KEY PRINCIPLES

Agency for Clinical Innovation

Establishment, governance and operation of a close observation unit

NSW GOVERNMENT

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Key definitions

Role delineation

The complexity of clinical services provided by health facilities in NSW, including close observation units, is described by their role delineation. Local health districts and specialty health networks (LHDs/SHNs) are responsible for determining the role delineation of their clinical services, with reference to the NSW Health *Guide to the Role Delineation of Health Services* (2018).[1] This *Key Principles* document outlines the support services, workforce requirements and minimum requirements for the safe delivery of services.

Close Observation Unit

A specially staffed and equipped area of a hospital providing a level of care between intensive care and a general adult ward. A close observation unit (COU) may be established in a hospital with no intensive care service (i.e. a Level 3 COU) or in a hospital with a Level 4, 5 or 6 intensive care service (i.e. a Level 4 COU). These units may have historically been referred to as high dependency units or coronary care units, depending on the scope of services delivered.

Intensive Care Unit

A specially staffed and equipped, separate and self-contained area of a hospital dedicated to the management of patients with life-threatening illnesses, injuries and complications, and the monitoring of potentially life-threatening conditions. The intensive care unit (ICU) provide special expertise and facilities for support of vital functions, and use the skill of medical, nursing and other experienced staff in the management of these conditions. An ICU may be a Level 4, 5 or 6, depending on the scope of services, therapies and care delivered.

Glossary

ACI	Agency for Clinical Innovation
ADRG	Australian Diagnosis Related Group
CEC	Clinical Excellence Commission
CNC	Clinical Nurse Consultant
CNE	Clinical Nurse Educator
COU	Close Observation Unit
ED	Emergency Department
ICS	Intensive Care Service
ICU	Intensive Care Unit
LHD	Local Health District
SAC	Severity Assessment Code
SHN	Specialty Health Network

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Executive summary

A close observation unit (COU) provides an intermediate level of care between a general ward and an intensive care unit. The description of COU services was revised in the 2018 *Guide to the Role Delineation of Clinical Services* to more clearly differentiate close observation and intensive care services.[1]

In order to deliver safe, effective and timely care in a close observation unit, a number of principles are recommended for adoption by local health districts (LHDs) and specialty health networks (SHNs).

These include:

- clarity of leadership and governance arrangements
- definition of care delivery and coordination mechanisms
- documentation of protocols, procedures and treatments
- proactive continuous quality improvement practices
- structured education and training programs
- appropriate workforce and support staff resourcing
- availability of necessary equipment to deliver care within the defined scope of the COU.

The principles outlined in this document should be considered when planning a COU within a facility or aligning an existing unit to best practice standards. To support implementation of the key principles for COUs, a number of additional resources have been developed, including:

- self-assessment tool
- medical record audit tool
- communication plan template
- risks and issues register template.

These resources support the design of local solutions and provide advice on how to operationalise and embed change. This will promote sustainability of improvement initiatives and allow changes to be tracked over time for monitoring and evaluation.

A number of suggested clinical and process indicators are also noted in Appendix 1 of this document to support regular and ongoing monitoring of current practices against the key principles for COUs.

The self-assessment tool enables users to identify gaps between the recommended principles and current practice standards in place, identify priority areas for improvement and track progress of improvement initiatives implemented over time.

Introduction

Role delineation

The complexity of clinical services provided by health facilities in NSW is described by their role delineation. Local health districts (LHDs) and specialty health networks (SHNs) are responsible for determining the role delineation level of their clinical services, with reference to the NSW Health *Guide to the Role Delineation of Clinical Services* (2018).[1] This guide outlines the support services, staffing profile and minimum requirements for the delivery of safe service provision.

Close observation unit

A Close Observation Unit (COU) refers to identified adult beds providing a higher level of patient monitoring and observation than a general ward, with medical care managed by each patient's admitting consultant. COUs may function under a particular clinical specialty, or combination of subspecialties (i.e. medical and surgical). This should be determined at a local level to ensure the COU best meets the needs of the local patient population and aligns with service delivery and adjuvant.

A COU is a specially staffed and equipped area of a hospital that provides an intermediate level of care between intensive care and general ward care. A COU may be established in a hospital without an intensive care service (ICS) (i.e. a Level 3 COU) or in hospital with a Level 4, 5 or 6 ICS (i.e. a Level 4 COU).

NSW Health *Guide to the role delineation of clinical services* (2018)

Close observation unit Level	Service scope	Service requirements
COU Level 3	• A dedicated unit in an adult health facility, with **no** intensive care unit (ICU), providing a higher level of monitoring and observation than standard ward-based care. • Admission and patient care is under the direction of the admitting medical officer.	• 24 hour access to a medical officer. • Each patient must have: – medical management plan including process for escalation of care and transfer reviewed daily – daily medical review and care planning documented. • Access to allied health appropriate to case-mix and clinical load. • Referral pathways to Aboriginal health services. • Quality and risk management programs.
COU Level 4	• A dedicated unit in a health facility with an ICS, providing a level of care between standard ward and an intensive care unit. • Admission and patient care may be under the direction of the admitting medical officer or an intensivist. • May provide non-invasive ventilation where there is no intention to escalate to invasive ventilation, and short-term vasopressor therapy where there is low risk of, or intention to, escalate to intensive care.	As for Level 3 above, plus: • close relationship with the health facility's onsite ICS to provide clinical advice and professional development support as required.

Many LHDs or hospitals have COU beds to support higher level monitoring and observation of higher acuity patients in specific settings, such as post-surgical units, coronary care units and respiratory failure or non-invasive ventilation units. These COUs do not ordinarily fall under the governance of the ICS unless negotiated at a local level.

It may be useful for LHDs or facilities to determine and define the following service aspects of their close observation unit (or beds) including:

- governance arrangement in relation to local or networked ICS
- the number of COU beds and expected volume of patients per day
- estimated and maximum lengths of stay
- local procedures for transferring patients to the ICS or wards.

These aspects, together with nursing and medical and other clinical workforce and equipment requirements should be considered when planning for a new COU within a facility.

Purpose of this document

This document details principles for the establishment, governance and operation of a close observation unit, based on the NSW Health *Guide to the Role Delineation of Clinical Services* (2018).[1] It incorporates leadership, workforce, education, clinical support and protocol documentation recommended for units to effectively deliver safe, quality care in a close observation environment.

These principles do not constitute a model of care, and this document does not provide detailed clinical guidance on patient care within a close observation unit.

For that reason, clinical information regarding different types of COUs – for example, cardiac monitoring or non-invasive ventilation for respiratory patients – is not outlined in this document. It is intended that localised protocols and models of care be developed in alignment with these principles, and other relevant policies and guidelines, to enable COUs to deliver a safe and appropriate level of care to their patients.

Key principles

LHDs, SHNs and facilities can use these overarching principles to guide the appropriate level of care and meet the requirements of the local facility.

The success of dedicated COUs relies heavily on strong leadership and governance, strict treatment protocols and well-defined inclusion and exclusion criteria.

1. Leadership and governance

Governance arrangements and medical and nursing leadership should be clearly documented and signed off by facility executive. The LHD or SHN will identify governance arrangements for the unit as a whole – in other words, under which service, department or stream the COU is managed.	
1.1	Medical – an endorsed model should be developed that is appropriate to meet the needs of the patient, unit and facility, including: **a.** assigning a medical officer who takes primary responsibility for each patient in-hours and out-of-hours **b.** defining the role and responsibility of the admitting medical officer for managing deteriorating patients within the COU **c.** detailing the role and responsibility of the admitting medical officer for managing a patient requiring transfer to a higher level of care.
1.2	Nursing – the nursing unit manager should have the following key roles and responsibilities: **a.** clinical leadership and supervision of patients and staff **b.** nursing staff management (staff appraisals, rostering, implementation of new practices, leadership and professional development) **c.** unit management (resource use, information dissemination, safety and quality, compliance with standards, equipment) **d.** coordination of patient care within the COU.
1.3	A Level 3 COU should have an executive approved escalation of care and transfer process with a LHD or SHN or networked Level 5/6 ICS.
1.4	Where appropriate, a Level 4 COU should also have: **a.** a formal agreement with the onsite ICS to provide clinical advice, minimum daily contact and an admission process for patients who require a higher level of care than can be delivered in the COU, or for patients transitioning from the ICS requiring a higher level of care than can be provided on the general ward. a documented list of procedures and level of treatment and care which can be undertaken within the COU. For example, one existing medical COU currently supports patients who are on non-invasive ventilation, but not those patients who are intubated. See also the role delineation guide for Level 4 COUs in the *Guide to the Role Delineation of Clinical Services*.[1]

2. Care planning, coordination and delivery

The role of the COU should be clearly defined, including care coordination and delivery.	
2.1	Role definitions should include: **a.** the responsible admitting medical officer must oversee and coordinate the patient's care **b.** formalised admission and discharge criteria developed collaboratively and endorsed by LHD or SHN executive **c.** processes to identify and admit suitable patients for admission to the COU from the emergency department, wards or other facilities **d.** Between the Flags[2] criteria and escalation plans in place on admission and reviewed daily and on transfer to the general ward **e.** clinical review and updating of individual management plans should occur daily at a minimum for all admitted patients and documented in the patient records **f.** combined medical and nursing ward rounds occuring daily at a minimum, and including multidisciplinary team members as available **g.** referral processes to allied health established and documented as required. **h.** a formalised clinical handover process to communicate patient management plans and ensure smooth transition of patient management between shifts or ward locations.

3. Standard protocols, procedures and treatments

To support patient care within the COU, appropriate local protocols should be identified, documented and endorsed by the LHD or SHN executive.	
3.1	These protocols should include: **a.** formal network agreement and arrangements to support timely access to the ICS **b.** an escalation plan for management and upgrade of care for a patient within the COU, both in-hours and out-of-hours **c.** de-escalation, ceiling of therapy and end of life pathways **d.** processes to support timely patient transfer to other facilities **e.** protocols available to manage the specific patient cohort or diagnosis related group (ADRG) outlined in the admission criteria for the COU e.g. telemetry monitoring.
3.2	A documented process for the review and update of protocols, guidelines and procedures should be developed based on the best available evidence, with input from multidisciplinary team members. Other relevant NSW Health policies and guidelines should be identified and made available within the COU. See Further reading for more information.

4. Patient safety and experience, quality outcomes and data

A process for supporting continuous quality improvement should be identified and supported within the COU.	
4.1	These should include: **a.** regular mandatory auditing and incident review, which are reported back to staff and hospital executive, as appropriate **b.** a minimum data set to capture information on admissions, bed-days, readmissions and other outcome indicators to support ongoing safety and quality improvement (Appendix 1) **c.** a case review process linked into the local mortality and morbidity committee. Responsibility for stewardship within the COU, as outlined in the Clinical Excellence Commission (CEC) *Antimicrobial stewardship*.[3] Further information on antimicrobial stewardship is available on the CEC website.

5. Education, training and clinical supervision

Education, training and supervision requirements should reflect the LHD's or SHN's defined role of the COU.	
5.1	Important considerations include: **a.** the medical scope of practice to manage the patient cohort and acuity within the COU should be documented and endorsed by LHD or SHN medical council and executive **b.** a list of planned medical procedures with appropriately skilled staff support available and the level of supportive care that can be undertaken within the COU for the admitted patient cohort or acuity should be documented and endorsed by LHD or SHN medical council and executive **c.** a local medical orientation process should be supported and include medical governance and leadership of the COU. **d.** structured orientation and education programs should be available for nursing staff and supported by the LHD or SHN executive **e.** nursing and allied health staff working within the unit should have the appropriate skills and training to care for the highest acuity patient eligible for admission to the COU.

6. Workforce management and support services

Workforce requirements and support services should reflect the LHD's or SHN's defined role of the COU.	
6.1	These should include: **a.** medical officer available 24-hours who is credentialed in airway management and vascular access **b.** the ratio of nursing staff must meet the patient acuity, volume and scope of clinical services **c.** a clear process must be in place to identify additional nursing staff above the baseline nursing profile, when required **d.** a senior nurse with the appropriate skills, experience and postgraduate qualifications for the clinical environment should be in charge whenever necessary **e.** at least one nurse on each shift within the COU must hold postgraduate qualifications for the clinical environment or significant experience in critical care or acute care **f.** staff should be able to access an onsite clinical nurse educator and/or clinical nurse consultant **g.** documented referral pathways to ensure access to allied health clinicians **h.** staff should be able to access support services, such as clerical support, ward persons and cleaners.

7. Equipment

Appropriate equipment should be available to support the defined functions of the COU.	
7.1	Important considerations include: **a.** availability of essential equipment in the unit at all times **b.** a replacement, maintenance and repair register for equipment should be used **c.** a contingency plan should be in place for situations where equipment is damaged or in high demand across weekends or at nights.

Implementation of the key principles

The key principles for COUs provide recommendations for the safe and appropriate delivery of care in COUs, at a level between that provided in a standard ward and an intensive care unit. The key principles are aligned with the CEC In Safe Hands[4] functions for building effective and efficient teams to improve healthcare quality and patient outcomes.

To support local implementation of a COU, the following components should be considered.

The case for change	Create a clear definition of the present state, the changes required and the reasons for that change.
Communication	Develop a detailed communications plan for all stakeholders. This plan is a key element of a successful implementation and will facilitate engagement and ownership of the project.
Identify and develop solutions	Identify and develop solutions required locally for a close observation model including: - assess the magnitude of the solutions (including what is in and out of scope) - assessment of resources required (if any) - timeframe required to fully implement solutions - priorities solutions for implementation. Identify potential risks and challenges to implement and how these may be managed.
Develop an implementation plan	Develop an implementation plan which defines the overall project objectives, timelines and individuals responsible. High level timeframes should be developed at the start of the process and will further develop as the project evolves.
Operationalise	Embed the solutions and into local practice and monitor the change.
Monitor	Implement sustainable change through evaluation the impact of solutions, and ongoing monitoring of clinical indicators.

Further implementation resources can be found on the Implementation support section of the ACI website.

Implementation resources

A number of resources have been developed to support facilities in designing solutions, implementing change, monitoring and evaluating improvements.

Self-assessment tool

The self-assessment tool enables users to identify gaps between the recommended principles and current practice standards in place, identify priority areas for improvement and track progress of improvement initiatives implemented over time. It is intended that the self-assessment tool will be used at regular intervals to allow follow up assessment of unit performance, track progress of quality improvement initiatives and demonstrate change over time.

Medical record audit tool

The medical record audit tool can be used to review patient medical records and assess the alignment of current practices with the key principles. It is intended that the audit tool will be used at regular intervals to allow follow up assessment of unit performance and evidence change over time.

Implementation guide

Understanding the Process to Implement a Model of Care: an ACI Framework provides guidance for facilities to support the transition of an established ways of working, into effective and sustainable change in practices.[5] Implementation of change is described step-by-step in three phases using the redesign methodology; planning for change, assessing the current environment and operationalising the change.

Communication plan template

Well-planned communication with staff and stakeholders is essential to successful change initiatives. The communication plan template is intended to assist clinicians and managers to create a comprehensive communication strategy to support their change initiative.

Risks and issues register template

This template can be used to record, monitor and plan for action around perceived risks and issues which may impact change initiatives. The register of risks and issues should be updated and communicated regularly to minimise their potential impact.

Evaluation

These key principles will be periodically reviewed based on new information. Clinicians and managers across LHDs and SHNs may provide feedback to the ACI at any time. Contact details for providing feedback to the ACI are available on page i of the document.

A formal evaluation may be undertaken on these key principles to review their effectiveness, or in collaboration with COUs to assess local implementation of a COU model. This evaluation would inform review and revision of these principles and associated resources to better meet the needs of clinicians and managers.

COU clinicians and managers are encouraged to use the self-assessment tool, on an agreed and regular schedule, to guide evaluation of the key principles for COUs at a facility level in order to assess service alignment with the principles and track changes over time.

More information on the ACI's evaluation process is available in Understanding Program Evaluation: an ACI Framework.[6]

Appendix 1. Close observation unit clinical and process indicators

Suggested clinical and process indicators for NSW close observation units are defined below. These are intended to support regular and ongoing monitoring of current COU practices against the key principles for COUs and should be assessed in conjunction with the self-assessment tool and medical record audit tool results.

Indicator	Description	Measure	Target
Governance	Nurse unit manager and assigned medical officer for each patient	**Numerator:** number of days per year each is available **Denominator:** 365 days per year	**100%**
Governance	Level 3 unit networking arrangements are formalised for off-site ICS support	**Question:** Does your unit have a networking arrangement with an off-site ICS, endorsed by the LHD or SHN executive?	**Yes**
Governance	Level 4 unit agreements with onsite ICS are formalised for advice, escalation and transfer	**Question:** Does your unit have an agreement in place with the onsite ICS?	**Yes**
Governance	Unit scope of practice, including documented list of procedures and level of treatment and care that can be undertaken, is defined	**Question:** Does your unit have an agreed scope of practice endorsed by the LHD or SHN medical council and executive?	**Yes**
Care planning, coordination and delivery	Daily medical and nursing rounds	**Numerator:** number of days per year with medical and nursing ward rounds completed **Denominator:** 365 days per year (compliance review should be completed monthly)	**100%**
Care planning, coordination and delivery	Care bundles, checklists, protocols and guidelines are used to ensure the quality and safety of care delivered to patients	**Question:** Does your unit have at least one care bundle, checklist or protocol in place, with compliance reviewed monthly? Please specify those used in the unit	**Yes**
Care planning, coordination and delivery	A standardised clinical handover process is in place at all care transfer points	**Question:** Does your unit have a standardised clinical handover process in place, with compliance reviewed monthly?	**Yes**
Care planning, coordination and delivery	To reduce mortality associated with after-hours patient discharge, night time discharges from the unit should be minimised	**Numerator:** Live unit discharges between 18.01hrs and 5.59hrs **Denominator:** Total number of live unit discharges (compliance review should be completed quarterly)	**0%**
Patient safety and experience, quality outcomes and data	Appropriate infection surveillance procedures in place to regularly monitor multi-resistant organism incidence	**Question:** Does the unit document evidence of infection surveillance systems and submit data to the NSW Health Hospital Acquired Infection database?	**Yes**
Patient safety and experience, quality outcomes and data	An open forum should be used to discuss significant critical incidents and care of all patients who die in the COU	**Numerator:** Number of deaths and critical incidents (SAC 1 & 2) discussed at morbidity and mortality meetings **Denominator:** Total number of deaths and critical incidents (SAC 1 & 2)	**Yes**
Patient safety and experience, quality outcomes and data	An open forum should be used to discuss clinical practice audits and incidents	**Question:** How many minuted meetings take place annually to discuss results of clinical practice audits and incidents? Please monitor the number of clinical incidents by SAC code	**Yes**

Indicator	Description	Measure	Target
Education, training and clinical supervision	All medical and nursing staff attend a formal Unit orientation program	**Numerator:** Number of staff who have completed a formal unit orientation program **Denominator:** Total number of staff in the unit	**100%**
Workforce management and support services	Medical officers credentialed in airway management and vascular access are available 24-hours per day	**Numerator:** number of days per year each medical officers are available 24-hours **Denominator:** 365 days per year	**100%**
Workforce management and support services	At least one nurse each shift with relevant postgraduate qualifications	**Numerator:** number of rostered nurses with postgraduate qualifications in the reporting period **Denominator:** total number of nurses rostered in the reporting period	**100%**
Workforce management and support services	Onsite access to clinical nurse educator or clinical nurse consultant support staff	**Numerator:** number of days per year onsite access to support is available **Denominator:** 365 days per year	**100%**
Workforce management and support services	Access to support services such as clerical, maintenance and cleaning	**Numerator:** number of days per year access to support services is available **Denominator:** 365 days per year	**100%**
Equipment	The equipment required to deliver safe, effective care is available	**Question:** Does the Unit have a *Repairs, Maintenance, and Replacement register*?	**Yes**

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