Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning

0270 – Day Surgery / Procedure Unit

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Australasian Health Facility Guidelines

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Index

01 INTRODUCTION

1.1 PREAMBLE

This Health Planning Unit (HPU) has been developed by the Australasian Health Infrastructure Alliance (AHIA). This revision has been informed by an extensive consultation process that was completed in 2021.

The document is intended to be used by design teams, project managers and end users to facilitate the process of planning and design.

1.2 INTRODUCTION

This HPU outlines the specific requirements for planning and designing a Day Surgery / Procedure Unit.

A Day Surgery / Procedure Unit provides facilities for the surgical / procedural treatment of patients who are admitted and discharged on the same day. These units may be integrated within a hospital complex, be a separate facility on a hospital campus or a stand-alone facility.

This document should be read in conjunction with the Australasian Health Facility Guidelines (AusHFG) generic requirements and Standard Components described in:

- Part A: Introduction and Instructions for Use;
- Part B, Section 80: General Requirements;
- Part B, Section 90: Standard Components, Room Data Sheets and Room Layout Sheets;
- Part C: Design for Access, Mobility, Safety and Security;
- Part D: Infection Prevention and Control; and
- AusHFG Arts in Health Framework

Additional HPUs which should be read in conjunction with this HPU include:

- 170 Cardiac Investigations Unit for information relating to cardiac catheter services;
- 190 Sterilising Services Unit, which contains details of scope reprocessing requirements;
- 340 Adult Acute Inpatient Unit for short stay surgical services requiring inpatient facilities;
- 440 Medical Imaging Unit for information relating to angiography services;
- 520 Operating Unit; and
- 155 Ambulatory Care Unit for information relating to preadmission clinics.

1.3 POLICY FRAMEWORK

Before undertaking a project, planners and project personnel should familiarise themselves with individual jurisdictional plans, regulations, policies, service specific guidelines and reports.

Jurisdictional policy information, where available, is contained in the Further Reading section of this HPU. Some key reference documents will include:

- ACORN Standards for Perioperative Nursing in Australia, The Australian College of Perioperative Nurses;
- Australian and New Zealand College of Anaesthetics (ANZCA) Professional Standards;
- Best practice guidelines for ambulatory surgery and procedures, Australian Day Surgery Nurses Association;

- Standards for Endoscopic Facilities and Services, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia;
- Infection Prevention and Control in Endoscopy, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia;
- NHMRC, Australian Guidelines for the Prevention and Control of Infection in Healthcare; and
- AS/NZS 4187 Reprocessing of reusable medical devices in health service organisations.

1.4 DESCRIPTION OF UNIT

1.4.1 Description and Model of Care

A Day Surgery / Procedure Unit will include facilities to support the care of patients undergoing a range of surgical and/or endoscopic procedures with provision to deliver inhalational and other anaesthetic agents.

Models and service configurations for day surgery / procedure services will vary and reflect local requirements. Many health services will 'stream' high volume, short stay surgical cases in dedicated units to improve service efficiency and access to planned surgical services. Generally, the types of procedures performed in these units are frequently performed, have a predictable length of stay, and patients are managed through standard care protocols.

The scope of this HPU includes pre-procedural areas, operating / procedure rooms for day surgical / procedural services, post procedure recovery areas and associated support areas. Recovery areas include facilities to support patient stays of up to 23 hours. Where the service model requires admission for longer than 23 hours, the level of amenity needed to support the patient and their family changes and typically, an inpatient unit environment is needed (refer to HPU 340 Adult Acute Inpatient Unit).

Changes and improvements in surgical / procedural and anaesthetic techniques, increasing demand (e.g. relating to bowel cancer population screening), as well as alternative options for post-surgical care e.g. Hospital in the Home, have resulted in an increase in the volume of patients managed in a day only or extended day only environment. The need to manage an increasing volume of activity and improvements in technology, such as the use of digital operating room environments, have resulted in a reduction in average procedure times and time between procedures. However, the achievement of optimal patient throughputs is dependent on having sufficient capacity in pre-procedural and post-procedural patient support areas.

The typical patient pathway for a Day Surgery / Procedure Unit is described in Section 2.2.

1.4.2 Scope of Services

The number of operating and procedure rooms required will be based on expected casemix and number of procedures. The unit may provide only operating rooms, a combination of operating and procedure rooms or a dedicated day procedure service e.g. endoscopy service. Some services may also include other procedure rooms such as cardiac catheter or angiography rooms. Although these rooms are more commonly located with other departments, access to post anaesthetic care areas within the day surgery unit may be required.

The range of procedures that may be undertaken in a Day Surgery / Procedure Unit and the clinical services that may access the Unit may include:

- a range of surgical procedures such as Ear, Nose and Throat (ENT), dental, general surgery, gynaecology, gastrointestinal, ophthalmology, urology, vascular, oncology, endocrine, plastics and orthopaedics;
- endoscopy – gastrointestinal, respiratory and urological procedures;

- other procedures such as:
  - biopsies including ‘lumps and bumps’;
  - aspirations (joints, pleural cavity, abdominal);
  - insertion of Peripherally Inserted Central Catheter (PICC) lines, Percutaneous Endoscopic Gastrostomy (PEG) tubes and venous access catheters for dialysis under radiological or ultrasound control; and
  - Electroconvulsive Therapy (ECT), where there is no dedicated ECT suite within in a mental health unit.

02 PLANNING

2.1 OPERATIONAL MODELS

2.1.1 Operational Models

The Day Surgery / Procedure Unit may be:

- a free-standing centre;
- a discrete fully self-contained unit within a hospital;
- collocated with a specialist clinical service within a hospital such as a Gastroenterology Unit; and
- incorporated into an Operating Unit complex, sharing selected facilities such as reception, holding, recovery and staff amenities.

If free-standing, the Day Surgery / Procedure Unit will typically be located with an acute hospital within a reasonable distance for transfer of patients in case of an emergency, or have other operational arrangements in place to facilitate the rapid transfer of patients.

The most efficient hospital-based day surgery / procedure services may be achieved by nominating dedicated operating and procedure rooms or scheduling of activity.

2.1.2 Patient Experience

Patient centred care and human centred design that supports the patient journey from trepidation in the waiting room to feeling sore and disoriented in recovery is essential. The design of the unit should not only ease patient and carer anxiety, but also provide staff with a work environment conducive to delivering optimal patient care through:

- provision of a welcoming and calming environment throughout the unit;
- strategically located arts initiatives, including soft ambient music; and
- appropriate support for carers to attend for vulnerable patients;

Planning and design processes must include consideration of the local cultural context through engagement with local cultural groups. The facility should celebrate the local cultural heritage of the area and provide a culturally safe and welcoming environment that meets the needs of all people.

2.2 OPERATIONAL POLICIES

2.2.1 General

Operational policies have a major impact on design requirements as well as capital and recurrent costs for health care facilities. Operational policies should be established at the earliest stages in planning with consideration given to local jurisdictional policies.

Unit specific operational policies are detailed below; a list of general operational policies is available from Part B: Section 80 General Requirements.

2.2.2 Hours of Operation

The hours of operation for the unit will depend on the service model and will vary between services. This should be confirmed to ensure that the planning and design of the unit supports staff and patient safety.

Day Surgery / Procedure Units typically operate Monday to Friday, opening at 6.30am to admit and prepare patients. Theatre and procedure lists will generally be conducted between 8.00am and 5.00pm with patient recovery services extending to 9.00pm.

2.2.3 Pre-Admission Screening

All patients referred to Day Surgery / Procedure Units will undergo preadmission screening to ensure they are adequately prepared for the procedure. This may involve a telephone interview or review in a preadmission clinic. There is an increasing role for telehealth to support the pre-admission process, however more complex patients will continue to require face to face pre-admission consultation. The proportion of patients needing to attend a 'face to face' clinic will vary between specialties and the overall case-mix of the facility. Preadmission clinics may be provided as part of a Day Surgery / Procedure Unit or collocated with other outpatient clinics in an ambulatory care centre.

2.2.4 Admission and Preparation

A patient will present to the Day Surgery / Procedure Unit reception where admission details are checked and finalised. Increasingly units are implementing electronic self-registration systems to support the flow of patients, however there will continue to be a requirement for a reception area. Patients will wait in an adjacent waiting room prior to being collected by a nurse to be prepared for the procedure. This will usually involve checking information and taking a set of observations, as well as the patient changing into a hospital gown in preparation for the procedure.

The patient may need to be assessed by the treating clinician. This assessment is usually undertaken in an interview / consult room or holding bay.

Gowned patients will wait in a pre-procedure holding area, separate to the main waiting area. This area should provide capacity to accommodate both patients waiting on chairs and trolleys, which may be required due to the patient's level of mobility, or to support the pre-procedure process. For example, most ophthalmology patients will be managed on a trolley for safety reasons given the pre-procedure eye drops impacts their vision. The services provided and operational model for the unit will inform the mix of pre-procedure waiting space, holding bays and patient change facilities required. This area can be collocated with post-procedure areas for flexible use in line with demand requirements.

Although anaesthetic is routinely administered in the operating / procedure room some services may provide an 'anaesthetic bay' attached to each procedure room / theatre to support patient preparation (e.g. insertion of preoperative intravenous lines, invasive monitoring devices and regional anaesthesia) and to facilitate patient flow. The staffing implications of this model should be assessed given the requirements relating to patient observation in comparison to an open holding bay arrangement.

There is an increasing volume of patients accessing day surgery units that have multiple comorbidities, are less mobile and may require access to the unit on a bed or trolley. This will impact on access to the unit and provision of appropriate holding areas.

Refer to ANZCA PS15: Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery, for further details.

2.2.5 Anaesthesia and Recovery

Anaesthesia may be local, regional, conscious sedation or General Anaesthesia (GA). All procedure and operating rooms should be capable of supporting patients having a range of anaesthesia including local anaesthetic and GA.

The recovery stages used in Day Surgery / Procedure Units will routinely include:

- Stage 1 recovery / Post Anaesthetic Care Unit (PACU) is a dedicated area where post-procedure patients are recovered under supervision. Transfer from Stage 1 recovery will be based on patients meeting established clinical criteria;

- Stage 2 recovery is used to manage day surgery patients who are transferred from Stage 1 or those patients who have had little or no sedation. Most patients will be nursed in a recliner although some access to trolleys may be needed. Patients will receive a light meal, post-discharge instructions and be supplied with discharge medications or a script; and
- Stage 3 recovery / discharge lounge is usually provided in larger units only to optimise patient flow. Patients will wait in this area prior to being collected by a carer. For smaller units, this area will be combined with Stage 2 in a single area to improve staffing efficiencies.

Patients who require a longer length of stay may be transferred from Stage 1 recovery to an extended day only unit. The location of this unit is ideally located near the Day Surgery / Procedure Unit.

Some services may support the provision of treatments, such as infusions in Stage 2/3 recovery, for example, iron infusions for patients having endoscopy to investigate the source of bleeding and infusions for inflammatory bowel diseases.

2.2.6 Case Assembly Set Up

Assembly or set-up is the process of compiling all of the Reusable Medical Devices (RMD) and sterile consumables required for each surgical case or procedure.

The requirements for the next day's cases will be assembled using information related to the procedure and surgeon preferences. The carts or trolleys will be stored unopened overnight in a dedicated area, usually a sterile supply room. The opening and laying out of the RMD packs and sterile consumables routinely occurs in the operating room and is performed under aseptic conditions.

2.2.7 Reprocessing of Reusable Medical Devices (RMDs) and Quality Assurance

Surgical RMDs are transferred to a clean-up room after use where carts / trolleys are stripped of sharps, waste and instrument trays prior to transfer to the Sterilizing Services Unit (SSU) for reprocessing. The operational model for sterilising services for the unit will require confirmation.

Where sterilisation services are provided off-site, sufficient space is required to accommodate:

- a dirty utility and dispatch area where gross matter can be removed and the RMDs or endoscopes prepared and held for collection; and
- a clean receiving area for processed RMDs or endoscopes.

Endoscopy services will typically include a collocated scope reprocessing area that is usually managed and staffed by the SSU. This arrangement is generally preferred to reduce the number of scopes needed and minimise opportunities for damage, however, reprocessing of endoscopes within a centralised SSU may be considered, particularly for hospitals with a small endoscopy case load.

The scope reprocessing area will require the following zones:

- a dirty or cleaning room where scopes are received, dry and wet leak tested and manually pre-cleaned in a height adjustable cleaning sink, prior to loading into a pass-through Automated Flexible Endoscope Reprocessors (AFER). AERs must comply with International Organisation for Standardization ISO 15883 Washer disinfectors, Parts 1 & 4;
- a clean room where processed scopes are unloaded from the AFER and stored in a controlled environment storage cabinet or other approved storage solution.

Endoscope storage cabinets should be installed where it can be conveniently accessed by endoscope reprocessing staff and endoscope procedural staff. These can be single or double door (pass-through) configurations and endoscopes may be hung vertically or stored horizontally in trays or cassettes.

For planning and design information relating to the endoscopy reprocessing area refer to AusHFG Health Planning Unit 190 Sterilising Services Unit. For further information refer to:

- AS/NZS 4187:2014 Reprocessing of reusable medical devices in health service organisations;
- Australian Commission on Safety and Quality in Health Care, National Safety and Quality Health Service Standards, Advisory – Reprocessing of Reusable Medical Devices in Health Service Organisations, 2021: AS18/07: Reprocessing of reusable medical devices in health service organisations | Australian Commission on Safety and Quality in Health Care;
- Infection Prevention and Control in Endoscopy, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia; and
- Standards for Endoscopic Facilities and Services, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia.

Quality assurance of the reprocessing of gastrointestinal endoscopes and bronchoscopes using microbiological sampling and culture is required in line with AS/NZS 4187 and the Gastroenterological Society of Australia (GESA) Guidelines for Infection Control in Endoscopy. The frequency of testing required will vary depending on the type of scope / device. This process is typically undertaken in the reprocessing clean room.

2.2.8 ERCPs and Endoscopic Ultrasound

Endoscopic Retrograde Cholangiopancreatography (ERCP) is a diagnostic and interventional procedure technique using both endoscopy and fluoroscopy for examination and intervention of the biliary tree and pancreatic ducts. This a specialised service that, where provided, may be undertaken in a Day Surgery / Procedure Unit or Medical Imaging Unit. Most patients will require some level of sedation and potentially general anaesthetic so direct access to recovery areas is important.

Either fixed or mobile C arm fluoroscopy is used, and the procedure room will require a collocated control room, as well as appropriate radiation protection including radiation shielding, storage of lead apparel and installation of radiation warning signs at entry points to the room. A suitably qualified expert will be required to provide advice regarding radiation safety requirements.

Endoscopic ultrasound incorporates a small ultrasound transducer on the tip of the scope to provide high quality ultrasound images of the digestive tract and surrounding tissues and organs.

2.2.9 Pathology

A range of pathology related activities will support the Day Surgery / Procedure Unit.

On-site cytology / histology review is commonly undertaken in the operating / procedure rooms with access to a microscope.

Tissue specimens that are not time critical are placed in formalin and sent to the pathology department. Most samples will be transported in pre-filled specimen containers, however a risk assessment should be undertaken to inform requirements relating to the handling of formalin within the unit.

Support for pathology services will include the need to store formalin, containers and research related requirements, including the need for some units to store frozen biopsy samples.

2.2.10 Management of Infectious Patients

For the management of patients with infections (airborne, droplet and contact), appropriate protocols will be in place that may include scheduling these cases at the end of the list and recovering the patient within the theatre / procedure room. Single enclosed rooms within Stage 1 recovery may be considered however they are not required in Stage 2/3 recovery as patients are about to be discharged to the community and would be managed with a mask where necessary.

The use of negative pressure environments within an operating theatre is not common practice as the air handling system needs to provide positive pressure within the theatre relative to surrounding areas to prevent surgical site infections. Consideration will need to be given to contemporary guidance relating to COVID-19 / other pandemics, however this is unlikely to be required in a Day Surgery / Procedure Unit with the exception of procedure rooms used for bronchoscopies.

2.2.11 Management of Bronchoscopies

Procedure rooms used for bronchoscopies should be under negative pressure with the same minimum number of air exchange and air exhaust provisions as a standard negative pressure isolation room. Where bronchoscopies are provided they should be scheduled as the last procedure of the day otherwise sufficient time should be allowed for adequate air exchange prior to the next procedure.

Refer to: Infection Control Guidelines for the Management of Patients with Suspected or Confirmed Pulmonary Tuberculosis in Healthcare Settings, Australian Government Department of Health, 2016: https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi4003i.htm.

2.2.12 Management of Paediatrics and Those with Special Needs

ANZCA recommends that 'ideally children should be separated from, and not managed directly alongside, adults throughout the patient care pathway. Where complete physical separation is not possible, alternate strategies should be considered.' (ANZCA PS29). This can be managed in several ways including child-friendly waiting areas, scheduling, use of single rooms, or identifying a cohort of beds. The environment must be child-friendly. Suitable equipment, toys, games and a play area should be provided to reduce anxiety and speed recovery.

It is also recommended that:

- induction areas should be non-threatening, child-friendly and should allow parental or carer attendance, with measures in place for their support and well-being;
- operating suite climate control and equipment, designed to meet the special needs of small children (neonates, infants, and toddlers), must be operational and available to ensure that body temperature is maintained throughout the perioperative period;
- paediatric patients should be 'recovered' in a dedicated area within the PACU; and
- parents and carers may be allowed access to the PACU.

Other patients, such as those with intellectual disability, may also need to be considered. A calm environment with space for a carer may be needed.

Those travelling from remote locations may require special consideration (e.g. access to a space to undertake bowel preparations and showers).

Refer to:

- Australian Commission on Safety and Quality in Health Care, 2018, 'National Safety and Quality Health Service Standards - User Guide for Acute and Community Health Service Organisations that Provide Care for Children';
- ANZCA PS29: Guidelines for the Provision of Anaesthesia Care to Children, 2020; and
- relevant jurisdictional policies.

2.2.13 Management of Bariatric Patients

The unit should provide a physical environment that supports the optimal care of bariatric patients, with appropriate consideration of staff safety.

The standard operating and procedure room size will accommodate bariatric patients with most procedure / operating tables able to support patients up to 200 to 250kg. Specialised facilities may manage patients over 250kg ('super' bariatric patients) and will require consideration of bariatric designed tables.

The impact of larger equipment such as beds, electric bed movers, chairs and wheelchairs, and the associated space requirements in the use of this equipment, such as door widths, turning space in corridors, lift access and the storage of equipment, should be considered.

2.2.14 Management of Emergencies

Procedures need to be in place to manage medical emergencies, as well as access to required resuscitation equipment. This will include difficult intubation trolleys, malignant hyperthermia trolley (although this may be portable kit) and paediatric resuscitation trolleys where applicable.

Medical emergencies occurring to a patient while in the unit may result in the need for admission to an inpatient bed or transfer to an acute hospital facility.

Stand-alone Day Surgery / Procedure Units will transfer patients to a nearby hospital should the patient's condition deteriorate.

2.2.15 Patient Property

The method of holding and return of patient's clothing and effects must be determined, to understand facility impacts. Usual methods are to provide lockers for patient property or for patient's property to remain with them.

2.2.16 Waste Management

There is an increasing focus in perioperative units to reduce, re-use and recycle waste where possible.

Sufficient, colour coded bins should be available to allow segregation of waste in line with state and national regulations.

Refer to:

- ACORN Standards: 'Environmentally Sustainable Practices'
- Standards Australia, AS 3816:2018 Management of clinical and related wastes
- NHMRC, 2019, Australian Guidelines for the Prevention and Control of Infection in Healthcare

2.3 PLANNING MODELS

Day Surgery / Procedure Units incorporate all areas required to support the full patient journey from point of admission to discharge. It is essential that the design and configuration of the unit supports optimal patient safety and throughput, as well as staff collaboration and efficiency. In most cases, this is best achieved by a 'circuit' design that enables collocation and flexibility between pre-procedure and post-procedure holding areas, rather than configurations that only support one-way flow.

In a combined Day Surgery / Procedure Unit, most zones will be shared to manage both surgical and procedural cases (e.g. holding and recovery spaces). However, Operating Rooms and Procedure Rooms should be separated to:

- promote patient throughput for endoscopy and other high turnover cases; and
- avoid the need for procedural services to comply with all aseptic technique standards as outlined in the ACORN Standards. Where procedure rooms are collocated with operating rooms, surgical standards must be maintained.

In selected services, the use of rooms may be shared with surgical and procedural activity scheduled at different times. In this case, it makes sense for these rooms to be collocated to promote flexibility and efficient use of resources.

In some cases, a service may collocate preadmission clinics with the Day Surgery / Procedure Unit rather than with other outpatient services. In this case, these rooms may share the space such as waiting and reception.

2.4 FUNCTIONAL AREAS

2.4.1 Functional Zones

The Day Surgery / Procedure Unit comprises the following functional zones:

- entry / reception / waiting;
- pre-procedure preparation and holding;
- operating / procedure rooms area;
- recovery, Stages 1 to 3 (including discharge lounge):
- clinical support areas; and
- staff work areas and amenities.

2.4.2 Entry / Reception / Waiting

These areas provide for the reception and admission of patients to the unit, with general oversight of day-to-day operations, control of entry and exit from the unit and completion of general administrative tasks (e.g. records management, clerical admissions / discharges, statistics compilation, typing). Areas may include:

- reception;
- administrative work areas for selected staff;
- public waiting; and
- public amenities.

Entry, reception and waiting areas are the gateway for patient experience and should be designed to communicate the hospital's values and support the patient and carers' emotional needs. Providing for cultural safety is also essential, as documented in the AusHFG Culturally Sensitive Planning & Design Guideline, and Arts in Health Framework.

2.4.3 Patient Preparation and Holding Area

This area will be used to check administrative paperwork, enable patients to change and toilet prior to undergoing procedures and wait in a suitably discreet location under supervision of staff.

Facilities comprise of:

- interview / consult rooms;
- patient amenities such as toilets, showers, lockers and change rooms;

- changed waiting / pre-procedure holding areas (as outlined in Section 2.2.4) with access to chairs and/or trolleys, depending on the local model. The number of spaces per operating / procedure room will depend on the patient casemix and turnover. At least one patient per room will be changed and ready, however this will increase for services that require a short procedure time e.g. ophthalmology and endoscopy services; and
- access to a staff base and utilities (clean and dirty). Depending on the size of the service, this is usually shared across holding and recovery areas.

To reduce duplication, it may be possible to reuse holding as Stage 2/3 recovery bays.

As noted in Section 2.2.4, some services may provide an 'anaesthetic bay' attached to each procedure room / theatre to support patient preparation and to facilitate patient flow.

Patient consult and interview rooms will need to be arranged so that staff can exit rooms easily when they feel unsafe. This may be through the provision of a second door or the arrangement of furniture within the room to ensure that the clinician is facing the patient at all times and there is a clear path of egress that is not blocked by furniture or the patient. A risk assessment and local jurisdictional policies will inform the number and types of rooms requiring a second egress point.

2.4.4 Operating / Procedure Rooms

The number and mix of procedure / operating rooms should be determined through clinical services planning and the number and range of procedures to be undertaken.

Where possible, a standard approach should be used to plan and design operating and procedure rooms to optimise flexibility, promote efficiency and reduce errors. However, some specialties may require specific considerations, for example:

- specialised endoscopy services requiring access to angiography via fixed or mobile C arms;
- specialties requiring access to microscopes within the room e.g. ophthalmic microscopes;
- microscopic surgeries using 'heads up' surgery whereby the surgeon will perform procedures by viewing images from a 3D camera on large display screen rather than via the eyepiece of a surgical microscope.

Operating rooms are frequently configured in pairs. This is generally provided through mirror imaging of operating room layouts which maximises opportunities for sharing facilities such as scrub bays and clean-up rooms.

It is essential that operating and procedure rooms are designed to optimise flexibility to readily respond to future changes in technology.

2.4.5 Clinical Support Areas

Refer to the Schedule of Accommodation for suggested requirements.

Dedicated and separate storage should be provided for a range of sterile stock, consumables and equipment. The amount will vary and depend on the size and complexity of the service. The location of the storage may vary depending on how frequently it is accessed.

An audit of existing and planned equipment should be undertaken to assess storage requirements. The complexity of procedures being undertaken in a Day Surgery / Procedure Unit is increasing and with it comes additional equipment.

The use of disposable sterile stock is also increasing and requires appropriate areas for receipt, de-boxing and storage areas with appropriate temperature and humidity control.

Access to space for biomedical engineering staff tests and repair equipment will be required. For larger services, a dedicated room within the unit may be provided.

2.4.6 Recovery Areas

In larger facilities, it is preferable to have three recovery areas - Stage 1, Stage 2 and Stage 3 (discharge lounge). Smaller units may combine Stages 2 and 3. Depending on the unit size, a staff station and other clinical support will be shared.

As noted in Section 2.2.12, services that treat paediatric patients will require separation between adult and paediatric recovery areas. Alternatively, paediatric cases could be scheduled separately or cohorted. The management of patients with special needs will also require consideration.

The number of recovery bays provided will depend on the casemix and projected throughput of the unit. For example, the majority of ophthalmology patients and a significant proportion of patients post endoscopy will be transferred directly to Stage 2 recovery.

Typical numbers provided per operating / procedure room include:

- Stage 1 recovery: 1.5 to 3 recovery spaces per theatre / procedure room depending on the casemix and projected throughput (the NSW 'High Volume Short Stay Surgical Model Toolkit' recommends the provision of 2.5-3 beds per high volume short stay surgery theatre);
- Stage 2 recovery: three trolley / chair spaces per theatre / procedure room used for day only cases; and
- Stage 3 recovery / discharge: two chairs per theatre / procedure room used for day only cases, however this will be subject to anticipated throughput.

Recovery Stage 1 / PACU

Stage 1 Recovery accommodates unconscious patients who require constant observation and monitoring with, ideally, one-to-one patient nurse ratio. Open planned bays will be provided that can be observed from a staff station.

Single enclosed rooms may be considered as described at Section 2.2.10.

Recovery Stage 2

Recovery Stage 2 accommodates:

- patients who have regained consciousness after anaesthesia but require further observation; and
- patients who have undergone procedures with local anaesthetic who may 'bypass' recovery Stage 1.

Depending on the size and complexity of the service, these spaces may also be used to hold patients prior to their procedure as the peaks in activity change across the day.

Bay will be arranged in an open-planned arrangement with direct access to Stage 1 and Stage 3 areas. Depending on the patient, access to recliner chairs or a trolley bay is needed.

Access is required to toilets and a beverage bay.

Recovery Stage 3 (Discharge Lounge)

The recovery Stage 3 / Discharge Lounge will accommodate comfortable chairs with adequate space between them for small tables. Centres which have a high volume of more rapid turnover patients with shorter first stage recovery (e.g. endoscopy, cystoscopy, ophthalmology, plastic surgery) may require larger discharge lounges with more chairs to avoid overcrowding.

Access is required to toilets and a beverage bay.

The exit from the discharge area may be separate from the admission entrance.

The covered ambulance bay for transfer of patients to hospital in cases of emergency should be easily accessible from the recovery areas.

2.4.7 Extended Day Only Unit

Selected services may choose to collocate an extended hours inpatient unit to accommodate a greater range of cases (i.e. those with a length of stay of between 24 and 72 hours). Alternatively, patients may be transferred to a dedicated inpatient unit.

Where beds are collocated with a Day Surgery/ Procedure Unit, planners will need to consider access for visitors and additional patient amenities such as toilets and showers.

2.4.8 Staff Areas

Facilities include:

- male/female change rooms which will include toilets, showers and lockers;
- staff room;
- meeting / tutorial room; and
- staff work areas to support the service.

Staff work areas will need to consider training and education requirements.

2.5 FUNCTIONAL RELATIONSHIPS

2.5.1 External

- Sterilising Services Unit;
- operating suite, if not collocated;
- extended day only unit and other inpatient units;
- pre-admission clinic; and
- medical imaging and pharmacy depending on service requirements.

2.5.2 Internal

Key issues to be managed include:

- separation of clean and dirty flows;
- logical orderly patient flow from arrival at reception, through holding, procedural areas and recovery Stages 1 to 3;
- colocation of pre-procedure holding and Stage 2 recovery areas for flexible use depending on demand throughout the day;
- the ability of staff to monitor the condition and safety of patients at all times; and
- the efficient management of the unit, in particular ensuring the design does not result in additional staffing costs.

03 DESIGN

3.1 ACCESS

3.1.1 Internal

Other hospital staff and visitors should only be able to access the unit as far as the reception / entry area. Selected visitors may be escorted to other areas (e.g. recovery).

Discreet access to the unit for patients on trolleys is required, e.g. for patients from residential care facilities or patients transferring from other clinical units such as inpatient units, depending on operational practices.

Discreet access for the deteriorating patient to be transported out of the unit for further management, elsewhere within the hospital or to another facility, is also essential.

3.1.2 External

To facilitate easy access to the unit by the patients and carers, consideration should be given to the following:

- provision of a covered pick-up and drop-off area, adjacent to the main entrance to the facility;
- clearly signposted directions to the area; and
- provision of car parking for visitors to the area within easy access of the main entrance to the facility.

Discreet ambulance access also needs to be considered.

3.2 PARKING

For staff parking, refer to AusHFG Part C: Section 6.0 Safety and Security Precautions.

3.3 DISASTER PLANNING

In case of a disaster, elective cases may be cancelled and these facilities used to provide additional unplanned capacity.

Refer to AusHFG Part B: Section 80 General Requirements for further information.

3.4 INFECTION PREVENTION AND CONTROL

The design should support the implementation of the following policies, standards and guidelines:

- ACORN Standards for Perioperative Nursing in Australia, The Australian College of Perioperative Nurses;
- AS/NZS 4187:2014 Reprocessing of reusable medical devices in health service organisations;
- AusHFG HPU 190 Sterilising Services Unit regarding endoscopy reprocessing areas;
- AusHFG Part D: Infection Prevention and Control;
- Infection Control in Endoscopy, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia;
- NHMRC, 2019, Australian Guidelines for the Prevention and Control of Infection in Healthcare; and

- PS28: Guidelines on Infection Control in Anaesthesia, 2015.

Reference should be made to contemporary guidelines regarding COVID-19 / other pandemics. This may include consideration of closed suction devices to reduce aerosolisation.

3.5 ENVIRONMENTAL CONSIDERATIONS

3.5.1 Natural Light and External Views

Where possible the design of the unit should incorporate external views and natural light to such areas as waiting areas, holding and recovery, and the staff lounge. The use of natural light can enhance wellbeing and make the environment feel less clinical and support the high throughput model.

When external views and natural light are introduced into patient areas, care must be taken to minimise glare, heat gain / loss and ensure privacy is not compromised.

3.5.2 Interior Decor

Interior design strategies should be welcoming and calming to reduce stress and support recovery.

Features that distract patients (e.g. artwork) may also be helpful and have a positive impact on staff. Colour schemes can support patient wayfinding and to identify progression through the various stages of their admission including preparation, treatment and recovery areas.

3.6 SPACE STANDARDS AND COMPONENTS

3.6.1 Human Engineering

Human Engineering covers aspects of design that permit effective, appropriate, safe and dignified use by all people, including those with disabilities. It includes occupational ergonomics, which aims to fit the work practices, FF&E and work environment to the physical and cognitive capabilities of all people e.g. access to a range of seating options in waiting areas to accommodate younger people as well as frail / aged.

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security, for further information.

3.6.2 Access and Mobility

Refer to:

- AS1428 - Design for Access and Mobility (set); and
- AusHFG Part C: Design for Access, Mobility, Safety and Security.

3.6.3 Building Elements

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for details regarding building elements such as walls, floors, ceilings, doors, windows and corridors.

3.7 SAFETY AND SECURITY

3.7.1 Safety

The design of the unit should seek to prevent injury and reduce the number of potential hazards that may include:

- exposure to infectious substances;
- exposure to anaesthetic gases;
- radiation (refer to Section 3.10.7);

- injury from equipment such as lasers;
- exposure to surgical plume (refer to Section 3.10.9);
- exposure to formalin fumes;
- cytotoxic substances;
- injuries related to manual handling; and
- heightened emotional states.

3.7.2 Security

Access control systems are required to ensure that only those authorised will have access to restricted areas of the unit. Duress points may also be needed at staff stations and receptions. Patient / visitor escorted access only is required beyond the waiting area.

3.8 FINISHES

3.8.1 General

As with most units, the selection of finishes for the Day Surgery / Procedure Unit is influenced by both durability and infection control issues.

The finishes should be easy to clean to facilitate infection control. At the same time, they should be hard wearing and impervious to moisture.

See AusHFG Part D: Infection Prevention and Control, and relevant Standard Components for further information.

3.8.2 Wall Finishes and Protection

Wall surfaces are subject to cleaning protocols. Full height wall vinyl is used in operating / procedure rooms.

Due to the high number of trolley and equipment movements in the unit, wall and corner protection is required wherever there is the potential for damage from trolleys.

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for details.

3.8.3 Floor Finishes

Floor finishes should be of a type that are impervious to moisture, easily cleaned, stain resistant, comfortable for long periods of standing and suitable for wheeled traffic.

In the procedure / operating rooms, the colour should be such that there is sufficient contrast to find small dropped items.

Slip resistant sheet vinyl with welded joints and coved skirtings is considered appropriate throughout the Unit.

Carpet may be used in the non-clinical areas of the unit such as staff work areas and public waiting areas.

3.8.4 Ceiling Finishes

Ceiling performance requirements include aesthetics, acoustics, infection control, access to services and durability.

Refer to relevant AusHFG Standard Components and AusHFG Part D: Infection Control and Prevention, for further information.

Artistic ceiling treatments should be considered, at a minimum for paediatric preparation and recovery bays, to mitigate patient boredom, anxiety, and hunger.

3.9 FIXTURES, FITTINGS & EQUIPMENT

Definition

Refer to the Room Data Sheets (RDS) and Room Layout Sheets (RLS) and AusHFG Part C Section 3.0, Space Standards and Dimensions.

3.10 BUILDING SERVICE REQUIREMENTS

3.10.1 General

The provision of appropriate building services to the unit, and easy access to these from the unit, is essential for efficient and safe operation.

These are described in more detail in both the Room Data and Room Layout Sheets. For further information relating to engineering services requirements, refer to local jurisdictional guidelines.

3.10.2 Ceiling Structure

Increasingly, services and equipment are ceiling rather than floor mounted. Increasing use of IT and medical imaging within operating and procedure rooms results in additional space being used within the ceiling space. The design of these rooms will require significant coordination to set out imaging equipment with ductwork, pendants, HEPA filters, access panels and lighting.

Ceiling heights also need to accommodate equipment requirements such as operating lights and ceiling mounted equipment. Appropriately designed, rigid support structures located above the finished ceiling should be provided.

3.10.3 Air Handling

Temperature, humidity and ventilation in all operating / procedure rooms must be maintained within acceptable standards for infection prevention and for patient safety and comfort.

Air handling systems must be designed in accordance with relevant standards and to meet the requirements of the types of surgery and procedures being undertaken. Although most procedural services do not need to comply with all aseptic technique, some procedures are becoming increasingly complex and invasive in nature which may require the procedure room/s to be designed to operating room standards including the installation of HEPA (high-efficiency particulate air) filters.

Operating rooms will each have separate air handling units and separate exhaust systems that are best located as close as practical to the areas served. Some operating / procedure rooms have extensive IT and medical imaging equipment included which places a high heat load onto the room and which will need to be considered in the design of air handling systems.

Air quality delivered to the sterile storage areas will be equivalent to that delivered to operating rooms using HEPA filters.

Refer to:

- local jurisdictional engineering policies and guidelines for health services;
- ACORN Standards;
- AS 1668.2:2012 The Use of Ventilation and Air-conditioning in Buildings; and
- contemporary guidelines relating to COVID / other pandemics.

3.10.4 Medical Gases

Refer to the relevant AusHFG Standard Components regarding recommended requirements.

Consideration may be given to sharing medical gases between patient bays in Stage 2 recovery.

3.10.5 Information Communications and Technology

Day Surgery / Procedure Units have an increasing reliance on audio-visual equipment. Key planning considerations include:

- wireless technology. This will facilitate many devices including Workstations on Wheels (WOW) and other equipment;
- the increasing use of point of care clinical systems used during a surgical procedure. This requires access to:
    - display screens to view results, PACS images etc.
    - PCs to access electronic medical records (EMR) and to discuss matters with other members of the multi-disciplinary team. It is common for PC access to be needed to support surgical, anaesthetic and nursing staff within an operating / procedure room;
    - technology to assist with the management of equipment and consumables, such as Real Time Location System (RTLS) and Reusable Medical Device (RMD) tracking.
- call systems including staff assist, porter or orderly and emergency call systems;
- patient monitoring systems;
- cameras within selected procedure / operating rooms;
- wiring for ethernet transmission of videos for teaching and training purposes;
- CCTV of identified high risk areas in line with local jurisdictional policies; and
- directional sound showers/speakers to enable music/audio to be played via patient-owned devices over designated recovery areas.

3.10.6 Electrical Services

Considerations include:

- electrical installation must comply with AS/NZS 3000 Electrical installations – patient areas;
- all patient areas within the Day Surgery / Procedure Unit will be wired at least as body protected electrical areas;
- patient areas should only be wired as cardiac protected electrical areas as defined in AS/NZS 3000, that is where cardiac-type procedures are regularly and routinely undertaken. For operating rooms this includes cardiac and thoracic theatres and cardiac catheter laboratories;
- stand-by lighting and power systems (also known as back-up or emergency power) will be provided in accordance with AS/NZS 3009 Standby Power System;
- uninterruptible power supply (UPS) for critical equipment. In an operating / procedure room, this may include operating lights, pendants, monitors, anaesthetic machines and integrated imaging systems; and
- provision of GPOs in equipment bays and equipment storage rooms so that equipment can be recharged.

Additional requirements are contained in the following codes and standards including:

- National Construction Code;
- AS/ANZ 3000 Electrical Installations; and
- jurisdictional guidelines relating to engineering services.

Service requirements are also detailed in the AusHFG Standard Components.

3.10.7 Radiation Safety

Radiation shielding will be required in all operating / procedure rooms where imaging routinely occurs. Specialist advice from a qualified consultant will be needed.

Where imaging equipment is used within operating and procedure rooms, staff will need access to lead gowns. These will be stored on a mobile unit or on a wall mounted rack.

3.10.8 Laser Safety

The use of lasers in operating rooms has decreased, however they are still required for some specialties e.g. ophthalmology and urology.

AS/NZS 4173:2018 'Guide to the safe use of lasers and intense light sources in health care' describes the requirements that will need to be met where lasers are used in an operating theatre. Staff will require access to suitable PPE when lasers are being used.

Major facility implications include:

- signage is located at the entry and egress point of each room where laser is used; and
- glass is treated to comply with laser use or covered with suitable covering such as a laser blind. Refer also to:
- ACORN Standards: Laser Safety; and
- jurisdictional policies.

3.10.9 Surgical Plume

During surgical procedures, energy-based surgical devices intentionally vaporise tissue creating a potentially hazardous, visible and invisible by-product or plume. Plume extraction systems will be needed.

For additional information refer to:

- ACORN Standards: Surgical Plume.

04 COMPONENTS OF THE UNIT

4.1 STANDARD COMPONENTS

Rooms / spaces are defined as:

- standard components (SC) which refer to rooms / spaces for which room data sheets, room layout sheets (drawings) and textual description have been developed;
- standard components – derived rooms are rooms, based on a SC but they vary in size. In these instances, the standard component will form the broad room 'brief' and room size and contents will be scaled to meet the service requirement; and
- non-standard components which are unique rooms that are usually service-specific and not common.

The standard component types are listed in the attached Schedule of Accommodation. The current Standard Components can be found at: https://healthfacilityguidelines.com.au/standard-components.

Non-Standard Components for this HPU are described below.

4.2 NON-STANDARD COMPONENTS

Endoscope Reprocessing Room

Refer to information contained in HPU 190 Sterilising Services Unit.

05 APPENDICES

5.1 SCHEDULE OF ACCOMMODATION

A Schedule of Accommodation follows and assumes a 2 theatre / procedure room and a 4 theatre / procedure room suite. The 2 room scenario shows one operating room and one procedure room. The 4 room scenario shows two operating rooms and two procedure rooms. These room numbers will need to be amended in accordance with the requirements of the Service Plan and the planned procedural and surgical caseload.

The 'Room / Space' column describes each room or space within the Unit. Some rooms are identified as 'Standard Components' (SC) or as having a corresponding room which can be derived from a SC. These rooms are described as 'Standard Components – Derived' (SC-D).

The 'SD/SD-C' column identifies these rooms and relevant room codes and names are provided. All other rooms are non-standard and will need to be briefed using relevant functional and operational information provided in this HPU. In some cases, Room / Spaces are described as 'Optional' or 'o'. Inclusion of this Room / Space will be dependent on a range of factors such as operational policies or clinical services planning.

ENTRY/ RECEPTION/ WAITING

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
WAIT-10	Waiting	Yes	1	14	1	20	Indicative area allocation. Requirements will depend on casemix / throughput. For services with a significant paediatric mix include a paediatric waiting and play area.
WCPU	Toilet – Public	Yes	1	3	2	3	
WCAC	Toilet – Accessible	Yes	1	6	1	6	
RECL-10	Reception/ Clerical	Yes	1	10	1	12	1 - 2 staff
	Office - Workstation			4.4		4.4	Administration workstations collocated with reception. Number of workstations dependent on staff profile.
STPS-8	Store - Photocopy/Stationery	Yes	1	3	1	5	Bay including multifunction device.
STFS-10	Store - Files		1	3 (o)	1	5 (o)	Optional, depending on local jurisdictional policies.
OFF-CLN	Office - Clinical Workroom	Yes	1	12	1	15	Central coordination point for unit.
INTV	Interview Room	Yes	1	9	1	9	Note interview rooms included in preparation and recovery zones also - recommend overall allocation of 1 interview/consult room per theatre/procedure room. Consider design requirements for staff safety.
	Discounted Circulation			30%		30%	

PATIENT PREPARATION AND HOLDING AREA

Colocation of pre-procedure holding, and Stage 2 recovery areas is recommended for flexible use as demand changes throughout the day.

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
INTV	Interview Room	Yes	1	9	1	9	Note interview rooms included in waiting and recovery zones also - recommend overall allocation of 1 per theatre / procedure room. Consider design requirements for staff safety.
CONS	Consult Room	Yes			1	12	Locate to enable access from recovery zone also. Consider design requirements for staff safety.
CHPT	Change Cubicle, Patient	Yes	1	2	3	2	Recommend 1 per theatre / procedure room. Access from Stage 2 recovery also required.
CHPT-D	Change Cubicle –Accessible	Yes	1	4	1	4	
WCPT	Toilet – Patient	Yes	1	4	1	4	
ENS-ACC	Ensuite – Accessible	Yes	1	7	1	7	Shower access may be required for some procedures eg bowel preps.
	Property Bay - Patient		1	2 (o)	1	3 (o)	Optional. Assumes lockers. Property may instead travel with the patient. Access from Stage 2 recovery also required.
PBTR-H-6	Patient Bay – Holding	Yes	4	6.5	8	6.5	"Changed" Waiting. Patient may be accommodated on a chair or trolley. May need to be 9m2 should access be required at each side. Suggest 2 bays per theatre - 1 may be provided as anaesthetic preparation room / collocated with theatre or procedure room. Additional bays per room may be required for high throughput services eg endoscopy and opthalmology.
SSTN-10	Staff Station	Yes	1	6	1	8	Locate to provide oversight of changed waiting / holding bay areas. Can be shared to support pre and post-operative areas.
BHWS-B	Bay – Handwashing, Type B	Yes	1	1	2	1	1 per 4 bays.
	Discounted Circulation			40%		40%	

OPERATING / PROCEDURE ROOMS

The operating and procedure rooms included below reflect indicative scenarios only. The number and type of rooms provided for each project will be identified during the development of the clinical services plan.

Smaller services may provide multipurpose operating / procedure rooms so in this case, rooms may be located side by side. As the size of the service increases, it is preferable to separate procedure rooms and operating rooms, so that procedural work can be done without impacting surgical activity.

The endoscopy reprocessing area allocations are the same for both scenarios given this is the recommended area required to support up to two endoscopy procedure rooms. For larger sized units refer to AusHFG HPU 190 Sterilising Services.

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
PROCEDURE ROOMS							
ENPR	Procedure Room - Endoscopy	Yes	1	45	2	45	Specialised units requiring angiography eg for ERCPs will also require a control room. Some services may include a collocated holding bay to support patient preparation and flow. If provided, reduce holding bays above.
	Endoscope Reprocessing - Dirty		1	13	1	13	One double basin sink per one-two procedure rooms is assumed.
	Automated Flexible Endoscope Reprocessors (AFERs)		1	4	1	4	The number of AFERs should provide capacity to process two endoscopes for each procedure room. Some AFERs are able to process two endoscopes at a time or asynchronously. Rural and remote health services will require a minimum of 2 AFERs. Check dimensions of preferred supplier's AFERs to confirm allowances. Note that the Quantity "1" refers to the number of spaces, not the number of AFERs or other equipment
	Endoscope Reprocssing - Clean		1	8	1	8	
	Endoscope Reprocessing - Storage (CESC or equivalent system)		1	4	1	4	Fleet size and the number of storage positions required must be confirmed with the user. Note that the Quantity "1" refers to the number of spaces, not the number of storage cabinets or storage positions. Where a storage bag system is used instead of CESCs, space will be required for the storage of the bagged endoscopes.
	Store - Chemicals		1	2	1	2	Area allocation will depend on the volume of chemicals required to service the projected workload. Some reprocessing agents used for endoscopy reprocessing are flammable and/or toxic. Storage of these agents will comply with jurisdictional workplace health and safety regulations. This space may need to be ventilated to exhaust air to a safe location outside the building.

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
OPERATING ROOMS							
ORGN	Operating Room - General	Yes	1	60	2	60	Smaller theatres may be justified for some specialties, such as ophthalmology, where current and projected patient throughput justifies the dedicated use of the theatre for that specialty.
ANAE-16	Anaesthetic Preparation Room	Yes	1	16 (o)	2	16(o)	Optional, and where provided reduce number of pre-procedure holding bays above.
SCRB-4	Scrub Up	Yes	1	4	2	4	May be combined and shared between rooms.
CLUP-10	Clean-Up Room-Shared	Yes	1	6	1	10	10m2 shared between 2 ORs.
	Exit Bay		1	12	2	12	16m2 bay can be shared between two rooms.
	Discounted Circulation			40%		40%	

RECOVERY AREAS

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
SSTN-10	Staff Station	Yes	1	9	1	14	
1BR-H-12	1 Bed Room – Holding	Yes	1	12	2	12	Used for children, special needs or isolation. Services providing bronchoscopy will require a negative pressure recovery bay.
PBTR-RS1	Patient Bay - Recovery Stage 1	Yes	4	9	8	9	Indicatively noted at 2 bays per room however 1.5 - 3 is recommended depending on the case mix / throughput.
PBTR-H-6	Patient Bay – Holding	Yes	6	6.5	12	6.5	Stage 2 Recovery. Recommend 3 per theatre / procedure room. May need to be 9m2 should access be required at each side.
BHWS-B	Bay – Handwashing, Type B	Yes	4	1	6	1	1 per 4 bays.
BBEV-OP	Bay- Beverage, Open Plan	Yes	1	4	1	4	
BLIN	Bay – Linen	Yes	1	2	2	2	
BMEQ	Bay - Mobile Equipment	Yes	1	2	1	3	Number depends on equipment stored and frequency of use. For blanket warmers, workstations on wheels etc. Include power for recharging equipment.
	Recovery Stage 3 / Discharge Lounge		4	4 (o)	8	4 (o)	Optional. Each chair planned at 4m2. In some smaller units, patients may be discharged from Stage 2 recovery.
INTV	Interview Room	Yes			1	9	In smaller services, interview room may be shared between zones.
	Discounted Circulation			40%		40%	

CLINICAL SUPPORT

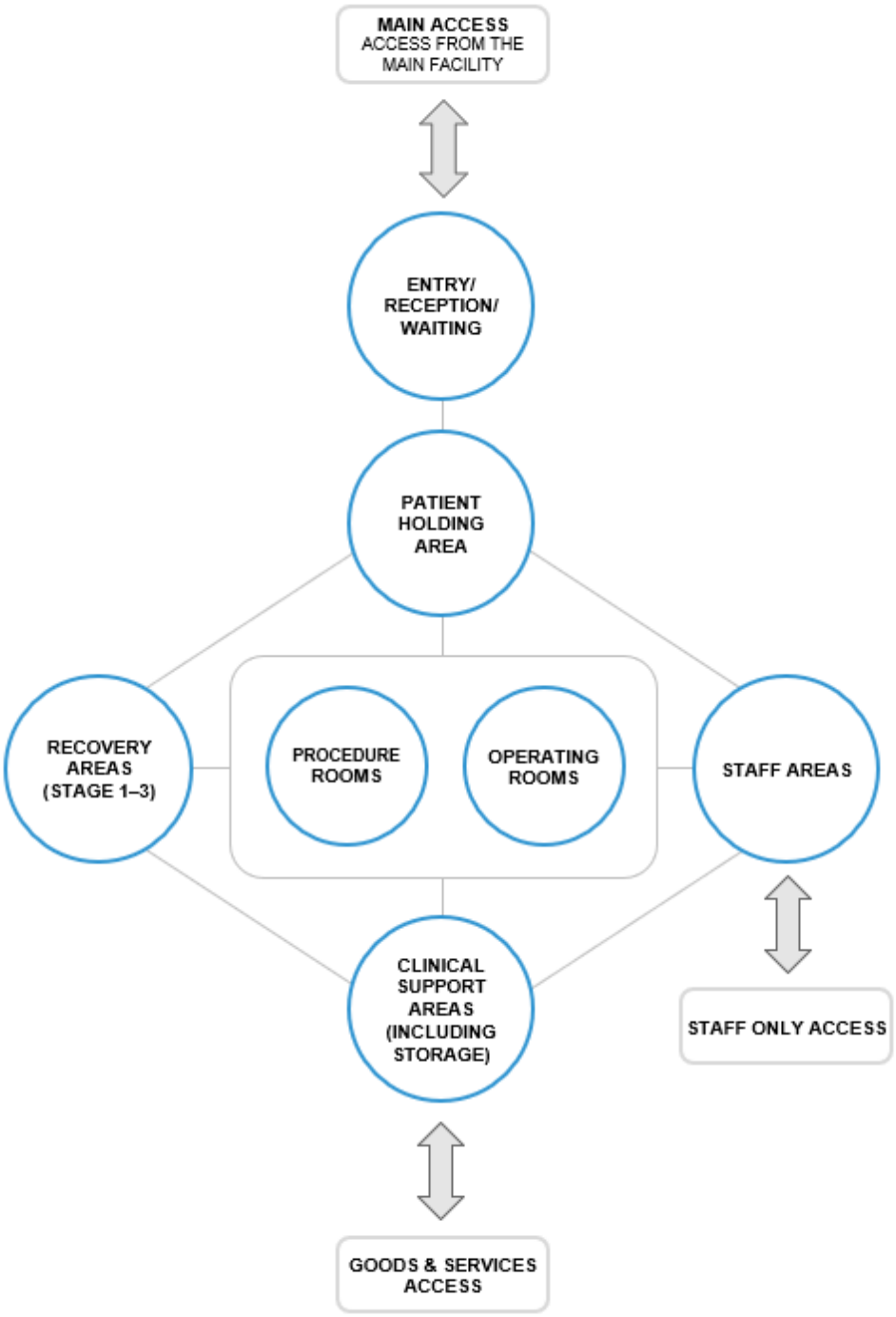
AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
BLIN	Bay – Linen	Yes	1	2	2	2	Assumes 1 bay: 2 rooms
STSS-20	Store – Sterile Stock	Yes	1	20	1	40	Recommend 20m2 per operating theatre for RMDs.
CLN-10	Clean Store	Yes	1	10	1	20	Recommend 10m2 per procedure room to support procedural services that do not need to comply with aseptic technique standards and do not require HEPA filtered sterile stock storage.
STGN	Store - General	Yes	1	15	1	25	For other non-sterile / deboxing storage. Increasing use of disposable packs.
STEQ-14	Store - Equipment	Yes	1	12	1	24	With power points for recharging pumps etc.
BMEQ	Bay - Mobile Equipment	Yes	2	2	4	2	Image intensifiers, lead gowns, trolleys eg for fracture/plaster equipment etc. Include power for recharging equipment.
CLN-MED-20	Clean Store / Medication Room	Yes	1	10	1	12	Consider approach to anaesthetic medication storage. Includes malignant hyperthermia trolley or portable kit.
	Dirty Utility / Disposal Room		1	12	1	14	
BRES	Bay - Resuscitation	Yes	1	3	1	3	Number to be determined based on local requirements / casemix. Includes difficult intubation trolley and paediatric trolley where applicable.
	Biomedical Workroom				1	10 (o)	Optional. For biomedical engineering testing and repair of equipment. Dedicated room usually only provided in larger services.
CLRM-5	Cleaner's Room	Yes	1	5	1	5	
WCST	Toilet - Staff	Yes		3		3	Number and location dependent on travel distances to staff change rooms.
	Discounted Circulation			40%		40%	

STAFF AREAS

AusHFG Room Code	Room / Space	SC / SC-D	1 Procedure Room + 1 Operating Room		2 Procedure Rooms + 2 Operating Rooms		Remarks
			Qty	m2	Qty	m2	
OFF-S9	Office- Single Person	Yes		9		9	Number and area allocation will depend on staff profile and local jurisdictional policies.
OFF-SW	Office - Workstation			4.4		4.4	Number and area allocation will depend on staff profile and local jurisdictional policies.
MEET-L-20	Meeting Room	Yes	1	12	1	20	Size will depend on number of people to be accomodated and local jurisdictional policies.
SRM-15	Staff Room	Yes	1	15	1	24	Requirements will depend on the staff profile for the unit.
CHST-10	Change - Staff	Yes	1	18	1	30	Requirements will depend on the staff profile for the unit. Full lockers - adjust female / male mix as required. Toilet and showers included.
CHST-10	Change - Staff	Yes	1	12	1	20	Requirements will depend on the staff profile for the unit. Full lockers - adjust female / male mix as required. Toilet and showers included.
	Discounted Circulation			25%		25%	

5.2 FUNCTIONAL RELATIONSHIPS / DIAGRAMS

A functional relationships diagram is shown below.



5.3 REFERENCES

- ACORN Standards for Perioperative Nursing in Australia (current versions), The Australian College of Perioperative Nurses including:
  - Volume 1- Asepsis
  - Volume 1 - Environmentally Sustainable Practices
  - Volume 1 - Laser Safety
  - Volume 1- Planning and Design of the Perioperative Environment
  - Volume 2 - Management of the Post Anaesthesia Recovery (PAR) Unit
- AHIA, 2018, AusHFG Culturally Sensitive Planning and Design, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW.
- AHIA, 2020, AusHFG Arts in Heath Framework, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW.
- Australian/ New Zealand Standards, including:
  - AS/NZS 4187:2014 Reprocessing of reusable medical devices in health service organisations
  - AS/NZS 4173:2004 Guide to the safe use of lasers in health care
  - AS1428 - Design for Access and Mobility (set)
- Australian and New Zealand College of Anaesthetics Professional Standards including:
  - PS04: Recommendations for the Post-Anaesthesia Recovery Room, 2020
  - PS09: Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures, 2014
  - PS15: Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery, 2018
  - PS28: Guidelines on Infection Control in Anaesthesia, 2015
  - PS29: Guidelines for the Provision of Anaesthesia Care to Children, 2020
  - PS55: Recommendations on Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations, 2020
- Australian Commission on Safety and Quality in Health Care, 2018, 'National Safety and Quality Health Service Standards - User Guide for Acute and Community Health Service Organisations that Provide Care for Children'
- Australian Day Surgery Nurses Association, 2019, 'Best practice guidelines for ambulatory surgery and procedures'
- Australian Government, Department of Health, 'Infection Control Guidelines for the Management of Patients with Suspected or Confirmed Pulmonary Tuberculosis in Healthcare Settings', 2016: https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi4003i.htm
- Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia Standards for Endoscopic Facilities and Services, 3rd Edition 2006
- Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia, Infection Control in Endoscopy, 4th Edition 2021 (currently being updated)
- NHMRC, Australian Guidelines for the Prevention and Control of Infection in Healthcare, 2019

5.4 FURTHER READING

- American Society for Gastrointestinal Endoscopy, 2014, Guidelines for Safety in the Gastrointestinal Endoscopy Unit
- NSW Health GL2012_001 High Volume Short Stay Surgical Model Toolkit, January 2012
- NSW Health Guideline GL2015_002 Work Health and Safety - Controlling Exposure to Surgical Plume, 2015
- NSW Health GL2018_004, The Perioperative Toolkit, February 2018
- NSW Health GL2020_023, Extended Day Only Admission Model, November 2020
- Queensland Government Department of Health 23 Hour Ward Admission Criteria, Document no. QH-GDL-412-2001, March 2014
- The Royal Australian and New Zealand College of Ophthalmologists, 'Guidelines on Toxic Anterior Segment Syndrome'
- The Royal Australian and New Zealand College of Ophthalmologists, Infection Control Guidelines to Prevent Nosocomial Epidemic Keratoconjunctivitis (EKC)'