Capability Framework for Anaesthetic and Surgical Services

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Introduction:

Colac Area Health Capability Framework:
Colac Area Health's Capability Framework was endorsed by the Board of Directors at the 2017 April Board meeting. Specific Clinical and Associated Capability Statements are designed to set out how a service will be managed and provided.

Capability Framework for Anaesthetic and Surgical Services
The Colac Area Health (CAH) Capability Framework for Anaesthetic and Surgical Services (Capability Framework) is designed to guide the perioperative service in the provision of safe, effective and appropriate care.

The services planned will be those that will best meet the identified needs of the local and surrounding communities using the population profile to assist in determining the service profile.

Decisions about the provision of services will be made in the context levels of risk for procedures, relevant workforce, physical facilities and support services available to provide the care. Inter-organisational relationships will be formalised in documented communication, referral and transfer arrangements with other health services across metropolitan, regional and sub-regional areas. This includes clear policies and protocols for management of members of the community who present with problems outside the defined capability level of Colac Area Health.

Where there is a clear departure or variation from the recommended framework, Colac Area Health will develop an appropriate strategy to mitigate risks. This may include the development of local strategies or the negotiation of solutions within the state-wide system.

The Anaesthetic and Surgical Capability and Procedural statement:

a. Sets out the organisation's requirements for the orderly conduct of perioperative services
b. Establishes minimum standards for the conduct of clinically safe anesthetics and surgical services for Colac Area Health

Objectives of the Capability Framework

- to assist a transparent planning approach for service providers, consumers and the department, based on service capability
- to assist Colac Area Health to provide a service appropriate to their individual circumstances and communities
- to assist Colac Area Health to make informed decisions, by defining the minimum standards in terms of resources, protocols and service arrangements that need to be formalised to manage different degrees of complexity of care

As a result, Colac Area Health will be able to operate within role delineation as a provider of safe and effective services.

Service Level Criteria
Within the Colac Area Health Capability Framework, the core clinical services are categorised into service levels with:

- Level 1 - managing the least complex patients and
- Up to Level 6 - managing the highest level of patient complexity.

Services are designated by the highest level of care provided, even though less complex care may be provided.

The service level criteria for Colac Area Health's perioperative services are:

- Level 4 General Surgery
- Level 4 Gynaecology
- Level 3 Orthopaedics
- Level 2 Paediatric surgery* (please refer to Page 19)
- Level 3 Anaesthetics

Capability Framework Assessment – Relevant to Perioperative Services

Assessment Parameters	***Colac Area Health***
Intensive Care Unit and High Dependency	No
Inpatient Care	Yes
Acute/Chronic Pain Service	No
Drug and Alcohol Services	No
Anaesthetic Registrars	No
Security Staff	No (Requires external assistance via 000)
Night Medical/Anaesthetic Cover	Yes
Code Blue Support	Limited after hours. (May require external assistance via 000)
Blood bank Inventory and Major Haemorrhage support	No major bleeding support.
Cell Saver	No service
Pathology Services	Some onsite service with regards to range of pathology tests and operational availability of onsite laboratory after-hours
Cardiology Support	No onsite service

Limits of suitability for surgery patients

Principles:

1. Limits of suitability for undertaking anaesthesia inform the conduct of safe surgery.
2. Colac Area Health's capability including staff skills, equipment, specialty capability and access to specialist clinical care all contribute to limit setting for surgery patients
3. Best and safe practice will guide anaesthetics practice.
4. Intra-operative anaesthetic and surgical suitability does not always confer post-operative care suitability.

Anaesthesia for Elective and Emergency Surgery:

The terminology used in this Surgical Capability and Procedural Statement is that the Australian Society of Anaesthetists Physical Status scale of ASA 1 – 5, detailed below:

Level of Risk	**Physical Status of Adults**
Low	ASA 1 and ASA 2
Medium	ASA 3
High	ASA 4 and ASA 5

Patients with an ASA of 4 or 5 will not undergo elective procedures requiring sedation, regional anaesthesia or general anaesthesia at Colac Area Health.

	Colac Area Health
ASA Physical Status	• ASA 1-3 only for patients undergoing procedures involving sedation, general anaesthesia or regional anaesthesia. • ASA 4-5 for patients undergoing local anaesthesia only.
Operating Suite BMI	• BMI < 40 – Suitable. • Patients with BMI > 40 can only undergo procedures involving local anaesthesia (no regional anaesthesia, no sedation, no general anaesthesia).
Procedure Room BMI	• BMI < 40 – Suitable. • Patients with BMI > 40 can only undergo procedures involving local anaesthesia (no regional anaesthesia, no sedation, no general anaesthesia).
Patients with high bleeding risk due to bleeding disorders	• Not suitable where rapid or high volume (>500mls) blood loss is likely. • Patients have to be assessed by Anaesthetist regarding suitability of undergoing procedure at CAH.
Procedures with established risks of high blood loss	• Not suitable where rapid or high volume blood loss is likely. • Patients have to be assessed by Anaesthetist regarding suitability of undergoing procedure at CAH.
Diabetes	• Stable diabetes including insulin requiring Type 1 and 2. Patients with unstable diabetes mellitus have to be reviewed by the GP Anaesthetist at least 2 weeks prior to the proposed surgery, with a management plan prepared and enacted.
History of addiction to Drugs of Dependence (Opioid/BDZ/Illicit)[i]	• Patients have to be assessed by Anaesthetist regarding suitability of undergoing procedure at CAH.
Complex Pain e.g. intrathecal pumps, stimulators.	• Not suitable.
Obstructive Sleep Apnoea (OSA)	• Only patients with mild OSA or well-managed intermediate OSA are suitable for CAH *
Surgical Complexity	Please see below

*Please refer to the 'Obstructive Sleep Apnoea Severity' section in the Appendix

Surgical Complexity Characteristics in Relation to BMI

5 levels (SCI – SC V) have been reviewed for the Anaesthetic and Surgical Capability and Procedural statement:

ASA	Surgical Complexity	BMI	Approved
ASA 2	II	BMI <40	Yes
ASA 2	III	<40	Yes
ASA 3	III	< 40	Yes
ASA 2 – 3	IV	< 40	Yes

** Please refer to the definitions for Surgical Complexity Characteristics in the Appendix

Patients with an ASA of 3 and undergoing a Surgical Complexity IV procedure would be the most complex cohort approved to undergo surgery at Colac Area Health. Unless due to clinical emergency, patients with a BMI > 40 should not undergo elective procedures at CAH.

District Director Medical Administration (DDMA) must be consulted if patient is booked for a procedure which is outside of the Capability framework. In the absence of DDMA the Director Nursing, Midwifery and Aged Care to be consulted.

For a prospective patient undergoing a procedure outside the Capability Framework, a discussion between the DDMA/DMNAC, Theatre NUM, surgeon and Anesthetist should be organized to discuss the appropriateness of the procedure at CAH. There has to be a valid clinical reason for the patient to undergo the procedure at CAH e.g. emergency surgery, and solely elective cases not fitting the Capability Framework should not be undertaken at CAH.

Management and Authorisation of Surgical List and Listing Limit

Principles:

1. Safe practice requires manageable surgical listing of cases to be in place.
2. The decision to list a case for elective surgery rests with Perioperative Services Manager in consultation with the Manager Acute Care to ensure aftercare of longer stay patients is within capability.
3. Receipt Surgeons of proposed surgical lists for elective patients are to be scheduled by Colac Area Health.
4. Manageable surgical lists vary according to specialty and Colac Area Health's capability.
5. There is early active management of comorbidities and fitness for surgery.
6. To ensure fair and equitable access for all surgical units and patients.
7. To ensure categorized patients are booked and surgery completed within their clinically required time frame.
8. Patients are provided with easy to understand information about access to surgery and their rights and responsibilities.
9. Patients are fully informed about, and have consented to the procedure (as per DHHS Elective Surgery Access Policy 2015).

Process:

1. Surgeon's Rooms submit an Elective Surgery Request List to Perioperative services for management within at least 4 weeks of the proposed procedures.
2. It is a requirement that each Elective Surgery Request List shall include the categorisation of each case in terms of severity and urgency in the form of Appendix One.

Category					
1		2		3	
Urgent within 30 Days		Semi-Urgent Within 90		Non Urgent within 365 Days	

   a. Uncategorised cases will be afforded a lower priority
   b. Urgency of cases will guide allocation of cases

3. Urgency categories are to be based on the patient's clinical need.
4. Perioperative Services Manager will approve assignment of cases to lists and advise Surgeon's Rooms.
5. Surgical Lists will be prepared in terms of length session estimated procedure time.

Specific Elective List Requirements

DEFINITIONS:
Urgency Categories for Elective patients:
Category 1**:**
- Admission within 30 days is desirable for a condition that has the potential to deteriorate quickly to the point that it might become an emergency.

Category 2:
- Admission within 90 days is desirable due to the clinical condition of the patient.

Category 3:
- Admission within 365 days is desirable due to the clinical condition of the patient.

Admission time frames
Patients assigned to lists will be contacted to undertake pre-admission processes in line with the Principles and Processes according to the Pre-Admission Guidelines.

a. All orthopaedic cases requested for listing are required to be notified to Colac Area Health 40 days in advance of anticipated surgery.

b. All other cases irrespective of urgency or type are to be notified at least 28 days ahead of anticipated surgery.

c. The scheduling of surgery is managed by the Perioperative Services NUM.

Annual Elective Operating Session Planning:

Elective surgery sessions times refer to an allocated period of operating theatre time as follows:
- Morning: 0800 – 1200hrs
- Afternoon: 1300 – 1700hrs
- Half hour allocated to the end of each session for clean-up and set up for next session.

The Annual Elective Operating Session Planner outlines surgeon allocation to each session.

The planner will be finalized after consultation with all relevant stakeholders and the Executive prior to the commencement of the financial year to assist with demand management decisions and WEIS allocations.

Requests for additional sessions may be made to the Perioperative Services NUM and will be referred to the Demand Management Committee for determination.

Additional sessions will be allocated if:
- An appropriate session is available.
- Equipment restrictions do not exist.
- Resources including beds and staff are available.
- Workforce are available.
- Endorsed by the Demand Management Committee.

Guideline:
Access and Management of Elective Surgery and Annual Sessions

Pre-Admission Processes:

Principle:

1. All patients having elective surgical procedures will undergo pre-admission prior to admission.
2. Preadmission assessment of the MR29 questionnaire is to enable staff to implement a care plan and identify any clinical or personal factors that may influence clinical and personal care.
3. Preadmission assist in discussing with patients detail on surgery, hospital routine and what to expect both in hospital and on transfer of care to home or another setting.
4. The preadmission process will inform the Anaesthetist and the Surgeon.
5. The preadmission process will be completed by a Registered Nurse.

Guideline:

Access and Management of Elective Surgery and Annual Sessions

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Public Pre-Anaesthetics Clinic For Non-urgent Elective Patients

Principles:

1. For the safety of patients undergoing General Anaesthetic (GA) or who in the opinion of Pre-Admission Clinic require a Pre-anaesthetic assessment, shall undergo pre-anaesthetic assessment.
2. Pre-anaesthetic assessment supports the appropriate and effective triage and assessment of patients undergoing procedures requiring anaesthetic and contributes to:
    a. safe, high quality surgical care
    b. conducting an efficient surgical process
    c. positive patient outcomes.
3. Pre-anaesthetic assessment will consider, in the context of the proposed procedure and patient's co-morbidities, Colac Area Health's capability including:
    a. facilities,
    b. equipment,
    c. staffing skills
    d. patient suitability
4. Prior to agreeing to any procedure the Anaesthetist must be satisfied that necessary postoperative monitoring capability is available for the required time frame.
5. A patient's MR29 is to be submitted to the Pre-Admission team at least 3 weeks prior to the proposed procedure. It is the referring doctor's responsibility to ensure that the patient's MR29 is completed and submitted to the Pre-Admission team within the timeframe described.
6. From the content of the MR29, the Pre-Admission team identifies high-risk patients and notifies the Anaesthetist group to review.
7. An Anaesthetist, in conjunction with the Pre-Admission team, will arrange for high risk patients to undertake a pre-anaesthetic assessment at least 2 weeks prior to the proposed procedure, to optimise patient care.
8. Elective procedures which are expected to be uncomplicated e.g. endoscopies, gastroscopies, colonoscopies, carpal tunnel surgeries involving regional blocks only, can have an anaesthetic assessment on the day of the procedure. However, the patients' MR29 must be submitted 3 weeks prior to the proposed procedure, and high risk patients have to undertake a pre-anaesthetic assessment with the Anaesthetist at least 2 weeks prior to the proposed procedure.
9. In formulating theatre lists, the pre-anaesthetic assessment time for each procedure must be considered and allocated when scheduling to ensure sessions are not overbooked.

10. If the anaesthetist assesses the patient to be unfit for the procedure on that day, the procedure will be immediately cancelled.

11. For invasive surgical and gynaecological procedures, it is not acceptable for patients to be consented only on the day of the procedure. If prior discussions between the surgeon and the patient regarding consent have taken place, and it had been agreed that the patient will only provide informed consent on the day of the procedure, there should be documented evidence provided. Patients shall be provided with ample time to make an informed decision.

12. Patients who are assessed by the referring doctor to require expedited management, can be arranged for a pre-anaesthetics assessment and undergo the proposed procedure in a more urgent timeframe. In these instances, the referring doctor shall liaise with the Pre-Admission team to arrange for expedited management of the patient.

Guideline:

Public Pre-Anaesthetics Clinic

Open Access Endoscopy

Definition:

Open Access Endoscopy is defined as the undertaking of an endoscopic procedure requested by a referring general practitioner without a full outpatient based consultation by the proceduralist performing the endoscopy.

Principles:

1. Open Access Endoscopy expedites the care of a patient by facilitating the direct referral of the patient by their local medical practitioner for upper gastrointestinal endoscopy and/or colonoscopy without full consultation in the rooms with the surgeon or proceduralist prior to the day of surgery.

2. On the day of the proposed procedure, the surgeon/proceduralist undertakes a brief consultation with the patient; confirms the medical safety of the procedure and suitability of the patient, confirms the indication and facilitating the patient to make an informed consent for the procedure.

3. It is ultimately the surgeon's/proceduralist's responsibility to obtain informed consent from the patient.

4. The patients' MR29 must be submitted 3 weeks prior to the proposed procedure, and high risk patients have to undertake a pre-anaesthetic assessment with the Anaesthetist at least 2 weeks prior to the proposed procedure.

Authorised List of Allowed Procedures:

Principles:

1. To ensure the conduct of safe surgical procedures at Colac Area Health a set of "Authorised List of Allowed Procedures" will be published and maintained.
2. Listing of procedures will be managed through Credentialing and Registration Advisory Committee.
3. Advances in technology and procedural techniques will be considered when making amendment to the "Authorised List of Allowed Procedures".
4. Initial establishment of the allowed procedures will be compiled from the procedure codes contained in medical records.
5. Initial compilation will be reviewed and recommendation made to the Chief Executive by the Credentialing and Registration Advisory Committee.

6. An annual process of allowed procedures reviews will be undertaken by the Credentialing and Registration Advisory Committee having regard for applications made under the New Technology or New Procedures process.
7. A surgeon wishing to be credentialed and granted privilege may seek to have specific procedures approved at initial appointment.
8. No elective surgical procedure may be undertaken that has not been included on the List of Allowed Procedures.

New Procedures

Principles:

1. All new procedures must go through a process of approval from the impacted Nurse Unit Managers to review staff skill level , education requirements, suitability for the organization and equipment management (include allied health).

2. New procedures to be communicated at the Credentials and Registration Advisory Committee (CARAC) and the Demand Management Committee.

Urgency of Cases and the potential of Fatigue[5.]

Principles

1. All Colac Area Health staff and Visiting Medical Staff are to work in a safe environment.
2. Anaesthetists, Surgeons and nursing staff are to be supported to be fit for conduct of duties.
3. Procedures and processes in place are to promote safety and provide support to all for the safe conduct of business.
4. The on call anaesthetist is entitled to make an assessment of their capacity to carry out possible service demands during their time as the on-call anaesthetists having regard for the clinical requirements of the patient/s who may need the anaesthetist presence.

Preamble:

Colac Area Health requires access to after-hours anaesthetics and surgical services to provide access to urgent and emergency surgical care.

Visiting anaesthetists and surgeons conduct businesses in their own right.

Circumstances can arise where there is a conflict between providing emergency care and conduct of normal business when emergency care was provided overnight.

Particularly for anaesthetists, there is a need to manage the rostering of on-call obligations to minimize impact on anaesthetic support for surgery lists on days following on-call. (similarly the management of on-call rosters for Urgent Care ought to have a similar approach in principle).

Reducing the potential for fatigue is an important consideration under this Anaesthetic and Surgical Capability and Procedural statement.

Categories of Urgency:

- Urgent, requiring immediate action as soon as possible.
- Semi-urgent where the definitive management can be delayed for some hours up to half a day, and
- Non urgent which can be safely delayed until the following day or longer.

Process

1. Urgent: To manage immediate and life threatening urgent
    a. the anaesthetist must attend as soon as possible
    b. Anaesthetist may send out a concurrent call for some other anaesthetist to assist as soon as possible
    c. In the event of fatigue hand over the provision of the ongoing anaesthetic care to a colleague
2. Semi-Urgent: To manage semi-urgent or non-life threatening cases negotiations may take place between the on-call anaesthetist and the surgeon requesting their services. Factors that may influence the outcome include:
    a. the relative urgency of the patient’s needs
    b. anaesthetist and surgeon’s planned schedule the following routine working day
    c. associated costs to Colac Area Health compared with the relative urgency of the case
    d. another anesthetist being prepared to meet a surgeon’s time constraints for semi-urgent cases

Conduct of Emergency Surgery:

Principles:

1. All emergency surgical cases will be managed promptly and efficiently.
2. Anaesthetic, surgical and perioperative resources will be allocated to emergency cases.
3. Emergency cases are those that are of a serious, unexpected, and life threatening nature requiring immediate action.
4. The need for emergency surgery can take place at any time, day or night and can include:
    a. patients who present to Urgent Care and require emergency surgery,
    b. obstetric patients requiring an unplanned caesarean section
    c. current inpatients who have recently undergone surgery and require unplanned returns to theatre
        i. The Urgency level of emergency surgery will be in accord with the Classification of Clinical Urgency Categories in General Surgery below:

Classification of Clinical Urgency Categories in General Surgery are defined as:	
Priority level	**Timeframe for surgery** (Time from booking to arrival in operating theatre)
1	< 30 minutes; immediate life-threatening
2	< 1 hour; life threatening
3	< 4 hours; organ/limb threatening/obstetric morbidity
4	< 8 hours; non-critical, emergent
5	< 24 hours; non-critical, non-emergent, urgent
6	< 48 hours; semi-urgent, not stable for discharge

        ii. The Urgency level for emergency caesarean section will be in accord with the Classification of Clinical Urgency Categories in Obstetrics as set out In the table below:

Classification of Clinical Urgency Categories in Obstetrics are defined as RANZCOG Categories:		
1	Urgent threat to the life of a woman or foetus	Procedure to be commenced as soon as possible
2	Maternal or foetal compromise but not immediately life threatening	Procedure to commence as soon as practical
3	Needing earlier than planned delivery but without currently evident maternal or foetal compromise.	Procedure to occur generally within a 24 hour period
4	At a time acceptable to both the woman and the caesarean section team, understanding that this can be affected by a number of factors.	Booking date and time negotiated.

The General Surgeon and Anaesthetist must both endorse the requirement for emergency surgery.

Guideline:

Management of Emergency Perioperative Procedures

Staff Essential Skills Assurance – ALS training

Principle:

1. That a high level of essential skills be maintained in Perioperative Services to ensure there is an advanced capacity to respond to clinical challenges.
2. To provide reassurance to all visiting medical staff of Perioperative Services clinical skills.

Process:

1. The NUM, ANUMs and CNs are required to undertake annual Advanced Life Support training.
2. An initial training program be conducted for all nursing staff listed above.
3. An annual refresher program be conducted by Workforce Training and Development for theatre staff listed above.

Hospital Initiated Postponements of Elective Surgery

Principle:

It is recognized that periodically Colac Area Health may have occasion where the Surgical Service will not be available and the health service will need to cancel elective surgery.

CAH aims to:

1. Keep Hospital initiated postponements to a minimum.
2. Ensure patients have no greater than two hospital initiated postponements.
3. Make every effort to reduce the anxiety caused through cancellation of surgery.
4. Provide appropriate staffing skill mix, and meet Enterprise Bargaining Agreement (EBA) and budgetary requirements.
5. Comply with the "Fatigue Management and Safe Working Hours" Policy.

Types of postponement

1. Planned Cancellation: Inability to offer surgical services for a finite duration of time. A planned cancellation may only be initiated after all reasonable attempts have been undertaken to address resource issues causing the lack of availability.
2. Contingency Cancellation: This mechanism may be actioned in the event of scheduled or urgent maintenance to or catastrophic failure of any element of offering a safe service.
3. Responsive cancellation: There has been an incident which requires theatre to be closed for a period of time defined by the executive.

Process

1. The Perioperative NUM will ensure principles are met and reported to the Director Nursing, Midwifery and Aged Care and District Director Medical Administration as required.
2. Any cancellation of surgery for multiple patients or for a length of time greater than two hours should be communicated to the executive.

Guideline:

Hospital Initiated Postponements of Elective Surgery

REFERENCES: *(include relevant Compliance, Key Legislation, Acts and Standards)*

1. Queensland Health 2015, Clinical Practice Guidelines, Available from: https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/service-delivery/cscf/modules/default.asp [Accessed December 20 2015].

2. Qld Dept of Health Document Number- QH-GDL-395:2013.

3. Credentialing and defining the scope of clinical practice for medical practitioners, 2011, DHHS.

4. Colac Area Health Board Credentialing and Scope of Practice Capability and Procedural Statement (2015).

5. Australian and New Zealand College of Anaesthetists position paper (PS43 2007) on "STATEMENT ON FATIGUE AND THE ANAESTHETIST".

6. Mercy Health - Emergency Surgery WMH Procedure.

7. Best Practice Guidelines for Ambulatory Surgery and Procedures 2013, Australian day Surgery Nurses Association.

8. Department of Human Services Elective Surgery Access Policy 2105.

9. Department of Health 'A framework for emergency surgery in Victorian Public Health Services' 2012.

10. Queensland Department of Health Document anaesthesia in non-bariatric surgery of obese patients.

Prepared By

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Final Endorsement by:

Committee	Date
Board of Directors at 30 October 2017 meeting	30/10/2017

Final Approval by Executive Director or CEO

Name	Position	Date
G Iles	CEO	30/10/2017

APPENDIX

1. Surgical Services delineation

The table below is one of several components in the build-up of the documentation of the classification of surgical services. The first is the surgical complexity characteristics described above, next is Workforce requirements which includes specific risk considerations where staff require extra qualifications, such as in Obstetrics and Paediatrics.

Level 3	Level 4
▫ provided mainly in hospital setting with designated but limited surgical, anaesthetic and sterilising services. ➢ 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. Note: 1. may be offered 24 hours a day and may include day surgery. 2. may also provide emergency surgical	▫ provides surgical services 24 hours a day for: ➢ 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 ➢ part of service network with higher level services, and treatments Provides emergency services to all levels except super specialty services (Level 6)

Definition For Surgical Complexity Characteristics	
Complexity	**Requirement**
Surgical complexity I (SCI) e.g. local anaesthetic for removal of lesions	A level of surgical complexity that: • is an ambulatory / office surgery procedure • requires local anaesthetic, but not sedation

	• requires a procedure room, aseptic technique and sterile instruments, but not an operating theatre • requires access to resuscitation equipment (including oxygen) and means of delivery • requires an area where patients can sit, but not a recovery room • generally does not require post-operative stay or treatment • does not require support services other than suture removal or a post-operative check
Surgical Complexity II (SCII) e.g. local anaesthetic and/or sedation for excision of lesions	A level of surgical complexity that: • is usually an ambulatory, day-stay or emergency department procedure • requires local anaesthesia or peripheral nerve block and possibly some level of sedation, but not general anaesthesia • requires at least one operating room or procedure room, and a separate recovery area
Surgical complexity III (SCIII) e.g. general anaesthesia, for example inguinal hernia	A level of surgical complexity that: • usually requires general anaesthesia and/or a regional, epidural or spinal block • requires at least one operating room and a separate recovery room • may be a day-stay / overnight case or extended-stay case • may have access to close observation care area/s.
Surgical complexity IV (SCIV) e.g. general anaesthesia for abdominal surgery such as laparotomy	A level of surgical complexity that: • involves major surgical procedures with low to medium anaesthetic risk • usually requires general anaesthesia and/or a regional, epidural or spinal block • has potential for perioperative complications • has a close observation care area • has access to intensive care services • may have capacity to provide emergency procedures.
Surgical complexity V (SCV) e.g. general anaesthesia for any major or complex surgery **NOT SUITABLE FOR CAH**	A level of surgical complexity that: • includes major surgical procedures with high anaesthetic risk • includes surgery and anaesthetic risk with highest potential for intra- and post-operative complications • provides the most complex surgical services • requires specialist clinical staff, equipment and infrastructure • has on-site intensive care services • > may have extensive support services available.

General Surgery

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	• Minor outpatient and same day procedures only by GP or visiting general surgeon	**As for level 2 plus:** • Day surgery type cases, uncomplicated elective surgery and emergency	**As for level 3 plus:** • Surgery by GPs, general surgeons and visiting subspecialists • Broad range	**As for level 4 plus:** • General surgeons • Some sub-Specialists • May have visiting sub-	**As for level 5 plus:** • Full range of surgical sub-specialists • State-wide referral role • Undergraduate

	• Inpatient care following surgery elsewhere • Resident service with a nursing post or clinic outpatient care • Visiting GP 24 hour cover by Registered Nurse	surgery • GP and visiting general surgical specialist • Visiting anaesthetist with visiting surgeon • Theatre trained RN Access to some allied health services	of day and general surgery and some specialty surgery • Theatre trained nurses • More than 1 theatre • *May* include high-dependency nursing unit • Access to designated allied health services Some allied health undergraduate education	specialists • Registrar/RMO • ICU • May have some teaching and research role • Undertakes most emergency surgery Access to specialised allied health services	and post graduate teaching role • Research role • Undertakes emergency surgery May include kidney and liver transplantation in selected sites

Gynaecology

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		• **Common and** intermediate procedures on low or moderate risk patients by credentialed GP or visiting surgeon • Access to gynaecologist visiting or by tele health • Access to some allied health services	**As for level 3 plus:** • Common, intermediate and some major procedures on low and moderate risk patients performed by visiting gynaecologists • Links with oncology, radiotherapy and palliative care services • Access to designated allied health services • Some allied health undergraduate education	**As for level 4 plus:** • Diagnostic services and surgery on low, moderate and high risk patients by on-call gynaecologists • Access to specialist Clinical Nurse Consultant • May have gynaecology Registrar /RMO • Regional referral role • May have some teaching and research role Access to specialised allied health services	**As for level 5 plus:** • Ability to deal with all cases including full range of complex cases in association with other specialists including reproductive endocrinology, infertility, gynaecological malignancy • Full emergency services • State-wide referral role • Undergraduate and post graduate teaching role • Research role Gynaecology registrar/RMO and possibly registrars in subspecialties

Orthopaedics

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	• **Minor reduction of** fractures performed on low-risk patients by GP or visiting general surgeon with experience in orthopaedics Orthopaedic consultation available	**As for level 2 plus:** • Common and intermediate procedures on low or moderate risk patients performed by visiting orthopaedic or general surgeon credentialed in orthopaedics • General orthopaedic equipment and theatre x-ray available • Preferably access to specialist Clinical Nurse Consultant • Access to some allied health services	**As for level 3 plus:** • Common and intermediate procedures on low or moderate risk patients performed by on-call orthopaedic surgeon • Access to level 4 rehabilitation service • Access to specialist Clinical Nurse Consultant • Access to designated allied health services Some allied health undergraduate education	**As for level 4 plus:** • Full range of major diagnostic and procedures on low, moderate and high risk patients performed by on call orthopaedic surgeons • May provide regional services • May have teaching and research role • Orthopaedic registrar on-call • Access to subspecialties • Link to level 5 rehabilitation service Access to specialised allied health services	**As for level 5 plus:** • Ability to deal with all cases including full range of complex cases (and all emergency) in association with other specialists • State-wide referral role • Undergraduate and post graduate teaching role • Research role Link to level 6 rehabilitation role

Pediatric Surgery*

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	• **No surgery** **On-call paediatric advice** **Sedation only for uncomplicated dental procedures**	**As for level 2 plus:** • Day surgery, uncomplicated elective surgery and emergency surgery • Limited surgery by visiting paediatric surgeon or surgeon with paediatric skills Anaesthetist with paediatric skills	**As for level 3 plus:** • Limited surgery by visiting paediatric surgeon Day surgery, uncomplicated elective surgery and emergency surgery	**As for level 4 plus:** • Range of paediatric Surgery 24 hour on-call paediatric anaesthetist	**As for level 5 plus:** • Full range of paediatric surgery Onsite or 24 hour paediatric anaesthetic services

* Only emergency Paediatric surgery for stabilization of the patient can be undertaken at CAH. Patients should be transferred to a tertiary health facility as soon as possible following emergency surgery.
* Paediatric patients under 1 year of age are not suitable for CAH.

2. Anaesthetics Services Delineation

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	• Analgesia/minimal sedation available by visiting medical officer	**As for level 2 plus:** • General Anaesthetics on low-risk patients given GP anaesthetists or general anaesthetist • May have visiting specialist anaesthetist	As for level 3 plus: • General anaesthetics on low-risk patients given by accredited medical practitioner • Specialist anaesthetist appointed for consultation and to provide service for moderate risk patients • Specific operating room anaesthetic staff support available	**As for level 4 plus:** • Specialist anaesthetist on 24 hour roster for low, moderate and high risk patients • Nominated specialist director of anaesthetic staff • Anaesthetic registrar on site 24 hours	**As for level 5 plus:** • Sub specialists, research and teaching of graduates and undergraduates Teaching and research role

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3. Obstructive Sleep Apnoea Severity

Severity of OSA:

The gold standard for diagnosis of OSA is polysomnography (sleep studies). Different indices are used. In general, more severe OSA is associated with a higher apnoea-hypopnoea index (AHI), respiratory disturbance index (RDI) and lower saturation nadir.
An AHI of less than 5 is considered normal. An AHI of 5-15 is mild; 15-30 is moderate and more than 30 events per hour characterizes severe sleep apnea.

Day time symptoms and development of cardiovascular complications are associated with increased severity of OSA. The presence of central apnoeas or obesity hypoventilation syndrome further increases the risk of postoperative complication.

OSA & Surgical Procedure Related Risk:

Low	Local anaesthesia infiltration, TRUS biopsy, rigid cystoscopy without diathermy, endoscopy, cataract
Intermediate	Airway, laparoscopic, breast, minor orthopaedic, peripheral vascular, prostate
High	OPIOID REQUIRING joint replacement, open abdominal, pelvic, thoracic