes				1 x 6	Specialist areas eg Mental Health, Rehab; or where required by service demand
LOUNGE - PATIENT	yes				1 x 20	Provided 1 per 60 beds, or shared between 2 units
TOILETS / SHOWERS - PATIENT (MALE/ FEMALE)	yes				2 x 25	Shared facilities 2 x WC; 2 x SH

STAFF AREAS

ROOM / SPACE	Standard Component				All RDLs Qty x m2	Remarks
BAY - BEVERAGE ENCLOSED	yes				1 x 5	
BAY - HANDWASHING	yes				4 x 1	In addition to basins in patient rooms; Refer to Part D
BAY - LINEN	yes				2 x 2	Qty & location to be determined for each facility
BAY - MEAL TROLLEY	yes				1 x 4	Dependent on catering operational policies
BAY - MOBILE EQUIPMENT	yes				1 x 6	Qty, size & location depends on equipment to be stored; locate in staff area
BAY - PPE	yes				4 x 1	As required for Isolation Room/s. Refer Part D
BAY - RESUSCITATION TROLLEY	yes				1 x 2	



ROOM / SPACE	Standard Component					All RDLs Qty x m2	Remarks
CLEANER'S ROOM	yes					1 x 5	Include separate cupboard for dry goods
CLEAN UTILITY	yes					1 x 4	Includes medication storage
DIRTY UTILITY	yes					1 x 14	2 may be required to minimise travel distances
DISPOSAL ROOM	yes					1 x 8	Optional
MEETING ROOM - 12M2	yes					1 x 12	Optional
OFFICE – CLINICAL / HANDOVER	yes					1 x 12	
OFFICE - SINGLE PERSON 12M2	yes					2 x 12	NUM office, plus for clinical personnel
PROPERTY BAY - STAFF	yes					1 x 4	Number of lockers depends on staff complement per shift
STAFF STATION	yes					1 x 14	May include ward clerk Size, location to be confirmed
STORE - EQUIPMENT	yes					1 x 20	Staff access area Size depends on equipment stored
STORE - GENERAL	yes					1 x 12	Size as per service demand & operational policies

SHARED AREAS

ROOM / SPACE	Standard Component					All RDLs Qty x m2	Remarks
MEETING - MEDIUM	yes					1 x 20	Tutorial. Shared by 2 units
OFFICE - SHARED 3 PERSON	yes					1 x 15	CNC, Nurse Educator, Registrars, as per service demand
STAFF ROOM	yes					1 x 18	Includes Beverage area
TOILET - PUBLIC	yes					2 x 3	Shared by 2 units. Access to disabled toilet also required
TOILET - STAFF	yes					2 x 3	
TREATMENT ROOM	yes					1 x 14	May be required in specialist units, or shared by >1 unit. Depends on service demand
DISCOUNTED CIRCULATION						32%	

SUPER VIP SUITE

ROOM / SPACE	Standard Component					All RDLs Qty x m2	Remarks
1 BED ROOM - SUPER VIP	yes					1 x 50	Provide according to service demand
ENSUITE - SUPER VIP	yes					1 x 20	Provide according to service demand
STORE – EQUIPMENT	yes					1 x 10	Provide according to service demand
PANTRY - SUPER VIP	yes					1 x 20	Provide according to service demand
LOUNGE / DINING - SUPER VIP	yes					1 x 40	Provide according to service demand
FAMILY / CARER ROOM	yes					1 x 33	Provide according to service demand
ENSUITE - VISITOR	yes					1 x 5	Provide according to service demand

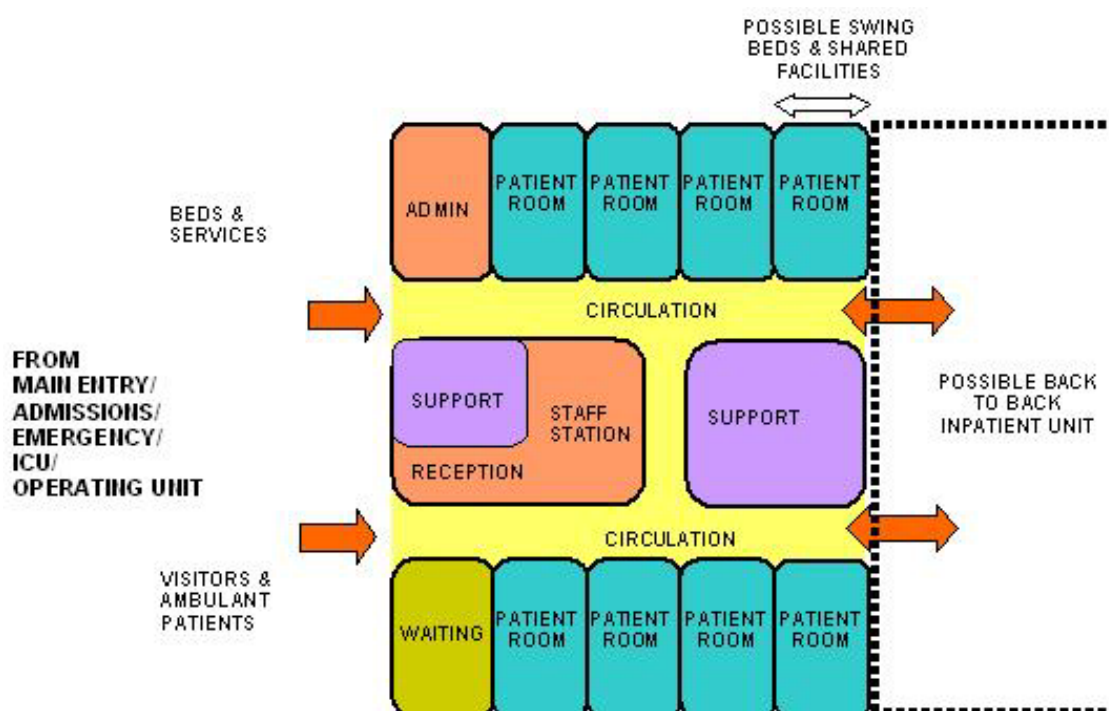


Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU.
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation.
- Exact requirements for room quantities and sizes will reflect Key Planning Units identified in the service plan and the policies of the Unit.
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit.
- Office areas are to be provided according to the Unit role delineation and staffing establishment.
- 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.

19.6 Functional Relationship Diagram

19.6.1 Inpatient Accommodation Unit Functional Relationship Diagram



19.7 References and Further Reading

- Australasian Health Facility Guidelines. (AusHFG Version 3.0), 2009; refer to website www.healthfacilitydesign.com.au
- Guidelines for Design and Construction of Health Care Facilities; The Facility Guidelines Institute, 2010 Edition.
- Design Guidelines for Hospitals and Day Procedure Centres, Department of Human Services Victoria, 2005
- Health Department Western Australia, Private Hospital Guidelines, 1998.



The Indian Health Facility Guidelines recommends the use of **HFBS** “**Health Facility Briefing System**” to edit all room data sheet information for your project.

HFBS provides edit access to all HFG India standard rooms, departments, and more than 40 report templates.

HFBS Health Facility Briefing System



Briefing Module

The Health Facility Briefing System (HFBS) has numerous modules available via annual subscription. It suits healthcare Architects, Medical Planners, Equipment Planners Project Managers and Health Authorities.

Use the HFBS Briefing Module to quickly drag in health facility departments or pre-configured room templates from the HFG standard, edit the room features such as finishes, furniture, fittings, fixtures, medical equipment, engineering services. The system can print or download as PDF more than 100 custom reports including room data sheets, schedules, and more...

To learn more about the HFBS web-based Healthcare Briefing and Design Software and to obtain editable versions of the “Standard Components” including Room Data Sheets (RDS) and Room Layout Sheets (RLS) offered on the HFG website, signup for HFBS using the link below.

Get Started Now:
hfbs.healthdesign.com.au

- ✓ HFG India Room Data Sheets and Departments are instantly editable in the HFBS software available online in the HFBS India Domain.
- ✓ You can access hundreds of report templates to print your HFG India room data in HFBS.
- ✓ HFBS has a onetime free 3 day trial available to all new users – signup for the HFBS India Domain today.

Get Started Now:
hfbs.healthdesign.com.au



HFBS

Health Facility Briefing System

hfbsinfo.com | techsupport@healthdesign.com.au