## 270 DAY SURGERY / PROCEDURE UNIT

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601800 270.0.10

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## INTRODUCTION

## **Preamble**

601801 270 .1.00

This Guideline aims to promote the development of optimal environments for the conduct of a range of surgical and endoscopic procedures performed on a day only and extended care basis, and the pre and post procedural management of patients whilst enabling the adoption of emerging technologies, changing models of care and accommodating day-to-day fluctuations in caseload and the corresponding fluctuations in staff.

It outlines the specific requirements for the planning of a Day Surgery / Procedures Unit and should be read in conjunction with Generic Planning Requirements (Section 80) and Standard Components (Section 90) in Part B of these Guidelines.

Description

601802 270 .1.05 ENDOSCOPY





Endoscopy literally means "looking into" and endoscopic equipment can be used to visualize the following areas some but not all of which are suitable for a Day Procedure Unit.

## 601803 270 .1.10 GASTROINTESTINAL (GI) TRACT

- Upper GI tract oesophagus, stomach and duodenum (oesophagoscopy, gastroscopy, duodenoscopy);
- Lower GI Tract colon (colonoscopy), sigmoid colon (proctoscopy, sigmoidoscopy).

In an endoscopic retrograde cholangiopancreatography (ERCP), an endoscope is used to introduce radiographic contrast medium into the bile ducts so they can be visualized on x-ray.

#### 601804 270 .1.15 RESPIRATORY TRACT

- Nose (rhinoscopy);
- Lower respiratory tract (bronchoscopy).

Bronchoscopy is the visualization of the lower airways using a flexible or rigid endoscope. Often performed for diagnostic purposes (tumor, bleeding, infection, or trauma, sputum induction for suspected TB), it is also useful in the treatment of airway obstruction by tumors or foreign bodies, for removal of secretions and as an assistive technique in difficult intubation of the trachea.

There are two types of bronchoscopes: flexible (fibreoptic) and rigid. Flexible bronchoscopy is often performed under local anesthesia with the patient awake. Rigid bronchoscopes may be employed to remove foreign bodies or to place stents. Such procedures are done under general anesthesia.

## 601805 270 .1.20 URINARY TRACT (ENDOUROLOGY)

Cystoscopy [Endourology] involves the use of small fiberoptic scopes which can be passed through the urethra to visualize internally the lining of the urinary tract from kidney to bladder. The majority of endourology procedures can be done on a day only basis.

## 601806 270 .1.25 FEMALE REPRODUCTIVE SYSTEM

- Cervix (colposcopy);
- Uterus (hysteroscopy);
- Fallopian tubes (Falloscopy).

These procedures are often undertaken in a dedicated women's health unit.

#### 601807 270 .1.30 MINIMALLY INVASIVE SURGERY

Examination of normally closed body cavities via a small incision:

- abdominal or pelvic cavity (laparoscopy);
- interior of a joint (arthroscopy);
- organs of the chest (thoracoscopy and mediastinoscopy);
- uterus during pregnancy (amnioscopy, amniocentesis).





## **Policy Framework**

601808 270 .2.00

NSW Health policies that impact on the management of procedural and surgical services and the operation of Day Procedure Units include:

Guide to the Role Delineation of Health Services Third Edition, 2002.

What a difference a day can make - Same Day Surgical and Endoscopic Procedures Policy, May 1999.

Glutaraldehyde in NSW Public Health Care Facilities (Policy and Guidelines for Safe Use of), PD2005\_108, 25 January 2005.

Extended Day Only (EDO) Admission Policy, PD2006\_082, October 2006.

## Description of the Unit

#### 601809 270 .3.00

**DEFINITION OF HEALTH PLANNING UNIT (HPU)** 

This guideline for a Day Surgery / Procedures Unit describes the facilities necessary for the treatment and care of patients undergoing a range of endoscopic and/or surgical procedures with provision to deliver Inhalational and other anaesthetic agents and provide accommodation for the reception, pre-procedural preparation and post-procedural recovery of patients.

Provision of an Extended Care Unit will affect the facility requirements and is discussed below.

#### 601810 270 .3.10 RANGE OF SERVICES/PROCEDURES

The range of procedures that may be undertaken in a Day Surgery/Procedures Unit and the clinical services that may access the unit are almost limitless and may include:

- Surgical procedures, particularly but by no means exclusively for ENT, Dental and Plastic Surgery and Ophthalmology as improved technology has allowed more complex procedures to move to day or 23 hour stay. The range of such procedures is addressed in NSW Health "Extended Day Only (EDO) Admission Policy" PD2006\_082, October 2006;
- Endoscopy gastrointestinal, respiratory, urology;
- ECT (where there is no dedicated unit within in a Mental Health complex);
- Day Medical Procedures such as:
- infusion of blood / & blood products, steroids & other intravenous treatments:
  - lumbar punctures:
  - removal/replacement of urinary catheters;
  - biopsies including "lumps and bumps";
  - aspirations (joints, pleural cavity, abdominal);
- insertion of PIC lines (peripherally inserted catheter) and venous access catheters for dialysis under radiological or ultrasound control.

## 601811 270 .3.15 PATIENT/CLIENT CHARACTERISTICS

Patients may be fully ambulant, on trolleys and/or in wheelchairs. Bed access for and discrete holding of inpatients will need to be addressed in hospital-based units.

The majority of patients will be adults but special consideration should be given to the needs of children and their parents where a paediatric service is provided.

"Patient selection is based on but not limited to:

- general health [triage, risk management, sick inpatients];





- age;
- obesity:
- social circumstances;
- post-discharge carer support;
- transport and distance from the clinic";
- expected level of patient compliance / willingness.

Source: Australian Day Surgery Association - About Day Surgeries in Australia.

#### **PLANNING**

## **Operational Models**

#### 601812 270 .4.00 HOURS OF OPERATION

The Day Surgery/Procedures Unit will be available for scheduled elective procedures generally during business hours but will/may need to be accessible for after-hours emergencies and, depending on operational policies, may extend services into evening hours and Saturday mornings or times decided by hospital policy. Provision of Extended Care facilities and staggered admission times enable sessions to be extended.

#### 601813 270 .4.05 MODELS OF CARE

The Day Surgery / Procedures Unit may be:

- general multidisciplinary endoscopy with day surgery conducted elsewhere;
- mix of day surgery and endoscopy;
- dedicated, single specialty endoscopy unit;
- day surgery only.

The unit may also include angiography rooms and facilities for day medical procedures.

All of the above may be supported by an Extended Care Unit.

#### 601814 270 .4.10 GENERAL ENDOSCOPY

A single unit for a wide range of endoscopic procedures, almost certainly Gastroenterology and Respiratory bronchoscopy and perhaps Endourology.

#### 601815 270 .4.15 SURGERY / ENDOSCOPY MIX

As above but with all necessary facilities for day surgery.

The inclusion of day surgery will need to be addressed and may depend on case mix, possibility of full-time sessions and the surgeons' preference for incorporating day cases into an inpatient list.

## 601816 270 .4.20 SINGLE SPECIALTY ENDOSCOPY UNIT

Major centres may be able to justify dedicated units for individual specialties such as Gastroenterology, Respiratory Medicine and Urology and will depend on the level of service of each specialty and a viable throughput. In these instances the Unit will probably also include all the offices for medical, nursing and support staff.

Under these circumstances, day surgery will probably be conducted through





the main Operating Suite unless a separate Day Surgery Unit is envisaged and viable.

#### 601817 270 .4.25 ADDITION OF ANGIOGRAPHY

Depending on hospital policy and location, the Unit may also incorporate the angiography suite to facilitate provision of anaesthetic services, recovery and access to the main Operating Unit in case of emergency.

## 601818 270 .4.30 ADDITION OF DAY MEDICAL UNIT

In smaller but nonetheless acute hospitals, the collocation of a Day Medical Unit could be considered as a viable proposition to enable optimum sharing of support facilities. Project staff should refer to the Ambulatory Care HPU in Part B of these Guidelines for additive rooms / spaces.

## **Operational Policies**

## 601819 270 .5.00 GENERAL

Operational Policies have a major impact on the design requirements and capital and recurrent costs of health facilities and must be established at the earliest stage possible. Refer to Part B Section 80 of these Guidelines for a list of general operational policies that may apply.

The following are examples of policies that may be specific to a Day Surgery / Procedures Unit. Users must be guided by their own policies in their own health facility.

### 601820 270 .5.05 PRE-PROCEDURE / ADMISSIONS

A pre-admission assessment for all patient is assumed but facilities will be required in the DSPU or Extended Care Unit for the following:

- completion of the admission process, clerical and clinical;
- consent on the day;
- anaesthetic review and examination as necessary;
- completion of bowel preparation for patients undergoing colonoscopy if necessary (older patients in particular do not always comply with instructions).

Refer to "Best Practice Guidelines for Ambulatory Surgery & Procedures", Australian Day Surgery Nurses Association.

#### 601821 270 .5.10 ANAESTHESIA AND RECOVERY

Anaesthesia may be local, regional, conscious sedation or general anaesthesia (GA). For flexibility, all procedure and operating rooms should be GA capable.

The likely extent of anaesthesia will determine if dedicated 1st stage recovery beds are needed but there should always be bed bays capable of first stage recovery and these beds may form part of overall recovery bed complement for the area and used on an as needs basis.

Project staff may refer to the following Australian and New Zealand College of Anaesthetists Guidelines:

PS4: Recommendations for the Post-Anaesthesia Recovery Room, 2006.





PS9: Guidelines on Conscious Sedation for Diagnostic, Interventional Medical and Surgical Procedures, 2005.

PS15: Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery, 2006.

PS24: Guidelines on Sedation for Gastrointestinal Endoscopic Procedures, 2004.

PS29: Statement on Anaesthesia Care of Children in Healthcare Facilities Without Dedicated Paediatric Facilities, 2002.

#### 601822 270 .5.15 ENDOSCOPE REPROCESSING

There will be a central processing room in the unit for all scope cleaning and processing. Staff from individual clinical disciplines may wish to undertake their own cleaning and assembly. In hospitals without a dedicated Endoscopy Unit, the processing function may be performed in the Sterile Services Unit.

Scope cleaning may be by:

- immersion in fixed sink or mobile container, or
- automated via Automated Flexible Endoscope Reprocessors (AFERs) followed by rinsing, if necessary, and drying.

Whatever the method, fume extraction is necessary either inherent to the AFER or via fume cabinet.

The process is critical for effective infection prevention and control and is addressed in detail in "Infection Control in Endoscopy, 2nd Edition, Gastroenterological Nurses College of Australia Inc (GENCA).

#### 601823 270 .5.20 ERCP

Project staff will need to determine whether ERCPs (Endoscopic Retrograde Cholangiopancreatography) will be undertaken in the Day Surgery Unit or in the Imaging Unit as the procedure requires radiology facilities and appropriate room screening etc.

## 601824 270 .5.25 MANAGEMENT OF BRONCHOSCOPIES

Patients having bronchoscopy for sputum induction to determine their TB status should be managed both pre and post-procedure in an isolation room with appropriate negative pressure air-conditioning.

It is preferred that the Procedure Room itself have "negative pressure exhaust ventilation or high efficiency particulate air filtration." (HEPA filter) Refer to "Fibre-optic bronchoscopy in adults: a position paper", The Thoracic Society of Australia and New Zealand, R Wood-Baker, J Burdon, A McGregor, P Robinson and P Seal, Internal Medicine Journal 2001; 31: 479-487, http://www.thoracic.org.au

This paper provides excellent guidelines as to requirements for bronchoscopic work.

## 601825 270 .5.30 MANAGEMENT OF CHILDREN/YOUNG PEOPLE

Age range may be from 0 to 18 years. If children / young people must be





cared for in an adult unit, there must be a specific area for them and their parents/carers, and separate sessions and/or facilities should be provided including a separate small waiting area for smaller children and parents and a few beds in Recovery designed so that they can be screened during paediatric sessions with facilities and privacy for breast feeding.

The environment must be childsafe and child-friendly. Suitable equipment, toys, games and a play area should be provided to reduce anxiety and speed recovery. Parents / carers should have access to a telephone and utilities to help them in caring for their child.

Appropriate equipment and environmental controls will be required. For details, refer to Section 13 - Paediatric Services in "Standards for Endoscopic Services and Facilities".

Transfer to the procedure / operating room will depend on the age but may be carried, walking, trolley, tricycle / small car. Storage will need to be provided for special child-friendly transfer items.

There must be contingencies for unexpected requirement for paediatric admission in accordance with NSW Health Guidelines on Hospitalisation of Children.

#### 601826 270 .5.35 MANAGEMENT OF EMERGENCIES

Policies will need to be in place to handle two types of emergency:

Medical emergencies occurring to patient whilst in the Unit requiring access to resuscitation equipment and ongoing care and possible admission to an inpatient bed.

Emergencies occurring outside the Unit requiring immediate access to the Unit for a procedure e.g. bleeding varices. Such an emergency requires access for a bed or trolley, a direct path to the Procedure Room and emergency endoscopy equipment, particularly after hours.

#### 601827 270 .5.40 PATIENT PROPERTY

The method of receiving, recording, holding and return of patient's clothing, effects and valuables must be determined.

#### 601828 270 .5.45 PATIENT WAITING

The design should separate patients awaiting their procedure from those awaiting discharge. Waiting patients, particularly children, should not be exposed to frightening and distasteful sights and noises and distractions should be provided in the form of music, television, magazines and toys for children.

## 601829 270 .5.50 RADIOLOGY REQUIREMENTS

The following is an edited extract from "Standards for Endoscopic Facilities and Services:

"X-ray equipment must conform to the appropriate Australian Standard. Either fixed or mobile units that are suitable for fluoroscopy should be available in a radiation protected procedure room. ... X-ray apparel (such as gowns and thyroid protectors) and radiation monitoring devices must be worn by staff during screening. ... Storage of lead apparel must be





appropriate i.e. hangers for gowns to prevent cracking of lead.

Where ERCP and associated pancreatico-biliary therapeutic procedures are to be undertaken, the x-ray equipment must be of a more sophisticated level. The equipment must be able to produce high definition images and there must be a facility for image storage, either as hard copy or video.

Appropriate radiation protection of rooms and doors in which x-ray equipment is used is necessary. "X-ray in use" signs should be in place to alert staff outside of rooms of radiation danger."

## 601830 270 .5.55 STORAGE

Storage Bays should be provided for equipment such as portable x-ray equipment, patient trolleys, warming devices, auxiliary lamps etc.

Equipment Bays should be provided at the minimum rate of 5m2 per procedure room with a minimum depth of 0.8 m (1m preferred). These areas should not impede on corridors or disrupt traffic. This can be satisfied by recessing the Bay into the corridor walls or adding the minimum equipment bay width to the corridor width.

#### 601831 270 .5.60 STAFFING

An office will be required for the Unit Manager and CNC and any other staff permanently based in the Unit. In addition there will need to be write-up workstations for visiting medical and nursing staff.

Provision of offices for the medical staff will depend on whether or not the Unit itself is dedicated to a single specialty to form e.g. an integrated Gastroenterology Unit located elsewhere in the hospital.

Refer to PD2005\_576 Office Accommodation Policy - Public Health Organisations and Ambulance Service, NSW Health, April 2005.

## Operational Models

## 601832 270 .6.00 OPTIONS

The Day Surgery 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 Gastroenterology Department or Respiratory Medicine Department;
- incorporated into the Operating Unit with which it will share facilities.

#### 601833 270 .6.05

If free-standing, the Day Surgery / Procedure Unit must be located in a community which has a large enough population to support it and is not already serviced by similar health care facilities. An acute bed hospital should be within a reasonable distance (less than one hour drive) of the centre for transfer of patients in cases of emergency.

The most efficient hospital-based day surgery services are provided by dedicated units which are functionally separate from the inpatient sections of the hospital.

601834 270 .6.10 DESIGN





Paramount in its design is a patient flow pattern that ensures maximum efficiency from admission to pre-op area to operating rooms to recovery and finally discharge, and the flow path should be unidirectional.

#### **Functional Areas**

#### 601835 270 .7.00 FUNCTIONAL ZONES

The Day Surgery / Procedure Unit comprises the following Functional Zones:

- Reception / Administration;
- Perioperative Area (unless separate Extended Care Unit established);
- Procedural Area;
- Recovery Area;
- Extended Recovery;
- Staff Areas:
- Day Medical Unit (if collocated).

#### 601836 270 .7.05 RECEPTION / ADMINISTRATION

Provides for 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 (eg files management, clerical admissions/discharges, statistics compilation, typing). Areas may include:

- Reception Desk;
- Administrative Office/s and support including the office for the Unit Manager;
- Consult / Exam / Interview rooms (for consents etc);
- Public Waiting:
- Public Amenities including accessible toilet for people with disabilities.

### 601837 270 .7.10 PRE-PROCEDURE PREPARATION AND HOLDING AREA

Facilities comprise:

- Patient Amenities toilets, showers, lockers and change rooms;
- Examination room with en suite and discreet small sub-waiting area (for completion of bowel preparations for colonoscopies);
- Changed Waiting chairs and trolleys 3 places per room;
- Staff base and medications cupboard/safe;
- Access to Dirty Utility (depending on size and layout, may be able to share with Recovery).

## 601838 270 .7.15 PROCEDURAL AREA

The number and mix of Procedure / Operating Rooms should be as determined by the Service Plan and the range of procedures to be undertaken.

Room configuration will vary dependent upon:

- whether for endoscopy or general surgery;
- the use of video equipment;
- electrosurgical laser treatment;
- multiple scope activity;
- multiple observers;
- the use of x-ray (image intensifying).

Ideally all rooms will be of the same size for flexibility and Endoscopy Room/s should be fitted out as for an Operating Room (refer Standard Components) with regard to GA capability.





A scrub basin should be provided outside the entrance to the Procedure Rooms.

Direct access to the Scope Cleaning Room is recommended from nominated Endoscopy Room/s.

#### 601839 270 .7.20 PROCEDURE SUPPORT AREAS

#### Facilities include:

- Induction Rooms / Bays (may be optional);
- Endoscope Reprocessing Room;
- Clean-up Room (for Operating Rooms);
- Scrub Bay/s;
- Equipment Store / Bays;
- Linen Trolley Bays.

## 601840 270 .7.25 RECOVERY AREAS

In larger facilities it is preferable to have a three recovery areas - Stage 1, Stage 2A and Stage 2B (Discharge Lounge). Smaller units may combine Stage 1 and Stage 2A.

If paediatric services are provided, the Recovery Room should cater to the needs of parents/attendants.

Given the rapid case turnaround, it is vital to recognise that an inadequate number of recovery places can cause OR lists to be stopped while the Recovery Room clears and does not allow any flexibility when clinical problems occur necessitating the patient staying for longer than usual for that procedure.

A negative pressure single room may need to be provided for patients undergoing bronchoscopy for TB diagnosis and single rooms can be useful for the care of children.

The Recovery Area is supported by:

- Staff Station (shared between 1st stage and Stage 2A recovery);
- Clean Utility;
- Dirty Utility;
- Resuscitation Trolley;
- Linen and equipment storage.

#### 601841 270 .7.30 RECOVERY - STAGE 1

Stage 1 Recovery accommodates unconscious patients who require constant observation and monitoring with, ideally one-to-one patient nurse ratio.

The Australian Day Surgery Council recommends four trolley spaces (each space 9 square metres) for every operating / procedure room with a minimum of 2.5 metre central corridor between facing bays to facilitate the movement and manipulation of trolleys.

#### 601842 270 .7.35 RECOVERY - STAGE 2A

Stage 2A Recovery Room accommodates:

- patients who have regained consciousness after anaesthesia but require further observation;
- patients who have undergone procedures with local anaesthetic who may





"bypass" 1st stage recovery.

A minimum of three recliner chairs/trolleys for each Operating / Procedure room, in addition to the 1st stage recovery bay requirement, is considered appropriate.

#### 601843 270 .7.40 STAGE 2B RECOVERY (DISCHARGE LOUNGE)

The discharge lounge must have large comfortable chairs with adequate space between them for small tables. There should be a minimum of three chairs for each procedure room with low level partitions to separate male and female patients.

Centres which have a high volume of more rapid turn over patients with shorter first stage recovery e.g. endoscopy, cystoscopy, ophthalmology, plastic surgery, will require larger discharge lounges with more chairs to avoid overcrowding.

Centres which treat paediatric patients should provide a separate section in the discharge area designed specifically for the recovery of children.

Refreshment facilities must be available.

Access to a small interview room for confidential follow-up discussions and instructions.

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

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

## 601844 270 .7.45 EXTENDED (23 HOUR) CARE UNIT

It must be noted that NSW Health is moving away from the terminology "23 hour care" to "extended care".

The following is an extract from "Surgical Services - 23 hour care units - Toolkit for implementation":

"23 Hour Care Units are based on the premise that the majority of surgical care can be administered within a 24-hour period in a non-ward environment. Patients can be admitted, prepared for the surgical procedure, then monitored and provided with appropriate pain relief post-surgery before protocol based discharge occurs within 24 hours."

Establishment of an Extended Care Unit in a facility will have a major impact on the facility requirements of a DPU and also on its location. If, as is the intention, the Extended Care Unit assumes the preoperative management of patients and the 3rd stage/discharge process, a stand-alone DPU may not be a viable proposition and it may be more appropriate to either collocate the Procedure Rooms with the Extended Care Unit or within the envelope of the Operating Suite.

Depending on its location relative to the main Operating Suite, it must be noted that the Extended Care Unit may also handle the pre-operative management of Day of Surgery Admissions in order to obviate the need for duplicated pre-operative facilities in the main Operating Suite.

It is emphasised that these extended recovery units should be of hotel type and do not require the sophisticated and expensive acute hospital wards/rooms, with inbuilt resuscitation and related equipment. The capital and running costs of these units would therefore be considerably less than





acute bed hospital accommodation.

#### 601845 270 .7.50 STAFF AREAS

- Male/Female Change Rooms;
- Staff Room;
- Meeting / Tutorial Room;
- Offices as required according to the Staff Establishment.

## **Functional Relationships**

#### 601846 270 .8.00 EXTERNAL

- Acute Hospital, if free-standing;
- Operating Suite:
- Extended Care Unit if not integrated with procedure rooms;
- Pre-Admission Clinic;
- To a lesser degree, the Emergency Department;
- Transit Lounge.

#### 601847 270 .8.05 INTERNAL

Key issues to be managed include:

- separation of clean and dirty traffic flows;
- logical orderly patient flow from arrival at Reception, through Pre Operative Holding, Procedure Rooms and Recovery back to either the Peri-Operative Unit, Inpatient Unit, Extended Care Unit or discharge to home;
- the ability of staff to monitor the condition and safety of patients at all times;
- the efficient management of the Unit, in particular ensuring the design does not result in additional staffing costs.

## **DESIGN**

## Accessibility

#### 601848 270 .9.00

## INTERNAL

The general staff of the hospital and visitors should only be able to access the Unit as far as the Reception / Entry area. Only authorised staff and visitors should be able to enter the Unit beyond this point.

Discreet access is required for inpatients on beds or trolleys.

The number of doors on the perimeter of the Unit should be limited to an absolute minimum particularly those to/from the hospital corridor. Such doors and their fittings should be compatible with the hospital's fire safety and security systems.

The majority of patients will be day stay but the unit will need to be designed for access and management of inpatients both elective and emergency. If a free-standing unit, there must be policies and procedures in place for transfer of patients to a nearby acute hospital in an emergency.

## 601849 270 .9.05 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 area adjacent to the main entrance to the





facility;

- clearly signposted directions to the area;
- provision of car parking for visitors to the area within easy access of the main entrance to the facility.

Ambulance access also needs to be considered.

## **Parking**

601850 270 .10.00

Consideration should be given to accessible drop-off and parking for people with disabilities and ambulance parking.

For staff parking, refer to Part C Clause 790 of these Guidelines for further information.

## **Disaster Planning**

601851 270 .11.00

The role of the Day Surgery / Procedure Unit within the context of the health care facility's disaster plan should be defined early in the planning process.

Refer to Part B Clause 80 and Part C of these Guidelines for further information.

#### Infection Control

601852 270 .12.00

The infectious status of many patients admitted to the Unit may be unknown. All body fluids should be treated as potentially infectious and adequate precautions should be taken.

Refer to "Infection Control in Endoscopy", 2nd Edition, Gastroenterological Society of Australia and to Part D of these Guidelines for further information.

Refer to NSW Health - Infection Control Policy, PD2007\_036.

Also refer to Part D of these Guidelines - Infection Prevention and Control.

## **Environmental Considerations**

601853 270 .13.00 ACOUSTICS

The ambient noise level should not exceed the recommendations of AS/NZS 2107 - Acoustics - Recommended design sound levels and reverberation times for building interiors.

Of particular consideration are consulting / interview rooms where privacy is critical.

#### 601854 270 .13.05 NATURAL LIGHT AND EXTERNAL VIEWS

As far as practicable the design of the unit should incorporate external views and natural light. This is especially so in the case of rooms such as the Waiting Area, Pre-Operative Holding Area, Recovery and the Staff Lounge.

It would also be advantageous if external views and natural light could be incorporated in areas where staff, by the nature of their work, are confined to one location e.g. Reception / Entry Area.

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





Sun penetration should be controlled to exclude glare and heat gain or loss

If daylight does enter the Procedure Rooms then consideration may have to be given to the provision of black out facilities when procedures require a controlled level of lighting.

#### 601855 270 .13.10 INTERIOR DESIGN

Interior design should be soothing and non-threatening.

## Space Standards and Components

#### 601856 270 .14.00 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.

Refer Part C Section 730 of these Guidelines for information.

#### 601857 270 .14.05 ACCESS AND MOBILITY

Refer to:

AS1428 - Design for Access and Mobility (set)

Part C Section 730 of these Guidelines for information.

### 601858 270 .14.10 BUILDING ELEMENTS

Building elements include:

- corridors:
- ramps:
- ceiling heights;
- doors;
- observation glass;
- windows.

Refer Part C Section 710 of these Guidelines for details.

## Safety and Security

## 601859 270.15.00 SAFETY

Employers and employees have a statutory obligation to ensure the health, safety and welfare at work of all users of the Unit - staff, patients and visitors.

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 radioactive materials;
- exposure to anaesthetic gases;
- exposure to decontamination agents, particularly glutaraldehyde;
- injury from machines;
- injuries related to manual handling;
- fire safety including fire doors and adequate egress should be addressed.





#### 601860 270 .15.05 SECURITY

Security should address:

- access control;
- staff and patient security;
- drug security;
- personal property security;
- equipment security.

In NSW, refer to "Protecting People/Property: NSW Health Policy/Guidelines for Security Risk Management in Health Facilities", PD2005\_339, January 2005.

## **Finishes**

#### 601861 270 .16.00 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 Part C of these Guidelines for further information.

#### 601862 270 .16.05 WALL FINISHES AND PROTECTION

Wall surfaces are subject to the cleaning protocols documented in the Operational Policy for the Day Procedures Unit.

Ceramic tiles are not recommended as a wall finish due to their potential to compromise infection control. These tiles are also susceptible to damage from trolleys and if cracked or broken individual tiles may be difficult to replace.

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

Refer to Part C of these Guidelines.

#### 601863 270 .16.10 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 Room, the colour should be such that there is sufficient contrast to find small dropped items.

Non-slip sheet vinyl with welded joints and coved skirtings is considered appropriate throughout the Unit.

Some substances heavily stain sheet vinyl. This should be considered when choosing a colour and pattern for the floor material.

Carpet may be used in the non-clinical areas. A short dense pile is recommended.





## 601864 270 .16.15 CEILING FINISHES

Ceilings will be subjected to the cleaning protocols documented in the Operational Policy for the Unit.

## Fixtures, Fittings & Equipment

#### 601865 270 .17.00 DEFINITION

Within the context of the Health Facility Guidelines and the Room Data and Room Layout Sheets in the associated Health Facility Briefing System (HFBS), Fixtures and Fittings can be described as follows:

Fixtures: Refers to fixed items that require service connection (eg electrical, hydraulic, mechanical) and includes basins, light fittings, clocks, medical service panels etc (but excluding services equipment such as theatre pendants).

Fittings: Refers to fixed items attached to walls, floors or ceilings that do not require service connections such as curtain and IV tracks, hooks, mirrors, blinds, joinery, pin boards etc.

Also refer to Part C of these Guidelines and to the Room Data Sheets (RDS) and Room Layout Sheets (RLS) for further detailed information.

## **Building Service Requirements**

#### 601866 270 .18.00 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.

Services and systems will/may include:

- communication and data systems such as telephones, email and internet and telemetry;
- mechanical air-conditioning and humidity control;
- light and power:
- patient monitoring systems;
- bar code readers;
- thermostatic mixing valves;
- fume extraction where glutaraldehyde is used.

These are described in more detail in both Room Data and Room Layout Sheets.

## 601867 270 .18.05 WATER QUALITY

Sterile water is required for all rinsing of scopes.

## 601868 270 .18.10 NURSE CALL SYSTEMS

Emergency call in all holding area, all procedure rooms and in Recovery.

Patient / nurse call at all recovery beds and in the pre-procedure holding area.

601869 270 .18.15 MEDICAL GASES





Oxygen, suction, scavenging, medical air and nitrous oxide will be provided in all Procedure Rooms.

Oxygen and suction will be required to all bays in 1st stage Recovery and shared between trolley bays in 2nd stage recovery.

Compressed air (for cleaning and drying) in the Reprocessing Area.

In rural and remote units, gas cylinders may be required if gases cannot be piped.

#### 601870 270 .18.20 RADIATION SHIELDING

Radiation shielding to recommended safety standards will be required in all procedure rooms where imaging will occur.

## **COMPONENTS OF THE UNIT**

#### General

601871 270 .19.00 Rooms/spaces are defined as "Standard" and "Non Standard" Components.

Standard Components (SC) refer to rooms/spaces for which room data sheets, room layout sheets (drawings) and textual description have been developed. Their availability is indicated by "Yes" in the SC column of the Schedule of Accommodation.

Refer to Part B, Section 90 of the Guidelines for the text and to separately itemised Room Data and Room Layout Sheets www.healthfacilityguidelines.com.au

Non-Standard Components are generally very unit-specific and are described below.

## Non-Standard Components

## 601872 270 .20.00 ENDOSCOPE REPROCESSING ROOM

#### **DESCRIPTION AND FUNCTION**

Dedicated room for cleaning and disinfecting endoscopes and accessories.

The room should be divided into 3 "zones"

#### **CLEANING ZONE**

"Dirty" bench with sink of a material impervious to solution. Large enough to adequately hold a coiled full length colonoscope. Hot & cold water and compressed air outlet. Adequate bench space for holding equipment awaiting chemical disinfection.

#### **DISINFECTION ZONE**

Rinsing may be automatic or manual. Digital timers. Automated Flexible Endoscope Reprocessors (AFERs) or manual disinfectant sink or container for soaking plus rinsing sink contained within a fume extraction cabinet & timers. Purge with compressed air. Specially designed container plus rinsing sink placed in a fume cabinet. An ultrasound tank will be required for accessories and small items. Cleaned scopes must be rinsed with sterile water. An area contiguous with the disinfection zone should be provided for drying the rinsed scopes.

**CLEAN ZONE** 





Clean assembly bench and endoscope storage cupboard.

#### LOCATION AND RELATIONSHIPS

Direct access from the Endoscopy Room/s.

#### **CONSIDERATIONS**

- handbasin;
- storage for personal protective clothing;
- waste disposal.

## **APPENDICES**

## Schedule of Accommodation

601873 270 .21.00

A Schedule of Accommodation follows and assumes a 2 room and a 4 room suite that may incorporate day surgery. The schedule will need to be amended in accordance with the requirements of the Service Plan.

Provision of Offices, Workstations and support areas will be dependant on the Operational Policy and service demand and may vary from the Schedule of Accommodation.

Standard Component - Refer to Part B & RDS/RLS.

601874 270 .21.05 DAY SURGERY / PROCEDURES UNIT - Entry / Waiting / Reception / Administration

ROOM/SPACE	Standard		Oty x	,	Remarks
	Component	Are	ea sqm	Area sqm	
		21	rooms	4 rooms	
RELATIVE/PATIENT WAITING	yes	1	x 10	1 x 15	8 and 12 seats respectively
TOILET - PUBLIC	yes	1	1 x 3	1 x 3	
TOILET - ACCESS	yes	1	1 x 5		Add baby change table as necessary. Refer to AS 1428.
RECEPTION	yes	1	x 10	1 x 10	1 - 2 staff
CLERICAL WORKROOM		1	1 x 9	1 x 12	1 and 2 staff respectively
STORE - PHOTOCOPY/STATIONERY	yes	1	1 x 8	1 x 8	Include stationery recycle bin
STORE - FILES		1	1 x 4	1 x 6	
OFFICE - UNIT MANAGER	yes	1	1 x 9	1 x 9	
OFFICE - DPU CNS	yes		0	1 x 9	
OFFICE - SHARED (MEDICAL AND NURSING WRITE-UP ROOM)	yes	1	x 12		2 and 4 workstations for visiting staff attending unit for sessions
MEETING/EDUCATION/GROUP ROOM	yes	1	x 12	1 x 15	Patients & Staff

601875 270 .21.10 DAY SURGERY / PROCEDURES UNIT - Patient Exam / Prep / Waiting

ROOM/SPACE Standard Qty x Qty x Remarks





Part B - Health Facility Briefing and Planning
Component Area Area sqm | Area sqm 2 rooms 4 rooms yes CONSULT/EXAM/INTERVIEW 2 x 12 May also be used for medical student training 1 x 12 SUB-WAITING (ENDOSCOPY) 1 x 2 For bowel preps 1 x 4 PREP ROOM (GASTRO) 1 x 9 1 x 9 Bowel Preps TOILET - ENSUITE (TO PREP 1 x 4 1 x 4 yes ROOM) PATIENT CHANGE/LOCKERS -1 x 10 1 x 10 2 cubicles, handbasin, 4 banks lockers FEMALE PATIENT CHANGE/LOCKERS -1 x 10 1 x 10 2 cubicles, handbasin, 4 banks lockers MALE PATIENT TOILET 1 x 4 2 x 4 yes **ACCESS** 1 x 7 1 x 7 yes TOILET/SHOWER/CHANGE LINEN TROLLEY BAY 1 x 2 1 x 2 Gowns etc yes "CHANGED" WAITING - CHAIRS "CHANGED" WAITING - TROLLEY 1 x 6 2 x 6 BAY STAFF BASE 1 x 8 To oversight changed waiting 1 x 6

## 601876 270 .21.15 DAY SURGERY / PROCEDURES UNIT - Procedure Unit

ROOM/SPACE	Standard Component		Qty x Area sqm	Oty x Area sqm	Remarks
			2 rooms	4 rooms	
PROCEDURE ROOM	yes		2 x 42	4 x 42	Able to rotate bed through 360 degrees
SCOPE REPROCESSING			1 x 12	1 x 16	If possible, direct access from Endoscopy Rooms
ENDOSCOPE STORE			1 x 2	1 x 2	Special cupboards
SCRUB BAY	yes		1 x 6	2 x 6	Shared between rooms
GENERAL CLEAN-UP ROOM	yes		0	1 x 7	Optional for surgical instruments processing
BAY - MOBILE EQUIPMENT	yes		2 x 2	4 x 2	X-ray units etc
BAY - LINEN	yes		1 x 2	1 x 2	

## 601877 270 .21.20 DAY SURGERY / PROCEDURES UNIT - Recovery

ROOM/SPACE	Standard Component		Qty x Area sqm	Qty x Area sqm	Remarks
			10 Bays	20 Bays	
STAFF STATION			1 x 9	1 x 9	
CLEAN UTILITY	yes		1 x 9	1 x 12	
DIRTY UTILITY / DISPOSAL ROOM	yes		1 x 12	1 x 14	





lity Briefing and Planning RESUSCITATION TROLLEY BAY yes 1 x 2 1 x 2 LINEN TROLLEY BAY Add 1 sqm if blanket warmer included 1 x 2 1 x 2 yes SINGLE RECOVERY ROOM Children; Neg/neutral air-conditioning for patients 1 x 12 2 x 12 yes post-bronchoscopy **BAY - TROLLEY - 1ST STAGE** 7 x 9 14 x 9 yes BAY - TROLLEY/CHAIR - 2ND 6 x 9 12 x 9 yes STAGE **BEVERAGE BAY** 1 x 3 1 x 3 yes DISCHARGE LOUNGE (3RD 1 x 18 1 x 36 6 and 12 chairs respectively at 3sqm per chair STAGE RECOVERY) INTERVIEW ROOM yes 1 x 9 1 x 9 **EQUIPMENT STORE** yes 1 x 12 1 x 16 With power points for recharging pumps etc

#### 601878 270 .21.25 DAY SURGERY / PROCEDURES UNIT - Staff Amenities

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ROOM/SPACE	Standard Component		Qty x Area sqm	· ·	Remarks
STAFF LOUNGE/BEVERAGE	yes		1 x 12	1 x 15	
STAFF TOILET/LOCKERS: MALE	yes		1 x 10	1 x 10	Full lockers - adjust mix as required
STAFF TOILET/LOCKERS: FEMALE	yes		1 x 10	1 x 14	Full lockers - adjust mix as required
STAFF SHOWER	yes		1 x 3	1 x 3	
CLEANER'S ROOM	yes		1 x 5	1 x 5	

## **Functional Relationships**

601879 270 .22.00 A diagram showing key functional relationships is attached.

## Checklists

601880 270 .23.00 For planning checklists, refer to Parts A, B, C and D of these Guidelines.

## References and Further Reading

601881 270 .24.00

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http://conjoint.gesa.org.au/document/Infection%20Control%20in%20Endoscopy%202nd%20Edition%20Final.pdf

Surgical Services - 23 hour care units - Toolkit for implementation in NSW Health facilities.

Standards for Endoscopic Facilities and Services, Gastroenterological Society of Australia and Gastroenterological Nurses Society of Australia, February 1998.





DISCOUNTED CIRCULATION %

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http://www.gesa.org.au/members\_guidelines/endoscopy\_ps/endoscopy\_stan dards.pdf

Minimal Staffing Requirements for Endoscopy Procedures-Position Statement, Gastroenterological Nurses College of Australia Inc. http://www.genca.org/html/s02\_article/article\_view.asp?id=140&nav\_cat\_id=1 31&nav\_top\_id=56&dsa=42

Best Practice Guidelines for Ambulatory Surgery and Procedures. Australian Day Surgery Nurses Association, 2005.

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601883 270 .24.10

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## FUNCTIONAL RELATIONSHIP DIAGRAM - DAY SURGERY / PROCEDURE UNIT

The following diagram sets out the relationships between zones in a Day Surgery / Procedure Unit.





