Queensland Health

Close observation services - children

CSCF v3.2

Module overview

Please note: This module must be read in conjunction with the Fundamentals of the Framework (including glossary and acronym list) and the Children's services preamble and Intensive care services – children's, Medical services – children's, Anaesthetic services – children's and Surgical services – children's CSCF modules.

Introduction

Close observation services – children's (COS-C) provide specialist expertise and facilities for the support of children and their families, using the skills of medical, nursing, allied health and other staff. They provide a high level of observation, monitoring and early intervention for children at risk of progressing to serious illness or developing complications post-surgery. COS-C provide a level of monitoring and care that is intermediate between a general ward and an intensive care setting. COS-C should only be provided in sites that already provide a minimum of either Level 3 Medical services – children's or Level 3 Surgical services – children's and are able to meet the COS-C module requirements. The overarching principle of this document is to standardise a safe level of COS-C care.

This module applies to public and private hospitals. This module does not apply to day hospitals offering paediatric services; however they are encouraged to meet the module requirements.

This module recognises three levels that a COS-C may be provided, as outlined below.

Table 1: COS – C levels of services

	Description of service
1	COS-C in hospitals with limited paediatric medical and surgical services. Where a child requires an intermediate level of monitoring and care, close observation would be required until definitive care could be arranged through a transfer to a higher-level facility or prior to stabilization of the child.
2	COS-C in hospitals with a dedicated unit or nominated close observation beds. This service is available 24 hours a day, 7 days a week. The service may provide generalist care for children with medical needs exceeding ward capability, or for children receiving surgery and identified as needing this level care post procedure
3	COS-C are provided in a designated unit in hospitals with specialist medical practitioners accessible 24 hours a day, 7 days a week.

If the health care facility is providing Medical Services – Children's Level 5 or Surgical Complexity level IV surgical services for medium risk children or providing Surgical Complexity level III surgical services for children with ASA score 3, they are required to provide on-site close observation care area/s as per the **Surgical services – children's CSCF module** and the **Anaesthetic services – children's CSCF module** (see also Table 1).

Table 2: Children's anaesthetic and surgical services / levels of complexity requiring on-site close observation services – children's

Level of complexity	Anaesthetic services – children's	Surgical services – children's
	Medium risk children (ASA 1-2) due to age or history of prematurity, including ex-premature infants ≥T44c PCA*.	Surgical complexity IV procedures for medium-risk patients
	>T44c or ex-premature infants ≥52 weeks PCA (ASA 3)**.	Surgical complexity IV with ASA 3

* PCA refers to post-conceptual age

** ASA refers to the American Society of Anesthesiologists (ASA1) scale for anaesthetic risk and physical status – children. See **Surgical services – children's CSCF module** for further details.

COS-C may or may not be provided in a hospital where on-site intensive care services are provided—please refer to the **Intensive care services CSCF module** and/or **Intensive care services – children's CSCF module**. However, COS-C are out of scope of the Intensive Care services modules – adult and children.

It should be noted that facilities providing children's medical and/or surgical services, as per the current **CSCF Children's services preamble**, must:

- provide rapid local assessment and management of the acutely unwell child
- have access to paediatric life support equipment and monitoring
- have a designated area that has the capacity to care for the child/children until rapid resolution or transfer to a higher-level service
- have documented processes for referral to/from higher-level services within the relevant children's service network.

For the purposes of this module, COS-C should be provided in a designated physical space which may be located within a general ward or children's ward, intensive care unit (ICU) or as a separate ward/unit. COS-C areas require designated floor space to accommodate one or more beds plus the equipment needed to manage children requiring increased observation and monitoring.

Beds in these designated spaces may be able to flex between a regular ward bed and a close observation bed or alternatively flex between a close observation bed and an ICU bed provided the bed and surrounding space has the equipment and staffing required to provide COS-C.

The COS-C must have a clear clinical governance structure with admission and discharge criteria. All children admitted to the COS-C will have a designated registered medical officer. Each COS-C will collect all required information to meet reporting standards and be the focus of regular quality assurance reviews.

Service networks

In addition to the requirements outlined in the **Fundamentals of the framework**, documented processes for the consultation, referral and transfer (as required) of children to/from higher CSCF services to provide safe, ongoing care and management for children, must be available in each facility, including:

- established network for accessing support and/or advice following local pathways
- formal escalation pathways from COS-C where a child's care requirements exceed the scope of the service or their condition continues to deteriorate (urgent transfer to a more appropriate level of care is required by following established local intra or inter-hospital pathways for escalation, with the early involvement of Retrieval Services Queensland (RSQ))
- formal de-escalation pathways from COS-C once a child is assessed as no longer requiring close observation (using the established de-escalation pathway), the child can be transferred to a general ward or back transferred to the referring facility/hospital
- established educational networks for the provision of regular education and training to support capability levels for staff working in COS-C.

Service requirements

In addition to what is outlined in the **Fundamentals of the framework**, and the **Children's services preamble**, the general services requirements for a COS-C include the following:

- resources for immediate resuscitation and management of the critically ill child

- age and weight appropriate equipment available to manage short-term emergencies
- physiologic monitoring and appropriate support equipment at each bed space
- relevant clinical indicator data provided to satisfy accreditation and other statutory reporting obligations
- patient safety and quality incidents are recognised, reported and analysed by the multidisciplinary team and this information is used to improve safety
- specific guidelines to facilitate appropriate and timely referral to local child protection services, in addition to health workers demonstrating knowledge of pathways for child protection.

Workforce requirements

The service will demonstrate desirable qualification and training requirements by fulfilling the below.

- Ongoing commitment to maintenance of workforce competencies, skills and capacity.
- All nursing, medical and allied health staff are required to have competency in Paediatric Basic Life Support.
- Medical: attending medical staff are required to be proficient in the appropriate assessment and acute management of children that are admitted to the COS-C. It is necessary to have immediate access, 24 hours a day to medical staff with recognised training in acute assessment and resuscitation of children (including recognition and response to the deteriorating child, teamwork skills and paediatric skills) that is documented and maintained for recency at the appropriate level. Supervising medical staff, should have appropriate clinical training with the relevant college and a skillset to deal with most emergencies.
- Nursing: a complement of nurses who have completed either:
  - a post-graduate program in paediatrics by an accredited tertiary institution,
  - the Acute Paediatric Transition to Practice Program, or
  - the Paediatric Intensive Care Transition to Practice Statewide Programs.
- Allied Health: staff working in a COS-C must undertake education and training relevant to discipline specific capability and competency requirements or established standards of practice aligned with the service level.

Specific risk considerations

In addition to risk management outlined in the Fundamentals of the framework, specific risk considerations for close observation services include:

- clear admission criteria to, and discharge criteria from, the COS-C
- documented scope of the service that determines the safe functioning of the COS-C.
- clearly documented ongoing professional development program for staff of the COS-C to satisfy accreditation and other statutory reporting obligations

- clear escalation pathways established to facilitate timely transfer to a higher-level service in the event the child's condition deteriorates
- clear de-escalation pathways to facilitate transfer to a general ward or back transfer to the referring facility/hospital (once a child is assessed as no longer requiring close observation)
- availability of telehealth support from higher-level service and relevant sub-specialties (telehealth should preferably be at the bedside, so the child can be visualised).

Table 3: Close observation services – children's

	Level 1	Level 2	Level 3
Service description	As per module overview, plus: • Provides rapid local assessment and management of the acutely unwell child usually in the context of minimal facility resources for children's care. • Capacity to look after children requiring COS-C until rapid resolution or transfer to higher-level care. • Usually provides management of single system disorders for children with low acuity medical conditions. • Care is provided for a limited duration in consultation with higher-level service. • Documented processes exist for referral to/from higher-level services within relevant paediatric service network.	As per Level 1, plus: • Capacity to look after children of any age requiring COS-C regardless of underlying chronic medical conditions, for an unlimited duration until resolution of the condition or until sub-specialist services or intensive care services are required.	As per Level 2, plus: • Access to sub-specialist services.
Service requirements	As per module overview, plus: • Access to continuous oxygen saturation and HR physiologic monitoring for all children admitted to the COS-C. • Use of endorsed paediatric guidelines for acute illness or conditions that require more intensive treatment or monitoring than typically provided in a ward environment.	As per Level 1, plus: • Access to specialist/s with paediatric acute care skills for consultation on admission to the COS-C and at any time during admission. Specialists may be on-call provided they are able to be onsite within 30 minutes. • Multidisciplinary team approach used in care / treatment of children.	As per Level 2, plus: • Experienced multidisciplinary team with advanced knowledge and skills in delivery of children's services pertaining to specialty / sub-specialty area. • Presence of onsite Level 5 or 6 children's intensive care service.

	Level 1	Level 2	Level 3
	• Local level paediatric basic life support simulation training occurring on at least a 12 monthly basis which may be facilitated by tertiary education networks. • Telehealth services are available with higher-level service and relevant sub-specialties. • Members of the multidisciplinary team must be suitably qualified and experienced in general paediatric principles and practice.	• Clear links to facilities with Medical services – children's CSCF Level 5 and Level 6 for both clinical and educational support and referral, including telehealth support.	
Workforce requirements	As per module overview, plus: **Medical** • Registered medical practitioner on site whilst a child is admitted requiring COS-C. • Specialist medical practitioner with credentials in paediatrics or FACEM PEM or CICM Paediatrics available during business hours and accessible after hours within 30 minutes. This clinician may be based at another facility but has oversight of clinical governance. **Nursing** • Minimum of two nurses with experience onsite and readily available to assist if needed when there is a child admitted requiring COS-C.	As per Level 1, plus: **Medical** • Registered medical practitioner with paediatrics experience onsite at all hours and immediately available to the COS-C. • Access to paediatric palliative care specialists 24 hours a day, via telehealth services if **required.** **Nursing** • Minimum of two registered nurses readily available to provide COS-C, with appropriate paediatric qualifications and / or have at least 5 years relevant experience in paediatrics. • Senior registered nurses employed to provide COS-C that have a paediatric	As Level 2, plus: **Medical** • Specialist medical practitioner with credentials in paediatrics or FACEM PEM or CICM Paediatrics onsite during business hours and accessible after hours. Ideally this specialist is not also on-call or responsible for neonatal services. **Nursing** • Senior registered nurse in charge who has paediatric experience and critical care postgraduate qualification.

	Level 1	Level 2	Level 3
	• The nurse allocated to the child must be a registered nurse who: – has successfully completed the Acute Paediatric Transition to Practice Statewide Program (articulation or staff development modes), and/or – has successfully completed a paediatric postgraduate qualification (or working towards), and/or – has at least 5 years' relevant experience in paediatrics. • Minimum nurse to patient ratio of 1:2 (clinically determined) with access to additional nursing support staff as required. • Ongoing training program with specific paediatric content, including recognition and management of the deteriorating patient. **Allied health** • Access, during business hours, to appropriate allied health specialties as required.	postgraduate qualification (or working towards) **Allied health** • Well-developed, multidisciplinary, allied health team approach to managing care, with some allied health professionals holding children specific qualifications and/or experience. • Access – during business hours – to allied health professionals with relevant qualifications and experience in children's service delivery which may include, but not limited to physiotherapy, pharmacy, dietetics, occupational therapy, social work, speech pathology or Indigenous health support as required. **Other:** • Access, during business hours, to biomedical support for equipment maintenance.	
Specific risk considerations	• Routine use of the Children's Early Warning Tool (CEWT) score to identify risk. • Easy access to telehealth services. • Patient safety and quality incidents are recognised, reported and analysed by the	As per Level 1, plus: • Initiation, where indicated, of advanced paediatric life support and stabilisation prior to PICU/ICU admission or retrieval.	As per level 2

	Level 1	Level 2	Level 3
	multidisciplinary team and this information is used to improve safety.		

Table 4: Support service requirements for close observation services – children's

	Level 1		Level 2		Level 3	
	On-site	Accessible	On-site	Accessible	On-site	Accessible
Anaesthetic – children's *	3		4		5	
Intensive care – children's		4		4	5	
Medical – Children's*	3		4		4	
Medical imaging	3		4		5	
Medication	3		4		5	
Mental health - Child & Youth		4		4	5	
Neonatal *		4		4	5	
Pathology		3		4	5	

	Level 1		Level 2		Level 3	
Perioperative (relevant section/s)	3		4		5	
Surgical – Children's *	3		4		5	

On-site means staff, services and/or resources located within the health facility or adjacent campus including third party providers.

Accessible means ability to utilise a service (either located on-site or off-site) or skills of a suitably qualified person (who may be either on-site or off-site)—without difficulty or delay—via various communication mediums including but not limited to face-to-face, telehealth, telepharmacy, and/or outreach

* If providing anaesthetic, medical, surgical or neonatal services

Legislation, regulations and legislative standards

Refer to the **Fundamentals of the Framework** for details.

Non-mandatory standards, guidelines, benchmarks, policies and frameworks

In addition to what is outlined in the **Fundamentals of the Framework**, the following are relevant to close observation services – children's:

- Australian and New Zealand College of Anaesthetists, Joint Faculty of Intensive Care Medicine, Australasian College for Emergency Medicine. Guidelines for transport of critically ill patients https://acem.org.au/Search-Pages/Search?txtSearchBox=Minimum%20Standards%20for%20Intrahospital%20Transport%20of%20Critically%20Ill%20Patients
- ACCCN Workforce Standards for Intensive Care Nursing: Systematic and evidence review, development, and appraisal https://www.australiancriticalcare.com/article/S1036-7314(17)30209-6/pdf
- Australian College of Critical Care Nurses. ACCCN Position Statement (2006) on the Use of Healthcare Workers other than Division 1 Registered Nurses in Intensive Care. ACCCN; 2006. https://www.acccn.com.au/documents/item/21
- Australian College of Critical Care Nurses. ACCCN Position Statement (2012) on Organ and Tissue Donation and Transplantation: The roles of the critical care nurses and the critical care units and the provision of critical care education. ACCCN; 2012. https://www.acccn.com.au/documents/item/18
- Australian College of Critical Care Nurses. ACCCN Resuscitation Position Statement (2006): Adult and Paediatric Resuscitation by Nurses. ACCCN; 2006. https://www.acccn.com.au/documents/item/17
- Australian College of Critical Care Nurses. ACCCN Position Statement on critical care nurse education (2017). ACCCN; 2017 https://www.acccn.com.au/documents/item/715
- Australian College of Critical Care Nurses. ACCCN Position Statement - Partnering with Families in Critical Care. ACCCN; 2015 https://www.acccn.com.au/documents/item/289
- Australian Council on Healthcare Standards. Intensive Care Indicators. ACHS; 2010. www.achs.org.au
- College of Intensive Care Medicine of Australia and New Zealand. Minimum Standards for Intensive Care Units: Review IC-1. CICM; 2016. www.cicm.org.au/ https://www.cicm.org.au/CICM_Media/CICMSite/CICM-Website/Resources/Professional%20Documents/IC-1-Minimum-Standards-for-Intensive-Care-Units_2.pdf
- College of Intensive Care Medicine of Australia and New Zealand. IC-2 Guidelines on Intensive Care Specialist Practice in Hospitals Accredited for Training in Intensive Care Medicine. CICM; 2013. http://cicm.org.au/CICM_Media/CICMSite/CICM-

Website/Resources/Professional%20Documents/IC-2-Guidelines-on-Intensive-Care-Specialist-Practice_2.pdf

- College of Intensive Care Medicine of Australia and New Zealand. IC-4 Guideline on The Supervision of Vocational Trainees in Intensive Care Medicine. IC-4 CICM; 2013. http://cicm.org.au/CICM_Media/CICMSite/CICM-Website/Resources/Professional%20Documents/IC-4-Guidelines-on-the-Supervision-of-Vocational-Trainees.pdf
- Queensland paediatric emergency guidelines available on: https://www.childrens.health.qld.gov.au/qpec-statewide-guidelines/
- QPCCP Guidelines (under development)
- PCOU Competency Framework
  - Clinical Pathways
- Australasian Health Infrastructure Alliance. Australasian Health Facility Guidelines v7.0. Part B–Health Facility Briefing and Planning, HPU 360 Intensive Care Unit. https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0360_7.pdf
- College of Intensive Care Medicine of Australia and New Zealand. Guidelines on Standards for High Dependency Units for Training in Intensive Care Medicine. IC-13 CICM; 2019. https://www.cicm.org.au/CICM_Media/CICMSite/CICM-Website/Resources/Professional%20Documents/IC-13-(2019)-Guidelines-on-Standards-for-High-Dependency-Units.pdf

Reference list

1. College of Intensive Care Medicine of Australia and New Zealand. Guidelines on Standards for High Dependency Units for Training in Intensive Care Medicine. CICM; 2019. https://www.cicm.org.au/CICM_Media/CICMSite/CICM-Website/Resources/Professional%20Documents/IC-13-(2019)-Guidelines-on-Standards-for-High-Dependency-Units.pdf