

# Perioperative Services

## Module overview

Please note: This module must be read in conjunction with the Fundamentals of the Framework (including the glossary and acronym list), the Anaesthetic Services module and the Surgical Services module.

This module applies to adult and/or children's perioperative services and is primarily focused on the provision of elective surgery. The module encompasses the care of patients preparing for, undergoing and recuperating from surgery. The knowledge distinct to this field includes:

- operative risk and complications
- patient-specific risks
- methods to reduce risk
- the management of medical comorbidities.

Children have specific needs in health services—please refer to the relevant children's services modules.

Sterilising services form an integral part of perioperative services, as transmission of infection is a potential risk for a patient's health outcome. Operating suite services must have direct links to sterilising services on-site or access to off-site sterilising services. Where these units are on-site, it is preferable that they are collocated to assist in the transfer of equipment and instruments. Where sterilising services are off-site, the transfer and transportation of sterile equipment and trays between facilities must be supported by documented processes.

Facilities providing sterilising services must be compliant with AS/NZ 4187 and must have adequate sterile instrumentation, equipment and stock to enable the effective functioning of perioperative services and negate the use of 'flash' sterilising. Where sterile equipment or products are required, these may be disposable (i.e. 'single use only' items). Standards, policies and processes for the cleaning and sterilising of reusable medical and surgical instruments and equipment<sup>1</sup> are essential.

The main factor affecting perioperative service levels is the interaction between anaesthetic risk (i.e. physical status of the patient) and procedural/surgical complexity. Patients undergoing surgery/procedures require general or local anaesthesia and/or major regional anaesthesia/analgesia or sedation (including conscious sedation) for procedures of wide-ranging surgical complexity. The characteristics pertaining to surgical complexity are outlined in Table 1.

*Table 1: Surgical complexity characteristics*

Complexity	Characteristics
Surgical complexity I (SCI) (e.g. local anaesthetic for removal of lesions)	This level of surgical complexity: <ul style="list-style-type: none"> <li>• is an ambulatory/office surgery procedure</li> <li>• requires local anaesthetic, but not sedation</li> <li>• requires a procedure room, aseptic technique and sterile instruments, but not an operating theatre</li> <li>• requires access to resuscitation equipment (including oxygen) and a means of delivery</li> <li>• requires an area where patients can sit, but not a recovery room</li> <li>• generally does not require post-operative stay or treatment</li> </ul>

Complexity	Characteristics
	<ul style="list-style-type: none"> <li>does not require support services other than suture removal or a post-operative check.</li> </ul>
Day surgery for SCI	When this definition is applied to patients having day surgery (i.e. those admitted and discharged on the same day), refer to Section 3, Day Surgery Services of this module.
Surgical complexity II (SCII) (e.g. local anaesthetic and/or sedation for excision of lesions)	<p>This level of surgical complexity:</p> <ul style="list-style-type: none"> <li>is usually an ambulatory, day-stay or emergency department procedure</li> <li>requires local anaesthesia or peripheral nerve block and possibly some level of sedation, but not general anaesthesia</li> <li>requires at least one operating room or procedure room, and a separate recovery area.</li> </ul>
Day surgery for SCII	When this definition applies to patients having day surgery, refer to Section 3, Day Surgery Services of this module.
Surgical complexity III (SCIII) (e.g. general anaesthesia for inguinal hernia)	<p>This level of surgical complexity:</p> <ul style="list-style-type: none"> <li>usually requires general anaesthesia and/or a regional, epidural or spinal block</li> <li>requires at least one operating room and a separate recovery room</li> <li>may be a day-stay/overnight case or extended stay case</li> <li>may have access to close observation care area/s.</li> </ul>
Day surgery for SCIII	When this definition is applied to patients having day surgery, refer to Section 3, Day Surgery Services of this module. Freestanding day hospitals require at least one operating room and a separate recovery room when performing SCIII procedures. Freestanding day hospitals may not provide extended stay cases.
Surgical complexity IV (SCIV) (e.g. general anaesthesia for abdominal surgery such as laparotomy)	<p>This level of surgical complexity:</p> <ul style="list-style-type: none"> <li>involves major surgical procedures with low to medium anaesthetic risk</li> <li>usually requires general anaesthesia, and/or a regional, epidural or spinal block</li> <li>has potential for perioperative complications</li> <li>has close observation care area/s</li> <li>has access to intensive care services</li> <li>may have capacity to provide emergency procedures.</li> </ul>
Surgical complexity V (SCV) (e.g. general anaesthesia for any major or complex surgery)	<p>This level of surgical complexity:</p> <ul style="list-style-type: none"> <li>includes major surgical procedures with high anaesthetic risk</li> <li>includes surgery and anaesthetic risk with the highest potential for intra- and post-operative complications</li> <li>provides the most complex surgical services</li> <li>requires specialist clinical staff, equipment and infrastructure</li> <li>has on-site intensive care services</li> <li>may have extensive support services available.</li> </ul>

Note to table: Developed by the CSCF Surgical, Perioperative and Anaesthetic Services Advisory Groups (acknowledging the gap in surgical descriptors between intermediate and complex within the CSCF version 2.0 2005)

The Framework recognises five levels of complexity for perioperative services: Levels 2 to 6. Level 2 perioperative services can perform the removal of a lesion under local anaesthetic.

This does not limit the administration of local anaesthetic by registered medical specialists or nurse practitioners with relevant advanced training for individual cases. In addition, consultative services may be provided to/by a Level 2 service either on-site or off-site.

Consideration should be given to the complexity of each case. For example, a person presenting with several identified 'low risk' factors might be more accurately assessed as 'moderate risk' due to the complexity of their general health. It would be expected that as situational complexity increases, input from a higher level of service or the need to access a higher level service and/or other support services is required.

The Perioperative Services module contains five sections:

- Section 1: Operating Suite Services incorporating Sterilising Services (Levels 2 to 6)
- Section 2: Endoscopy Services (Levels 3 to 6)
- Section 3: Day Surgery Services (Levels 3 and 4)
- Section 4: Post-Anaesthetic Care Services (Levels 3 to 6, including Children's Post-Anaesthetic Care)
- Section 5: Acute Pain Services (Levels 5 and 6).

## Section 1 Operating Suite Services

### Section overview

Please note: This section must be read in conjunction with the module overview.

The operating suite provides the physical environment where diagnostic, therapeutic and surgical procedures are performed. The operating suite is a physically distinct and environmentally controlled unit comprising one or more operating rooms and/or procedure rooms, with provision for the delivery of anaesthesia and immediate post-operative recovery of patients.

Patient entry to the operating suite may be from a variety of locations; therefore, it is essential that perioperative services have close and direct documented processes with relevant services, which may include, but are not limited to:

- emergency
- intensive care
- medical imaging
- maternity
- pathology
- anaesthetic
- surgical
- sterilising services.

The operating suite may be:

- a dedicated unit within a facility
- collocated with a specialist clinical service within a facility (e.g. maternity services)
- a freestanding ambulatory surgical facility (refer to Section 3, Day Surgery Services of this module).

Set-up areas are essential to the effective functioning of an operating suite. They are defined as designated spaces where trolleys for each case are assembled (i.e. loaded with instruments and sterile supplies) prior to delivery to the operating/procedure room. Sterile stock remains unopened in this area. Policies and protocols should ensure that:

- sterility is monitored and maintained by staff at all times<sup>2</sup>
- flows between dirty and clean areas are directional (i.e. only one way)
- the roles of instrument and circulating personnel are clearly defined and include reference to the practice of setting up in that facility
- air conditioning and pressure standards for the area where set-up is being done are the same as in the operating room.

As perioperative services may be a key unit in the event of a disaster, there must be written policies and procedures in place to assist the staff if and when this situation arises. Provision for documented processes with local health facilities to assist in caring for emergency surgical patients should be considered. It is recommended that all perioperative services refer to the Australian College of Operating Room Nurses (ACORN) Standards for Perioperative Nursing: G2 Management of the Perioperative Environment, 2010 for specific considerations in the management of this service.<sup>3</sup>

Education regarding infection control practices must form part of staff orientation to perioperative services.<sup>4</sup> Policies must exist in relation to items including, but not limited to, standard precautions, the sterilisation and/or cleaning of instruments and equipment, the

cleaning and checking of all sterile equipment, and the wearing of personal protective equipment.<sup>5</sup>

Access to the operating suite must be controlled, limiting access to authorised staff only, to ensure the security of drugs and equipment, and as an infection control measure. The unit's design and processes should seek to prevent injury and reduce potential hazards, including:

- exposure to infectious substances, radioactive materials, anaesthetic gases, chemical agents and decontaminating agents
- injury from machines and lifting, and potentially from patients and other staff
- repetitive work activities
- heavy equipment movement
- exposure to 'sharps', and sharp instruments and equipment.

## Service requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific service requirements include:

- general surgical service requirements
- adherence to clearly documented, best-practice clinical guidelines and pathways for perioperative care, which are reviewed every 4 years
- documented processes with emergency services
- written policies, procedures and protocols for the whole episode of perioperative patient care (including emergency situations)
- the following services and systems:
  - medical gases and thermostatic mixing valves
  - communication and data systems, such as telephones, nurse call, emergency call, email and internet
  - mechanical air conditioning and humidity control
  - patient monitoring systems
  - sterilising facilities where those services are provided on-site
  - ice machine or immediate access to ice, blanket and fluid-warming cabinets
  - may include telemetry systems, barcode readers and vacuum tube for specimen transport to pathology
- may have involvement in the development of emergency surgical services, where applicable to that service.

## Workforce requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific workforce requirements include:

- a range of staff with different skills (including surgeons, anaesthetists, perioperative nurses, and a range of technicians and assistants) for technically complex surgery
- appropriately trained perioperative nurse managers (however titled) for management of perioperative services

- perioperative nurses and/or sterilising personnel (or equivalent) working in sterilising services must have knowledge and skills relating to the principles and practices of cleaning, checking, assembling, packing, disinfecting, sterilising, and storage and distribution of sterile and non-sterile supplies<sup>6</sup>
- the person in charge of sterilising services (who may be the manager of perioperative services or a clinical manager, however titled) has specific qualifications and/or appropriate experience in sterilising technology<sup>7</sup>
- at least one member of staff with formal sterilisation training from a registered training organisation rostered on each shift
- relevant nursing staff with evidence of ongoing clinical competency and experience appropriate to the service being provided
- relevant nursing staff have specific clinical competency in the role they regularly perform as per ACORN Competency Standards (e.g. role of the instrument nurse<sup>8</sup>)
- perioperative services staffed as per the ACORN Standard S19 Staffing requirements<sup>9,10</sup>
- other than medical staff, a minimum of three staff members allocated/rostered to the operating room: one registered nurse, one assistant to the anaesthetist (an anaesthetic technician, or a registered nurse or an enrolled nurse—refer to the Anaesthetic Services module) and one other staff member (a registered or enrolled nurse), trained and competent in the perioperative environment
- where dental procedures are undertaken, the dental nurse or technician accompanying the dentist may form part of the three-person operating room team (who must be trained in aseptic technique and surgical count, ensuring intended surgery and oriented to the operating room).

## Section 1

### Level 2 Operating Suite Service

#### Service description

A Level 2 service is provided in a hospital setting without defined perioperative services. This level of service operates on demand and manages low- to medium-risk patients through the provision of:

- surgical complexity I procedures, usually on the surface of the body, using only local anaesthetic
- procedures not involving the penetration of the internal body cavities via the epithelium (other than with a needle), with services provided by suitably qualified and trained registered medical practitioners or endorsed nurse practitioners
- services available fewer than 24 hours a day
- no elective anaesthetic or surgical services.

It may be necessary for registered medical practitioners (general practitioners) to provide services akin to anaesthesia as part of resuscitation at this level facility.

This level of service has at least one procedure room where minor, simplistic, diagnostic and therapeutic surgical procedures are undertaken. Most procedures are able to be performed in an ambulatory, day-stay or emergency setting.

#### Service requirements

As per section overview, plus:

- nursing services available on-site
- medical services provided on-site or in close enough proximity to provide rapid response times
- arrangements for the appropriate cleaning, disinfection and/or sterilisation of reusable medical and surgical instruments and equipment<sup>7</sup>
- members of the multidisciplinary team have experience, knowledge and skills in operating suite principles and practice
- awareness of surgical complexity and the combination of anaesthetic risk at the level of service.

#### Workforce requirements

As per section overview, plus:

##### Medical

- care coordinated by registered medical practitioners (general practitioners) with credentials in general surgery, and with a defined scope of practice and admitting rights
- registered medical practitioners may have rights to private practice

##### Nursing

- care predominantly delivered by registered nurses

- a senior registered nurse in charge of each shift
- adequate nursing staff to support the registered nurse in charge
- evidence of ongoing clinical competency (including annual competency skills testing for a limited range of skills)
- may have nurse practitioners with relevant advanced training

### Other

- may have trained staff to assist in positioning the patient.

## Support service requirements

A Level 2 service requires:

Service	On-site	Accessible
medical imaging		2
medication		2
pathology		2

## Section 1

### Level 3 Operating Suite Service

#### Service description

A Level 3 service is predominantly provided in a hospital setting with limited but designated surgical, anaesthetic and sterilising services.

This level of service manages:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to medium anaesthetic risk
- surgical complexity IV procedures with low to medium anaesthetic risk
- all types of general anaesthetics, sedation, and neuraxial, regional, epidural and spinal blocks.

Where these procedures are performed, the surgery is performed by a:

- registered medical practitioner (general practitioner) with credentials in general surgery
- registered medical practitioner undertaking training in surgery, who may provide surgery under supervision
- registered medical specialist with credentials in surgery, who may provide services for elective surgery.

#### Service requirements

As per Level 2, plus:

- on-site close observation care area/s for surgical complexity IV procedures
- access to intensive care services
- at least one operating room
- elective surgical services provided during business hours for regularly scheduled lists
- an appropriate cleaning and/or sterilisation service for reusable medical and surgical instruments and equipment, or a policy pertaining to the use of pre-packaged and sterile set-ups, or a documented process with an external supplier for sterilisation services
- members of the multidisciplinary team have experience, knowledge and skills in operating suite principles and practice
- a manual method of batch tracking of instrumentation and sterile items as a minimum requirement, though may have the capacity to track reprocessed sterile items electronically
- may provide services on Saturdays and/or after hours by prearrangement
- may provide electroconvulsive therapy where the facility is authorised under the *Mental Health Act 2000*
- emergency surgical services may be available
- may have an additional procedure room.

## Workforce requirements

As per Level 2, plus:

- for all lists, one registered nurse, one assistant to the anaesthetist—either a nurse or technician—and one other registered or enrolled nurse
- a minimum of three clinical staff members<sup>9</sup> in addition to medical staff allocated to each operating room
- in remote, rural or regional settings, use of anaesthetic technicians to be balanced with the need for multiskilling of nursing staff in the operating suite, and nursing staff numbers evaluated to ensure that adequate numbers of perioperative-trained staff are present at all times<sup>9</sup>
- staff trained in manual handling (including the use of positioning and lifting devices for bariatric patients where such patients are admitted)
- access to trained technical assistants to manage safe functioning and servicing of all equipment

### Medical

- a registered medical practitioner available 24 hours
- may have a registered medical specialist with credentials in surgery visiting for elective sessions

### Nursing

- a nurse manager (however titled)
- a nurse manager/nursing staff (however titled) in charge of sterilising services who may be the manager of perioperative services
- nursing staff available on-site during hours of operation and available after hours, if required
- registered nurses utilised as surgical assistants performing only that role and not the duties of an instrument nurse
- an infection control coordinator.

## Support service requirements

A Level 3 service requires:

Service	On-site	Accessible
anaesthetic	3	
intensive care		4
medical imaging		3
medication		3
nuclear medicine		4
pathology		3

## Section 1

### Level 4 Operating Suite Service

#### Service description

A Level 4 service manages:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to high anaesthetic risk
- surgical complexity IV procedures with low to medium anaesthetic risk
- surgical complexity V procedures with low anaesthetic risk.

A Level 4 operating suite service must be part of a service network with higher level services, ensuring access to information related to the latest evidence-based care and treatments.

#### Service requirements

As per Level 3, plus:

- on-site Level 4 intensive care services
- access to close observation care area/s
- clinical services provided 24 hours
- sterilising services provided on-site, with this level of service having the capacity to sterilise heat-sensitive equipment
- members of the multidisciplinary team have demonstrated experience, knowledge and skills in the delivery of operating suite services
- access—24 hours—to an image intensifier in the operating suites
- may provide a day surgery operating room and separate endoscopy area (refer to Section 2, Endoscopy Services and Section 3, Day Surgery Services of this module)
- may provide sterilising services during the day up to 7 days a week
- may provide interventional services
- may provide outreach services
- may provide a range of specialist outpatient/specialist clinics
- may provide limited outreach for low- to medium-risk anaesthetic services.

## Workforce requirements

As per Level 3, plus:

- medical services provided on-site or in close enough proximity to provide a rapid response to surgical emergencies
- sterilising staff not available after hours unless by prearrangement
- may have an elective surgery coordinator
- may have dedicated operating room staff available on-site 24 hours

### Medical

- a registered medical practitioner available 24 hours
- visiting registered medical specialists with credentials in surgical subspecialties consulting and/or operating
- access to registered medical specialists with credentials in general surgery
- registered medical practitioners (general practitioners) with credentials in general surgery and a defined scope of practice, who treat and manage surgical patients
- access to, and documented processes for referral arrangements with, a pathologist
- in situations where the registered medical practitioner/specialist is not a resident in the town or immediately accessible, arrangements in place for a designated local registered medical practitioner with surgical training to provide post-operative care, as required
- a registered medical specialist with credentials in general surgery may be available

### Nursing

- access to at least one registered nurse with training and experience in infection control
- a senior registered nurse in charge of each shift
- registered nurses who are employed as a surgeon's first assistant have evidence of formalised education and credentials from the facility
- registered nurses who may have relevant clinical experience commensurate with positions in perioperative specialities such as scrub, scout, anaesthetics, post-anaesthetic care, preadmission and sterilising services
- enrolled nurses with perioperative experience may be utilised in a variety of roles

### Other

- sterilising service assistants and technical aides appropriate to the service provided
- access to laboratory staff.

## Support service requirements

A Level 4 service requires:

Service	On-site	Accessible
anaesthetic	4	
intensive care	4	
medical imaging	4	
medication	3	
nuclear medicine		4
pathology		5

## Section 1

### Level 5 Operating Suite Service

#### Service description

A Level 5 service manages most levels of patient risk (low, medium and high) through the provision of short- to long-term or intermittent care. The service manages all but the most highly complex patients and procedures. This service may act as a referral service for all but the most complex service needs. Highly complex, high-risk patients may require transfer or referral to a Level 6 service.

Level 5 services provide anaesthesia and surgery for combinations of the following:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to high anaesthetic risk
- surgical complexity IV procedures with low to high anaesthetic risk
- surgical complexity V procedures with low to high anaesthetic risk.

The potential intra- and post-operative complications are increased for patients with comorbidities and a medium to high level of surgical complexity.

Sterilisation services at this level provide on-site cleaning, disinfecting and sterilisation of reusable medical and surgical instruments, and equipment. These sterilisation services may operate 7 days a week with varying hours of operation, depending on service needs.

#### Service requirements

As per Level 4, plus:

- on-site Level 5 intensive care services
- access to a paediatric intensive care unit (PICU) or neonatal intensive care unit (NICU) where the type of surgery necessitates
- at least one operating room and a designated post-anaesthetic recovery area
- nursing and medical services available on-site
- clinical services provided 24 hours with combinations of medical, nursing, allied health, administrative and other staff available 24 hours
- where emergency surgery or obstetric services are provided, access—24 hours—to an emergency operating theatre
- dedicated operating theatre staff available 24 hours where emergency procedures are performed
- care of surgical patients coordinated and prioritised
- members of the multidisciplinary team with demonstrated experience, and advanced knowledge and skills, in the delivery of operating suite services pertaining to the specialty/subspecialty area
- documented processes with emergency services
- may provide an extended-care area/second-stage recovery area
- may provide one or more dedicated endoscopy operating/procedure rooms and associated specialist cleaning areas, or these services may be provided within the normally scheduled lists

- may provide specialist ward areas (e.g. orthopaedics)
- may provide case management for patients requiring complex care
- may provide sterilisation services to lower level services.

## Workforce requirements

As per Level 4, plus:

- registered medical practitioners (registrars) supervised by a registered medical specialist with credentials in surgery in an accredited training facility<sup>11</sup> (where employed)
- registered medical practitioners directly supervised at all times by a registered medical specialist with credentials in surgery if undertaking training in surgery
- designated staff involved in loan equipment management, consumables, case preparation, inventory management and logistical management, as well as biomedical staff and technical staff<sup>12</sup>

### Medical

- a registered medical practitioner available 24 hours
- access to registered medical specialists with credentials in surgery and/or surgical subspecialties who assess, treat and review surgical patients
- registered medical specialists with credentials in anaesthetics
- access—24 hours—to a registered medical specialist with credentials in anaesthetics
- access to a registered medical specialist with credentials in surgery who may be available 24 hours
- may have provision for registered medical practitioners to relieve in rural and remote areas

### Nursing

- may have provision for nursing staff to relieve in rural and remote areas

### Other

- staff with training in the perioperative environment in attendance at each operating session to assist with the transfer of patients, positioning and equipment transfer
- other technical staff, as required for the level of service provided
- access to specialist Aboriginal and Torres Strait Islander health workers.

## Support service requirements

A Level 5 service requires:

Service	On-site	Accessible
anaesthetic	5	
intensive care	5	
medical imaging	5	
medication	4	
nuclear medicine		4
pathology	5	

## Section 1

### Level 6 Operating Suite Service

#### Service description

A Level 6 service is a high-level service delivering complex care and may act as a referral service for all lower level services. A Level 6 service can be a statewide and/or superspecialty service accepting referrals from across the state and/or interstate, where applicable. This level of service is generally provided at a large metropolitan hospital (population greater than 100,000).

A Level 6 service is supported by a wide range of medical and surgical subspecialties and support services within a large health facility. Staff have demonstrated knowledge, competency and experience in specialist subspecialties of surgery and anaesthesia (e.g. neonatal anaesthesia, complex anaesthesia, superspecialty procedures and highly complex surgery) relevant to the services provided. This service is usually a provider of telehealth.

These services may provide a leadership role for other services across the state. It is essential that there are resources present to support this level of service. A statewide consultation-liaison service may also be provided. Staff at this level of service represent a critical mass of expertise and may provide statewide leadership in clinical management to service providers.

#### Service requirements

As per Level 5, plus:

- separate day surgery operating rooms and specialist endoscopy suites
- specialist medical/surgical services and nursing available on-site, and many staff members with subspecialty training and/or experience
- procedures that have a high level of complexity, magnitude or risk to patients with an extensive range of comorbidities
- superspecialty services (including cardiothoracic, surgical and neurosurgical services)
- an emergency plan to provide access to emergency operating theatre time
- procedures performed on patients with high-risk potential for intra- and post-operative complications (e.g. a chronic disease that is advanced and may not be well controlled)
- staff rostered 24 hours and available at close proximity
- specialist ambulatory services, or access to specialist clinics or private specialist care, for all surgical subspecialties
- sterilisation services with the capacity to sterilise heat-sensitive equipment
- members of the multidisciplinary team with demonstrated experience, and advanced knowledge and skills, in the delivery of operating suite services pertaining to specific specialty and/or subspecialty areas
- intensive care services, areas of close observation care and specialist ward areas available on-site, and access to a PICU and NICU where these services are provided

- operating room staff, who may consist of specialist nurses (however titled) who are recognised as experts in their specialty, nurse practitioners and/or registered nurse assistants to the surgeon
- may provide outreach for low- to medium-risk anaesthetic services.

## Workforce requirements

As per Level 5, plus:

### Medical

- one or more registered medical practitioners available 24 hours to support patients in the pre-, intra- and post-operative stages
- registered medical specialists with credentials in anaesthetics available 24 hours
- a registered medical specialist with credentials in surgery available 24 hours
- a trained assistant to the surgeon, as required

### Nursing

- as per Level 5 service

### Other

- as per Level 5 service.

## Support service requirements

A Level 6 service requires:

Service	On-site	Accessible
anaesthetic	6	
intensive care	6	
medical imaging	5	
medication	5	
nuclear medicine		5
pathology	5	

## Section 2 Endoscopy Services

### Section overview

**Please note:** This section must be read in conjunction with the module overview.

Endoscopy services conduct a range of endoscopic procedures performed on a day-only and limited extended-care and/or inpatient basis. These services provide accommodation for pre-procedural preparation and post-procedural recovery of patients. Patients undergoing these procedures receive some form of anaesthesia/sedation, which may include general or local anaesthesia and/or analgesia and/or conscious sedation. Services should have the capacity to administer emergency drugs and resuscitate patients.

Endoscopy services perform diagnostic and interventional procedures, and can include:

- elective diagnostic and therapeutic upper gastrointestinal endoscopy (e.g. oesophagoscopy, gastroscopy and duodenoscopy)
- elective or emergency diagnostic and therapeutic flexible sigmoidoscopy
- elective or emergency diagnostic and therapeutic lower gastrointestinal tract procedures (e.g. colonoscopy, sigmoidoscopy and proctoscopy)
- diagnostic and therapeutic endoscopic retrograde cholangiopancreatography and associated therapeutic interventions
- diagnostic and therapeutic bronchoscopy (e.g. rigid and flexible bronchoscopy)
- endoscopic ultrasound
- cystoscopy.

The procedural complexity for endoscopy services can be described in terms of:

- emergency versus elective procedures
- diagnostic versus interventional procedures
- procedures that interfere with the airway
- procedures that may be associated with major complications that require support services (e.g. may require patient to have an overnight stay).

The types of endoscopy units include:

- general endoscopy—a single unit for a wide range of endoscopic procedures, almost certainly including gastroenterology and respiratory bronchoscopy, and perhaps endourology
- surgery/endoscopy mix—as above, with the addition of necessary requirements for day surgery (refer to Section 3, Day Surgery Services of this module for more detailed information)
- single-specialty endoscopy unit—major centres may have sufficient patient throughput for dedicated units for individual specialties such as gastroenterology, respiratory medicine and urology
- endoscopy situated in the operating suite—a specialist endoscopy unit located adjacent to, or as part of, perioperative services. In these instances, the unit should generally come under the overall management of the perioperative services manager.

## Service requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific service requirements include:

- endoscopy units must have specific protocols and procedures in relation to paediatric patients (refer to the Children's Surgical Services module)
- a central reprocessing room in the unit for all endoscope cleaning and reprocessing
- staff involved in the cleaning and reprocessing of scopes with proof of competency
- mandatory documentation of the reprocessing cycle, including, but not limited to, staff reprocessing the instrumentation, date of the procedure, and patient details
- in hospitals without a dedicated endoscopy service, sterilising services performing reprocessing, provided it is done without delay and, preferably, at the point of use
- documented processes for:
  - medical emergencies (e.g. bleeding varices), either within or outside the service, with such emergencies requiring access to a bed or trolley, a direct path to the procedure/operating room, and emergency endoscopy equipment
  - transfer of patients in cases of emergency
- in cases of medical emergency, an acute bed within a one-hour drive of the centre.

## Section 2

### Level 3 Endoscopy Service

#### Service description

A Level 3 service is provided to patients of low to medium anaesthetic risk (see the Anaesthetic Services module) having elective procedures, where sedation or general anaesthetic is used for diagnostic and interventional procedures (including upper and lower gastrointestinal endoscopy). Other features of this service include:

- located within a day health facility or an acute health facility
- no emergency endoscopy
- provide fibre-optic endoscopy
- where the procedure is performed in a day health facility or other ambulatory setting, a documented process is in place with a nearby health facility for overnight and emergency health admission of patients, if required
- can provide resuscitation and stabilisation of emergencies until transfer or retrieval to a back-up health facility.

Generally, this level of service refers to stand-alone facilities whose sole activity is related to the provision of endoscopy or day surgery services for patients 14 years and older.

#### Service requirements

As per section overview, plus:

- clinical services not provided 24 hours
- medical services on-site or in close enough proximity to provide a rapid response at all times
- nursing services available on-site during business hours
- at least one procedure room
- processes and procedures detailing the pre-admission process, pre-anaesthetic consultation and patient procedural expectations (including patient selection and anaesthetic risk) and possibly including a detailed patient health questionnaire
- education of the patient pre-operatively that includes:
  - procedure particulars (including doctor, anaesthetist, date, time and consent)
  - patient requirements for procedure, including, but not limited to, fasting status, medication cessation and responsible person to assist the patient post-procedure
  - procedure and anaesthetic explanation, and the follow-up required
- where pre-admission of the patient occurs via a specialist room, these practices are linked with the facility in terms of continuity of information
- an appropriate cleaning and sterilisation service for reusable medical and surgical instruments and equipment, or a policy pertaining to the use of pre-packaged and sterile items, or a documented process with an external supplier for the cleaning and sterilisation service
- at a minimum, a manual method of batch tracking instruments and equipment, though may have the capacity to track items electronically

- procedures and policies relating to the management of emergencies, best managed proactively through the management of the selection of patients undergoing endoscopy
- members of the multidisciplinary team have experience, knowledge and skills in endoscopy service principles and practice
- awareness of, and compliance with, the surgical and anaesthetic risk matrix
- access to telehealth services
- documented processes with emergency services.

## Workforce requirements

A Level 3 service requires:

### Medical

- procedures performed by a registered medical practitioner with credentials for that procedure and a defined scope of practice
- a registered medical specialist with credentials in anaesthetics or a registered medical practitioner (general practitioner) with credentials in anaesthetics in attendance for procedures where an anaesthetic is given
- a registered medical practitioner on-site until the patient has recovered from sedation/general anaesthesia

### Nursing

- a nurse manager (however titled)—the service may be managed by a perioperative services nurse manager
- a senior registered nurse in charge of each shift
- a minimum of two nurses—either two registered nurses or a registered nurse and an enrolled nurse—rostered to the operating/procedure room, one of whom must be present at all times, with the second nurse immediately available to be called for additional assistance, as required
- at least one nurse with experience in infection control
- nursing staff available on-site during hours of operation

### Other

- access to technical support staff (e.g. biomedical engineers or scientific officers), as required
- all staff involved with the cleaning of endoscopes having completed an annual endoscope cleaning competency
- staff with training in infection control.

### Support service requirements

A Level 3 service requires:

Service	On-site	Accessible
anaesthetic	3	
medical imaging		3
medication		3
nuclear medicine		4
pathology		3

## Section 2

### Level 4 Endoscopy Service

#### Service description

A Level 4 service is provided to patients of low to medium anaesthetic risk having elective or emergency procedures, where all levels of sedation or general anaesthetic are used for diagnostic and interventional procedures (including upper and lower gastrointestinal endoscopy).

The service is part of a service network with higher level services, ensuring access to information related to the latest evidence-based care and treatments.

#### Service requirements

As per Level 3, plus:

- on-site intensive care services
- all types of elective endoscopy procedures
- at least one operating room
- referral and management primarily performed by a registered medical specialist with credentials in endoscopy and a defined scope of practice applicable to this level of service
- diagnostic and therapeutic endoscopy
- members of the multidisciplinary team have demonstrated experience, knowledge and skills in the delivery of endoscopy services
- access to the operating suites in case of emergency surgery requirements
- may provide limited emergency procedures
- may provide services that may take place within an operating suite or a dedicated endoscopy suite, which may or may not be attached to operating suite services.

#### Workforce requirements

As per Level 3, plus:

- specific workforce requirements for a Children's Endoscopy Service as per Children's Surgical Services module
- dedicated endoscopy staff available on-site or may be available on-call
- sterilising staff not available after hours unless by prearrangement

#### Medical

- a registered medical specialist with credentials in endoscopy available at this level, either consulting and/or providing services with a defined scope of practice
- one or more registered medical practitioners with credentials and a defined scope of practice for the range of procedures performed
- one or more registered medical practitioners with credentials in anaesthetics and a scope of practice defined for the range of procedures performed
- a registered medical practitioner on-site until the patient has recovered from anaesthesia

- access to registered medical specialists for telephone consultation and clinical support (with the range of registered medical specialists reflecting the range of procedures performed)
- where the registered medical specialist is not a resident in the town or immediately accessible, arrangements in place for a designated local registered medical practitioner to provide post-procedural care, as required

### Nursing

- registered nurses
- adequate nursing staff to support the senior registered nurse in charge (however titled)
- may have dedicated staff who undertake pre-admission of patients

### Other

- assistants in nursing
- equipment technicians, as required
- sterilising services assistants and technical aides appropriate to the service provided
- staff with training in the perioperative environment to assist with the transfer of patients, positioning and equipment transfer
- may utilise anaesthetic technicians who have undertaken an accredited training course, and show clinical competency and evidence of ongoing training.

## Support service requirements

A Level 4 service requires:

Service	On-site	Accessible
anaesthetic	4	
intensive care	4	
medical imaging	4	
medication	3	
nuclear medicine		4
pathology		5

## Section 2

### Level 5 Endoscopy Service

#### Service description

A Level 5 service is provided to patients of low, medium and high anaesthetic risk having elective, emergency, diagnostic and/or interventional procedures.

This level of service manages most levels of patient risk (low, medium and high) through the provision of short- to long-term or intermittent care. The service is part of a service network with higher level services, ensuring access to information related to the latest evidence-based care and treatments.

#### Service requirements

As per Level 4, plus:

- a dedicated endoscopy unit with facilities and staffing separate from the main operating theatres with specialist cleaning areas, or a separate unit within the operating suite with specialist cleaning areas
- clinical services provided 24 hours with combinations of medical, nursing, allied health, administrative and other staff on-site
- medical services available on-site in public services, or in close enough proximity to provide a rapid response at all times in private services
- combinations of procedures with a moderate level of complexity and risk, with some patients with comorbidities and risk of intra- and post-operative complications
- specialist ambulatory services, or access to registered medical specialist clinics or private specialist care
- sterilisation services as per Level 5 Operating Suite Service
- the capacity to sterilise heat-sensitive equipment
- members of the multidisciplinary team with demonstrated experience, and advanced knowledge and skills, in the delivery of endoscopy services pertaining to the specialty/subspecialty area
- documented processes with emergency services
- access—24 hours—to the operating suite where endoscopy services are provided
- may provide endoscopy services as part of normally scheduled lists
- may provide emergency endoscopy procedures
- may provide outreach services
- may provide provision for case management for patients requiring complex care.

## Workforce requirements

As per Level 4, plus:

### Medical

- access to registered medical specialists with credentials in anaesthetics and surgery who assess, treat and review endoscopy patients
- a registered medical practitioner available 24 hours
- access to registered medical specialists in multiple specialties with evidence of ongoing clinical competency and a defined scope of practice relevant to the service being provided
- a registered medical specialist with credentials in anaesthetics available 24 hours where emergency procedures are undertaken
- one or more registered medical practitioners available 24 hours with timely access to support patients in the pre- and post-operative stages
- registered medical practitioners (surgical registrars) supervised by a registered medical specialist with credentials in endoscopy (where employed)

### Nursing

- as per Level 4 service

### Other

- access to Aboriginal and Torres Strait Islander health workers
- access to interpreter services
- staff trained in the perioperative environment to assist with transfer of patients, positioning and equipment transfer in attendance at each operating session
- extensive range of specialist services/functions provided on a visiting basis
- other technical staff, as required for the level of service provided
- may utilise anaesthetic technicians who have undertaken an appropriate accredited course and who show clinical competency and evidence of ongoing training.

## Support service requirements

A Level 5 service requires:

Service	On-site	Accessible
anaesthetic	5	
intensive care	5	
medical imaging	5	
medication	4	
nuclear medicine		4
pathology	5	

## Section 2

### Level 6 Endoscopy Service

#### Service description

A Level 6 service is the highest level service delivering complex care and may act as a referral service for all lower level services. A Level 6 service can also be a statewide and/or superspecialty service accepting referrals from across the state and/or interstate, where applicable. This level of service is generally provided at a large metropolitan hospital.

This level of service provides a service of excellence in endoscopy care and may provide a leadership role for other services across the state. Staff at this level of service represent a critical mass of expertise who may provide statewide leadership in clinical management to service providers. A statewide consultation-liaison service may be provided.

A wide range of medical and surgical subspecialties, and support services, within a large health facility supports a Level 6 service. This service is usually a provider of telehealth.

#### Service requirements

As per Level 5, plus:

- first and second stage recovery rooms (post-anaesthetic care), separate specialist endoscopy suites and/or day surgery suites
- services provided 24 hours
- procedures that have a high level of complexity or magnitude of risk to patients with an extensive range of comorbidities are performed
- procedures performed on patients with a high risk potential for intra- and post-operative complications (e.g. a chronic disease that is advanced and may not be well controlled)
- the broadest range of subspecialties
- an emergency plan to provide access to operating theatre time to undertake emergency endoscopy at any time
- staff rostered 24 hours and available at close proximity
- nursing and medical staff with expertise in a wide range of subspecialties
- endoscopy staff who may consist of specialist nurses recognised as experts in their field
- sterilisation services providing an on-site cleaning and sterilisation service
- specialist ambulatory services for all subspecialties, or access to specialist clinics or private specialist care
- members of the multidisciplinary team with demonstrated experience, and advanced knowledge and skills, in the delivery of endoscopy services pertaining to specific specialty and/or subspecialty areas
- on-site close observation care area/s and specialist ward areas
- documented processes with emergency services, which may also involve coordination of services across the state
- may provide limited outreach, low- to medium-risk anaesthetic services
- may provide a surgical triage unit.

## Workforce requirements

As per Level 5, plus:

### Medical

- access to registered medical specialists with credentials in gastroenterology who assess, treat, manage and review endoscopy patients
- one or more registered medical practitioners available 24 hours to support patients in the pre-, intra- and post-operative stages
- registered medical specialists of multiple specialities have credentials to provide anaesthetics and surgery
- a registered medical specialist with credentials in anaesthetics available 24 hours
- may provide registered medical practitioners to relieve in rural and remote areas as the need arises

### Nursing

- as per Level 5 service

### Other

- as per Level 5 service.

## Support service requirements

A Level 6 service requires:

Service	On-site	Accessible
anaesthetic	6	
intensive care	6	
medical imaging	5	
medication	5	
nuclear medicine		5
pathology	5	

## Section 3 Day Surgery Services

### Section overview

**Please note:** This section must be read in conjunction with the module overview.

Day surgery services are an integral part of perioperative services. This service can be provided when a patient is able to be safely discharged on the same day. Day surgery services may occur in freestanding day surgery centres or as part of existing hospital facilities. Day surgery units may have access to an extended (overnight) recovery unit, which may be attached to a day surgery/procedure unit in an inpatient hospital setting (refer to the Anaesthetic Services and Surgical Services modules).

Day surgery units must have specific protocols and procedures in relation to paediatric patients<sup>13</sup> (refer to the Children's Surgical Services module).

A wide range of procedures may be undertaken in day surgery/procedure units, including:

- surgical procedures
- plastic surgery and ophthalmology
- endoscopy (including gastrointestinal, respiratory and urology)
- electroconvulsive therapy, which may be provided where facilities are authorised under the *Mental Health Act 2000*
- day medical procedures, such as infusion of blood and/or blood products, steroids and other intravenous treatments, lumbar punctures, removal/replacement of urinary catheters and lump biopsies.

The following should be considered when selecting patients for day surgery:

- minimal risk of post-operative haemorrhage or airway compromise
- easily managed post-operative pain by the patient or a person responsible for the patient
- proximity of patient's residence to medical attention—preferably the patient should live within one hour of medical attention; however, provided the patient has a responsible adult with them for 24 hours post surgery/procedure and they have access to a telephone, some patients may be discharged to their usual place of residence, which may be more than one hour from medical attention
- patients with an American Society of Anaesthesiologists' (ASA) of 1 or 2
- patients with a medically stable ASA 3 who require early consultation with the anaesthetist involved.

It is essential that adequate time is scheduled for the treating anaesthetist to consult with the patient and for any other relevant pre-anaesthetic/operative assessments. The service has written guidelines/policies regarding the discharge of patients (i.e. discharge criteria).

Patients must be instructed on fasting times and medication protocols, and given general information on procedures, admission and discharge from the day surgery unit.<sup>14,15</sup> In day surgery waiting areas, patients should have access to:

- information regarding their surgery
- family/carers who are involved in their care
- a safe place to store personal belongings—accessible post-operatively
- distractions for anxiety/boredom/procedure noise (e.g. a television or music).<sup>16</sup>

Recovery from anaesthesia occurs in a post-anaesthetic recovery area. These areas should be equipped and staffed as per ANZCA PS4 Recommendations for the Post-Anaesthesia Recovery Room, 2006.<sup>17</sup>

## Workforce requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific workforce requirements include:

- staffing that complies with ACORN Standards for Perioperative Nursing: S19 Staffing Requirements, 2010-2011,<sup>9</sup> wherever possible
- staff in day surgeries who work as part of a team, with a minimum of three staff members rostered to the operating room/procedure room: one registered nurse, one assistant to the anaesthetist, and one staff member (registered nurse/enrolled nurse) who is trained and competent in the role in which they are rostered
- the use of anaesthetic technicians in the remote, rural and regional settings balanced with the need for the multiskilling of nursing staff in the day surgery environment
- in facilities where anaesthetic technicians are utilised, nursing staff numbers re-evaluated to ensure adequate numbers of appropriately trained staff are present at all times.

## Section 3

### Level 3 Day Surgery Service

#### Service description

A Level 3 service is provided in either a freestanding facility or a discrete self-contained unit within a hospital, or is collocated with a specialist clinical service within a hospital or incorporated into perioperative services. If these services are housed in a freestanding facility, they should be within one hour of an acute health facility.

This level of service manages low- to medium-risk patients with:

- day surgical complexity I, II and III procedural requirements through the provision of day-only surgery and the use of local anaesthetic, sedation and general anaesthetic or combinations of these
- an ASA physical status of 3, who are treated in a freestanding day hospital, only if they are medically stable.

This level of day surgery is provided in a stand-alone facility or within a healthcare facility with access to intensive care services. However, these types of patients would not normally be expected to require intensive care services when they are scheduled for their day surgery.

In some facilities, registered medical specialists with credentials in surgery may not be available or present in sufficient numbers to provide a complete service. Under such circumstances, surgically trained registered medical practitioners (general practitioners) who have completed an Advanced Rural Training module in surgery, and with satisfactory exam completion and approval from the appropriate professional bodies, may have the credentials to perform minor surgery in rural and regional settings. Consultation and support are provided to patients.

#### Service requirements

As per section overview, plus:

- procedures are usually performed by an experienced registered medical specialist with credentials in surgery
- procedures requiring only simple general anaesthetic, sedation and/or local anaesthetic, or combinations of these
- anaesthetic services generally provided during business hours for regularly scheduled lists
- appropriate cleaning and sterilisation service for reusable medical and surgical instruments, and equipment as per AS/NZS 4187,<sup>1</sup> or a policy pertaining to the use of pre-packaged and sterile set-ups, or a documented process with an external supplier for the cleaning and sterilisation service
- members of the multidisciplinary team with experience, knowledge and skills in day surgery services, principles and practice
- an awareness of the combination of surgical complexity and anaesthetic risk at this level of service
- services on Saturdays and/or after hours may be provided by prearrangement
- at least one operating room/procedure room, with separate post-anaesthetic care for stages 1 and 2, and may have separate endoscopy area.

## Workforce requirements

As per section overview, plus:

### Medical

- procedures performed by a registered medical practitioner with credentials in surgery and a defined scope of practice
- registered medical practitioners (general practitioners) or registered medical specialists with credentials in anaesthetics providing the anaesthetics
- registered medical practitioners (general practitioners) or registered medical specialists delivering conscious sedation must have appropriate training in the administration of conscious sedation
- registered medical specialists with credentials in surgery and/or surgical subspecialties appropriate to the services provided (e.g. ears, nose and throat or ophthalmology)
- registered medical specialists with credentials in internal medicine, general surgery, and/or a range of medical and surgical specialties available for consultation via telephone

### Nursing

- nurse manager (however titled)
- a senior registered nurse in charge of each shift
- registered nurses
- nursing staff supporting the registered nurses available on-site during hours of operation
- may provide management by perioperative services nurse manager (however titled)

### Allied health

- access to allied health professionals, whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines, as required

### Other

- may have access to:
  - anaesthetic technicians and equipment technicians
  - assistants in nursing
  - an infection control coordinator
  - environmental services staff
  - operating room orderlies or equivalent staff
  - sterilising services staff with training in sterilising technology (nurse or technician)
  - surgical booking staff
  - technical aides
  - staff with training in the perioperative environment to assist with the transfer of patients, positioning and equipment transfer
  - staff who have undertaken training in infection control and aseptic technique
  - trained and competent dental staff may be utilised as the assistant to the dentist for dental surgery.

### Support service requirements

A Level 3 service requires:

Service	On-site	Accessible
anaesthetic	3	
medical imaging		3
medication		3
nuclear medicine		4
pathology		4

## Section 3

### Level 4 Day Surgery Service

#### Service description

A Level 4 service has services as per Level 3 components and provides anaesthesia for combinations of:

- day surgical complexity I and II procedures with low to high anaesthetic risk
- day surgical complexity III procedures with low to high anaesthetic risk.

A Level 4 day surgery service may not be provided in a freestanding hospital. This level of day surgery is achieved within a healthcare facility where there may be access to intensive care services. However, these types of patients would not normally be expected to require intensive care services when they are scheduled for day surgery.

The service is part of a service network with higher level services, ensuring access to information related to the latest evidence-based care and treatments.

#### Service requirements

As per Level 3, plus:

- at least one operating room and separate post-anaesthetic care for stages 1 and 2
- sterilising services on-site, with facilities for the cleaning and sterilisation of reusable medical and surgical instruments and equipment, and, within its service, the capacity to sterilise heat-sensitive equipment
- as a minimum requirement, a method of tracking instruments and sterile items, though the capacity to track reprocessed sterile items electronically may be provided
- may provide a separate endoscopy area
- may provide sterilising services during business hours.

#### Workforce requirements

As per Level 3, plus:

##### Medical

- one or more registered medical practitioners with relevant credentials and a defined scope of practice
- visiting registered medical specialists of differing surgical subspecialties available at this level, either consulting and/or operating
- one or more registered medical practitioners (general practitioners) with credentials in anaesthetics and a defined scope of practice
- access to registered medical specialists for telephone consultation and clinical support, with the range of specialists reflecting the range of procedures performed
- medical services provided on-site or in close enough proximity to provide a rapid response to surgical emergencies
- in situations where the registered medical practitioner is not a resident in the town or immediately accessible, arrangements in place for a designated local registered medical practitioner to provide post-operative care, as required

## Nursing

- registered nurses who may have postgraduate qualifications in perioperative and/or day surgery nursing and relevant clinical experience commensurate with the position
- nursing services available on-site while patients are on-site
- at least one registered nurse with documented experience in infection control
- staff responsible for sterilising services with demonstrated evidence of ongoing clinical and/or technical knowledge in sterilising services

## Allied health

- as per Level 3 service

## Other

- as per Level 3 service.

## Support service requirements

A Level 4 service requires:

Service	On-site	Accessible
anaesthetic	4	
intensive care		4
medical imaging	4	
medication	3	
nuclear medicine		4
pathology		5

## Section 4 Post-Anaesthetic Care Services

### Section overview

**Please note:** This section must be read in conjunction with the module overview.

A well planned, equipped, staffed and managed post-anaesthesia recovery area—also known as a recovery room or post-anaesthetic care unit (PACU) stages 1 and 2—is essential for the safe management of patients who have recently undergone a surgical or other procedure. A recovery area is defined as a discrete area within the health facility that is able to provide a level of care that falls between an operating suite and a general clinical unit for patients who have undergone surgery or medical procedures, regardless of the type of anaesthesia or sedation used.

The general principles that apply for the post-anaesthesia recovery area<sup>17</sup> are:

- recovery from anaesthesia should take place under supervision in an area designated for the purpose
- the area should be close to where the anaesthesia or sedation has been administered
- staff must be able to contact supervising registered medical practitioners promptly.

Specific requirements relating to the post-anaesthetic care of children are noted within each level.

### Service requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific service requirements include:

- the PACU is part of the operating suite with easy access for the management of emergencies
- the use of pain and post-operative nausea and vomiting protocols encouraged<sup>18</sup>
- written policies, procedures and protocols for post-anaesthetic patient care (including emergency situations)
- a dedicated resuscitation trolley with defibrillator, airway management equipment and resuscitation drugs, and the means to deliver those drugs immediately is available
- compliance in the PACU with breastfeeding health initiative principles, which propose that all women are to be provided with early and ongoing access to skin-to-skin contact (to cover birth to 6 weeks postnatal and following lower-segment caesarean section)
- the requirements of relevant clinical modules within the Framework are met, where maternity, paediatric and emergency services are provided.

In addition to the service requirements outlined in this section overview, specific service requirements for Children's Post-Anaesthetic Care Services include:

- a minimum of two registered nurses present in the post-anaesthetic recovery area at all times when there is a patient admitted to the unit
- staff able to contact supervising registered medical practitioners at all times.

## Workforce requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific workforce requirements include:

- anaesthesia administered only by registered medical practitioners with training in anaesthesia
- during stage 1.1, at *reception stage*, nursing staff minimum requirements include:
  - a 1:1 nurse:patient ratio where the patient is an uncomplicated, unconscious patient
  - the capacity to manage continued artificial airway support/mechanical ventilation
  - the capacity to manage any paediatric patient regardless of age—paediatric patients require 1:1 nurse:patient ratios in the reception stage
  - the capacity to manage the initial phase of intravenous pain protocol administration
  - a 2:1 nurse:patient ratio or higher may be required when the patient is critically ill, unstable or complicated
  - increased staffing levels until the patient's condition has stabilised may be required
- during stage 1.2, at *stabilisation stage*, which is also the *reception stage* post procedures performed under conscious sedation, minimum nursing staff requirements include a 1:2 nurse:patient ratio if patients are both conscious and stable, or a competent and experienced registered nurse supervising one nurse in training provided neither patient has complications
- during stage 1.3, at *pre-discharge stage*, minimum nursing staff requirements include a minimum 1:3 nurse:patient ratio provided the patients are uncomplicated and comfortable
- during stage 2, minimum nursing staff requirements include:
  - a minimum of two nurses, one of whom is a registered nurse, present when a patient is present
  - minimum staff for a 1:4 nurse:patient ratio provided:
    - patients are stable
    - there is a higher ratio for higher-acuity patients
    - a family member or a care giver is present for children over 5 years of age within the first hour of a procedure.

In addition to the requirements outlined in this section overview, specific workforce requirements for Children's Post-Anaesthetic Care Services include:

- staff providing post-anaesthetic care have appropriate training and have demonstrated competency in the care of children.

## Section 4

### Level 3 Post-Anaesthetic Care Service

#### Service description

A Level 3 service generally provides elective surgery or other procedures; however, limited emergency surgery may also be provided. A Level 3 service includes provision of care for the types of patients who have received a general anaesthetic, sedation, or neuraxial, regional or spinal block for:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to medium anaesthetic risk
- surgical complexity IV procedures with low to medium anaesthetic risk.

#### Service requirements

As per section overview, plus:

- on-site close observation care area/s for surgical complexity IV procedures
- access to intensive care services
- immediate access to an anaesthetic machine for emergency ventilation only and not for long-term ventilation
- immediate access to a registered medical practitioner with credentials in anaesthetics who can attend emergencies at all times
- elective post-anaesthetic services generally provided during business hours
- where day surgery is offered, relevant staff available while patients are on-site
- where service provision is 24 hours, registered medical practitioners available in accordance with documented time and/or distance policies
- suitable infection control, and isolation procedures and facilities, applicable to the PACU
- a supply of emergency drugs and the capacity for telephone consultation with a clinical pharmacist
- post-anaesthetic patient comment/feedback on pain management, and post-operative nausea and vomiting management, may be included
- information technology that supports electronic record-keeping may be available.

#### Workforce requirements

As per section overview, plus:

##### Medical

- registered medical practitioners with credentials in anaesthetics available 24 hours in facilities with inpatients
- access to registered medical specialists with credentials in anaesthetics relevant to the procedures performed for telephone consultation and clinical support

## Nursing

- dedicated PACU registered nurses with training who are competent in post-anaesthetic care
- a nurse manager (however titled)
- access to nursing staff competent in providing advanced paediatric life support
- care by nurses supporting the registered nurse/s under the direct supervision of registered nurses may be provided

## Allied health

- access to allied health professionals, whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines, during business hours, as required.

Specific workforce requirements for a Level 3 Children's Post-Anaesthetic Care Service are as per the section overview, plus:

## Medical

- a registered medical practitioner remaining on-site until the patient has recovered from anaesthesia and meets the PACU discharge criteria, as per facility guidelines and ANZCA PS4<sup>17</sup>
- access to medical and surgical registered medical practitioners with credentials relevant to the procedures performed for telephone consultation and clinical support
- a registered medical specialist with credentials in paediatric anaesthesia must remain on-site until a child between 1 and 2 years of age who is recovering from surgical complexity III with low anaesthetic risk procedures has fully recovered and been discharged from the post-anaesthetic care area

## Nursing

- a senior registered nurse in charge on each shift
- nursing staff to support the senior registered nurse
- nursing staff with paediatric nursing experience must remain on-site until a child between 1 and 2 years of age who is recovering from surgical complexity III with low anaesthetic risk procedures has fully recovered and been discharged from the post-anaesthetic care area
- access to staff who are competent in providing paediatric life support.

## Support service requirements

A Level 3 service requires:

Service	On-site	Accessible
anaesthetic	3	
intensive care		4
medical imaging		3
medication		3
nuclear medicine		4
pathology		3

## Section 4

### Level 4 Post-Anaesthetic Care Service

#### Service description

A Level 4 service provides post-anaesthetic care for combinations of the following:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to high anaesthetic risk
- surgical complexity IV procedures with low to medium anaesthetic risk
- surgical complexity V procedures with low anaesthetic risk.

The service is part of a service network with higher level services, ensuring access to information related to the latest evidence-based care and treatments.

#### Service requirements

As per Level 3, plus:

- on-site intensive care service
- access to close observation care area/s
- dedicated PACU staff may be available on-site or available 24 hours
- may provide limited outreach, low- to medium-risk anaesthetic services only.

#### Workforce requirements

As per Level 3, plus:

##### Medical

- a registered medical practitioner available 24 hours
- immediate access to a registered medical practitioner with credentials in anaesthetics until the patient is extubated and the patient's airway is patent, and while the patient is recovering from anaesthesia

##### Nursing

- a senior registered nurse in charge on each shift
- access to senior registered nurses who may assist in the management of the PACU
- registered nurses

##### Allied health

- allied health professionals whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines with relevant surgical experience or training, as required

##### Other

- may provide specialist services/functions on a visiting basis.

Specific workforce requirements for a Level 4 Children's Post-Anaesthetic Care Service are as per Level 3, plus:

### Medical

- a registered medical practitioner available 24 hours
- a registered medical practitioner in the PACU with demonstrated ability and competency to provide airway support where there is provision of care for term infants and well, ex-premature infants (postconceptional age of more than 52 weeks)

### Nursing

- as per Level 3 service.

## Support service requirements

A Level 4 Service requires:

Service	On-site	Accessible
anaesthetic	4	
intensive care	4	
medical imaging	4	
medication	3	
nuclear medicine		4
pathology		4

## Section 4

### Level 5 Post-Anaesthetic Care Service

#### Service description

A Level 5 service is provided 24 hours a day with combinations of medical, nursing, allied health and other staff on-site providing post-anaesthetic care for combinations of the following:

- surgical complexity I procedures with low to high anaesthetic risk
- surgical complexity II procedures with low to high anaesthetic risk
- surgical complexity III procedures with low to high anaesthetic risk
- surgical complexity IV procedures with low to high anaesthetic risk
- surgical complexity V procedures with low to high anaesthetic risk.

This level of service manages most levels of patient risk (low, moderate and high) through the provision of short- to long-term or intermittent care. Increased levels of risk are managed until transfer to the highest level of service is arranged.

#### Service requirements

As per Level 4, plus:

- access to specialist ward areas (e.g. orthopaedics)
- dedicated post-anaesthetic care staff available on-site or available 24 hours
- may provide outreach services
- documented processes with emergency services and involvement in the development of emergency post-anaesthetic services may occur.

#### Workforce requirements

As per Level 4, plus:

##### Medical

- a registered medical practitioner available on-site or in close enough proximity to provide a rapid response at all times
- access to a registered medical specialist with credentials in anaesthetics with responsibility for the training and upskilling of medical staff
- some specialist anaesthetic services/functions may be provided on a visiting basis within the capability level of the host service

##### Nursing

- senior registered nurses in charge of each shift (however titled)

##### Allied health

- access to allied health professionals whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines, as required

## Other

- as per Level 4 service.

Specific workforce requirements for a Level 5 Children's Post-Anaesthetic Care Service are as per Level 4, plus:

## Medical

- access—24 hours—to one or more registered medical practitioners, with timely access, to support patients in the post-operative stage
- medical services available on-site in public services, or in close enough proximity to provide a rapid response at all times in private services
- access to a registered medical specialist with credentials in anaesthetics with responsibility for the training and upskilling of medical staff
- some specialist anaesthetic services/functions may be provided on a visiting basis within the capability level of the host service

## Nursing

- may have a dedicated nurse manager (however titled) with responsibilities for the PACU.

## Support service requirements

A Level 5 service requires:

Service	On-site	Accessible
anaesthetic	5	
intensive care	5	
medical imaging	5	
medication	4	
nuclear medicine		4
pathology	5	

## Section 4

### Level 6 Post-Anaesthetic Care Service

#### Service description

A Level 6 service is a specialist service managing the highest level of risk, and most complex surgical and medical patients post-operatively. A Level 6 service is supported by a wide range of medical and surgical subspecialties and support services.

The staff at this level of service represent a critical mass of expertise that provide statewide leadership and education, and may provide a consultation–liaison service. Staff have demonstrated knowledge, competency and experience in specialist subspecialties of anaesthesia (e.g. neonatal anaesthesia, complex anaesthesia and anaesthesia for superspecialty procedures).

#### Service requirements

As per Level 5, plus:

- subspecialties of surgery and anaesthetics available with required staffing, equipment and resources (refer to relevant modules).

#### Workforce requirements

As per Level 5, plus:

##### Medical

- registered medical specialists with credentials in anaesthetic subspecialties who may be pioneering procedures in anaesthetics and post-anaesthetic care
- a registered medical specialist with credentials in anaesthetics as the lead clinician with responsibility for clinical governance of the service
- may have provision for medical staff to relieve in rural and remote areas as the need arises

##### Nursing

- may have provision for nursing staff to relieve in rural and remote areas as the need arises

##### Allied health

- allied health professionals whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines, with relevant credentials, surgical experience or training, as required

##### Other

- other technical staff, as required for the level of service provided.

Specific workforce requirements for a Level 6 Children's Post-Anaesthetic Care Service are as per Level 5, plus:

- may have lead clinicians with responsibility for clinical governance of the service in both medical and nursing fields

- may have medical and nursing staff with subspecialty qualifications in post-anaesthetic care
- may have provision for registered medical practitioners and registered nurses to relieve in rural and remote areas as the need arises

### Medical

- as per Level 5 service

### Nursing

- nurse manager (however titled) in charge of children's post-anaesthetic services
- some senior registered nurses with qualifications in anaesthesia, and/or PACU.

## Support service requirements

A Level 6 service requires:

Service	On-site	Accessible
anaesthetic	6	
intensive care	6	
medical imaging	5	
medication	5	
nuclear medicine		5
pathology	5	

## Section 5 Acute Pain Services

### Section overview

**Please note: This section must be read in conjunction with the module overview.**

Acute pain management is a fundamental component of safe and quality patient care. Unrelieved and severe acute pain has adverse physiological and psychological effects on the patient. Effective treatment of post-operative pain may reduce the incidence of post-operative complications and facilitate earlier discharge from hospital.<sup>9</sup>

Acute pain management may be facilitated by the establishment of pain management services in hospitals that perform major and complex surgery. This section provides minimum standards for a recognised acute pain management service and does not replace acute pain management administered by registered medical practitioners for individual patients.

Pain management, as a component of care, may be provided to patients in all facilities; however, an identified level of pain management service occurs in Levels 5 and 6, which may coordinate outreach pain services.

Acute pain management requires special consideration for the following groups:

- children
- pregnant patients
- elderly patients
- Aboriginal and Torres Strait Islander patients
- culturally and linguistically diverse patients
- patients with obstructive sleep apnoea
- patients with substance abuse disorder
- patients with cognitive behavioural and/or sensory impairments
- patients with concurrent hepatic or renal disease.

### Workforce requirements

In addition to the requirements outlined in the Fundamentals of the Framework, specific workforce requirements include:

- experience in acute pain management as mandated in training for the Fellowship in Anaesthesia (Australian and New Zealand College of Anaesthetists) and the Fellowship in Pain Medicine (Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists)
- medical and nursing staff with expertise in acute pain management
- nursing staff with knowledge and experience commensurate with their responsibilities in acute pain management
- multidisciplinary liaison with physiotherapists, psychologists and pharmacists.

## Section 5

### Level 5 Acute Pain Service

#### Service description

A Level 5 service provides a multidisciplinary approach to the management of acute pain. The aim is to provide pain relief, better patient outcomes and reduced incidences of post-operative complications or side effects. This level service is provided 24 hours a day.

A Level 5 service must have documented processes with a Level 4, 5 or 6 anaesthetic service. Specialist services and/or functions may be provided on a visiting basis.

#### Service requirements

As per section overview, plus:

- registered medical specialists with credentials in anaesthetics provide services for patients with acute or chronic (persistent) pain
- documented processes and protocols for the management of pain services for patients
- liaison and coordination with surgical and trauma services to ensure patient access to pain services
- access to subspecialties in surgery (including medicine), where necessary
- acute pain services may manage patients with epidural and trauma injuries, and post-operative surgical patients
- pain management services for children may be provided.

#### Workforce requirements

As per section overview, plus:

- where interventional pain management services are provided (e.g. epidural block, spinal block and regional techniques), they are administered by clinical staff with evidence of ongoing and annual clinical competency and experience relevant to the service being provided
- a registered medical practitioner or nurse with extensive experience in acute pain management is in attendance for the pain round

#### Medical

- access to registered medical practitioners with credentials in anaesthetics who assist and guide assessment, treatment, case management and case review of patients requiring acute pain management
- a registered medical practitioner available 24 hours
- interventional pain management services (e.g. epidural block, spinal block and regional techniques), where provided, administered only by:
  - registered medical practitioners with training in anaesthesia or a registered medical specialist with credentials in anaesthesia, and advanced knowledge and demonstrated clinical competency as indicated by satisfactory completion of clinical training and/or possession of a Fellowship in Anaesthesia recognised by the Australian and New Zealand College of Anaesthetists and the Medical Board

of Australia

- registered medical trainees under the supervision of the above medical staff
- access to a qualified registered medical practitioner with knowledge of acute pain management for the consultation, advice and review of patients

### Nursing

- registered nurse with extensive experience in acute pain management may coordinate the service
- nursing staff with specialist expertise in acute pain management
- at least one nursing staff member available for pain rounds, as required

### Allied health

- access to allied health professionals, whose specialties may include physiotherapy, social work, occupational therapy, psychology, speech pathology or other disciplines, as required
- access to a clinical pharmacist for ongoing advice and support of staff.

## Support service requirements

A Level 5 service requires:

Service	On-site	Accessible
anaesthetic	4	
medical imaging		4
medication	5	
pathology		4

## Section 5

### Level 6 Acute Pain Service

#### Service description

A Level 6 service provides a multidisciplinary approach to the management of acute pain where complex surgical procedures are performed and trauma services are provided. This service is a specialist, statewide and, where applicable, interstate service. This level service provides pain management services for adults and/or children.

A Level 6 service manages and supports the highest level of risk and most complex surgical and medical presentations in a specified area of expertise. This service is predominantly delivered in a large metropolitan hospital. There is typically low patient throughput based on the complexity of presentations and care provided.

The staff at this level service represent a critical mass of expertise who provide statewide leadership and may provide a statewide consultation-liaison service. A Level 6 service is supported by a wide range of medical and surgical subspecialties, and support services, within a large health facility. This service is usually a provider of telehealth.

#### Service requirements

As per Level 5, plus:

- supports patients with comorbidities who are undergoing procedures with a high level of surgical complexity and anaesthetic magnitude or risk
- procedures performed on patients with a high risk potential for intra- and post-operative complications (e.g. chronic disease that is advanced and may not be well controlled)
- may have responsibility for the statewide coordination of pain management services.

#### Workforce requirements

As per Level 5, plus:

- specialist medical, surgical and nursing services available on-site or in close enough proximity to provide a rapid response at all times

#### Medical

- access to a registered medical specialist with credentials in anaesthetics available 24 hours
- a registered medical practitioner with credentials in pain management available 24 hours

#### Nursing

- nursing staff with training and ongoing evidence of clinical competency in charge of pain management services (however titled)
- nursing staff to support nurse in charge of each shift (however titled)

#### Allied health

- access to allied health professionals whose specialties may include physiotherapy,

social work, occupational therapy, clinical psychology or other disciplines, with relevant specialist experience and/or postgraduate qualifications, as required.

## Support service requirements

A Level 6 service requires:

Service	On-site	Accessible
anaesthetic	5	
medical imaging	4	
medication	5	
pathology	5	

## Legislation, regulations and legislative standards

Refer to the Fundamentals of the Framework for details.

## Non-legislative standards, guidelines, benchmarks, policies and frameworks

In addition to what is outlined in the Fundamentals of the Framework, the following are relevant to perioperative services:

- Australasian Health Infrastructure Alliance. Australasian Health Facility Guidelines: Revision V3.0. AHIA; 2009. [www.healthfacilityguidelines.com.au/guidelines.htm](http://www.healthfacilityguidelines.com.au/guidelines.htm)
- Australian and New Zealand College of Anaesthetists. Professional Standard PS 15: Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery. ANZCA; 2010. [www.anzca.edu.au/resources/professional-documents/](http://www.anzca.edu.au/resources/professional-documents/)
- Australian and New Zealand College of Anaesthetists. Professional Standard PS7: Recommendations for the Pre-Anaesthesia Consultation. ANZCA; 2008. [www.anzca.edu.au/resources/professional-documents/](http://www.anzca.edu.au/resources/professional-documents/)
- Australian College of Operating Room Nurses. ACORN Standards for Perioperative Nurses. ACORN; 2008. [www.acorn.org.au/](http://www.acorn.org.au/)
- Australian Day Surgery Nurses Association. Best practice guidelines for Ambulatory Surgery and Procedures. Perth: Cambridge Publishing; 2009. [www.adsna.info/index.html](http://www.adsna.info/index.html)
- Gastroenterological Nurses College of Australia Inc. Minimal Staffing Requirements for Endoscopy Procedures: Position Statement. [www.genca.org/](http://www.genca.org/)
- Gastroenterological Society of Australia, Gastroenterological Nurses Society of Australia. Standards for Endoscopic Facilities and Services: GESA; 2006. [www.gesa.org.au/professional/guidelines/standards-for-endoscopy.cfm](http://www.gesa.org.au/professional/guidelines/standards-for-endoscopy.cfm)
- Gastroenterological Society of Australia. Infection Control in Endoscopy 2nd ed. GESA; 2006. [www.gesa.org.au/professional/guidelines/infectioncontrol.cfm](http://www.gesa.org.au/professional/guidelines/infectioncontrol.cfm)
- Queensland Government. Endoscope Reprocessing. Queensland Health; 2009. [www.health.qld.gov.au/EndoscopeReprocessing](http://www.health.qld.gov.au/EndoscopeReprocessing)
- Queensland Government. Infection Control Guidelines. Queensland Health; 2010. [www.health.qld.gov.au/chrisp/ic\\_guidelines/contents.asp](http://www.health.qld.gov.au/chrisp/ic_guidelines/contents.asp)

- Queensland Health. Prevention and Control of Healthcare Associated Infection (HAI) Policy. Standard 2. Reprocessing of Reusable Medical Devices and Surgical Products Standard.  
[www.health.qld.gov.au/chrisp/policy\\_framework/STANDARD2\\_v1.pdf](http://www.health.qld.gov.au/chrisp/policy_framework/STANDARD2_v1.pdf)
- Royal Australasian College of Surgeons. Training for GP Surgical Proceduralists. RACS; 2007.
- Standards Australia. Australian Standard AS/NZS 4187:2003. Cleaning, disinfecting and sterilizing reusable medical and surgical instruments and equipment and maintenance of associated environments in health care facilities. Standards Australia; 2003.
- Standards Australia/Standards New Zealand. Australian/New Zealand Standard AS/NZS 4173:2004. Guide to the safe use of lasers in health care. Standards Australia; 2004.
- Standards Australia/Standards New Zealand. Australian/New Zealand Standard AS/NZS 4360:2004 Risk Management. Standards Australia; 2004.
- Standards Australia/Standards New Zealand. HB 436:2004 Risk Management Guidelines: Companion to AS/NZS 4360:2004. Standards Australia; 2004.

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3. Australian College of Operating room Nurses. ACORN Standards for Perioperative Nursing: G2 Management of the Perioperative Environment. ACORN; 2010.
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5. Australian College of Operating Room Nurses. ACORN Standards for Perioperative Nurses: Standard S7 Infection Prevention. ACORN; 2008.
6. Australian College of Operating Room Nurses. ACORN Standards for Perioperative Nurses: Standard S16 Reprocessing of Reusable Items: Cleaning, Packaging, Sterilisation and Storage of Sterile Supplies. ACORN; 2008.
7. Standards Australia. Australian Standard AS/NZS 4187:2003. Cleaning, disinfecting & sterilizing reusable medical and surgical instruments & equipment and maintenance of associated environments in health care facilities. Standards Australia; 2003: 8.10.
8. Australian College of Operating Room Nurses. ACORN Standards for Perioperative Nurses: Nursing Roles NR4 Instrument Nurse. ACORN; 2008. [www.acorn.org.au/](http://www.acorn.org.au/)
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12. Australian College of Operating Room Nurses. ACORN Standards for Perioperative Nurses: Standard S23 Use of Loan Equipment. ACORN; 2008. [www.acorn.org.au/](http://www.acorn.org.au/)
13. Australian Day Surgery Nurses Association. Best Practice Guidelines for Paediatric Day Surgery. ADSNA; 2009.
14. Australian Day Surgery Nurses Association. Best Practice Guidelines for Patient Education. ADSNA; 2009.
15. Australian Day Surgery Nurses Association. Best Practice Guidelines for Pre Admission Procedures for Day Surgery Units. ADSNA; 2009.
16. Australian Day Surgery Nurses Association. Best Practice Guidelines for the Care of Patients Whilst in the Day Surgery Unit. ADSNA; 2009.
17. Australian and New Zealand College of Anaesthetists. Professional Standard PS4: Recommendations for the Post-Anaesthesia Recovery Room. ANZCA; 2006. [www.anzca.edu.au/resources/professional-documents/](http://www.anzca.edu.au/resources/professional-documents/)
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