

Queensland Clinical Guidelines

Translating evidence into best clinical practice

Maternity and Neonatal **Clinical Guideline**

Guideline Supplement: Neonatal resuscitation

Table of Contents

1	Introduction.....	3
1.1	Funding.....	3
1.2	Conflict of interest.....	3
1.3	Guideline review.....	3
2	Methodology.....	5
2.1	Topic identification.....	5
2.2	Scope.....	5
2.3	Clinical questions.....	5
2.4	Exclusions.....	5
2.5	Search strategy.....	6
2.5.1	Keywords.....	6
2.6	Consultation.....	7
2.7	Endorsement.....	7
2.8	Publication.....	7
3	Levels of evidence.....	8
3.1	Summary recommendations.....	9
4	Implementation.....	10
4.1	Guideline resources.....	10
4.2	Suggested resources.....	10
4.3	Implementation measures.....	10
4.3.1	QCG measures.....	10
4.3.2	Hospital and Health Service measures.....	10
4.4	Quality measures.....	11
4.5	Areas for future research.....	12
4.6	Safety and quality.....	13
5	References.....	18

List of Tables

Table 1.	Summary of change.....	3
Table 2.	PICO Framework.....	5
Table 3.	Basic search strategy.....	6
Table 4.	Major guideline development processes.....	7
Table 5.	Levels of evidence.....	8
Table 6.	Summary recommendations.....	9
Table 7.	NSQHS Standard 1.....	11
Table 8.	Clinical quality measures.....	11
Table 9.	NSQHS/EQuIPNational Criteria.....	13

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1 Introduction

This document is a supplement to the Queensland Clinical Guideline *Neonatal resuscitation* It provides supplementary information regarding guideline development, makes summary recommendations, suggests measures to assist implementation and quality activities and summarises changes (if any) to the guideline since original publication. Refer to the guideline for abbreviations, acronyms, flow charts and acknowledgements.

1.1 Funding

The development of this guideline was funded by Healthcare Improvement Unit, Queensland Health. Consumer representatives were paid a standard fee. Other working party members participated on a voluntary basis.

1.2 Conflict of interest

Declarations of conflict of interest were sought from working party members as per the Queensland Clinical Guidelines [Conflict of Interest](#) statement. No conflict of interest was identified.

1.3 Guideline review

Queensland clinical guidelines are reviewed every 5 years or earlier if significant new evidence emerges. Table 1 provides a summary of changes made to the guidelines since original publication.

Table 1. Summary of change

Publication date <i>Endorsed by:</i>	Identifier	Summary of major change
November 2009 <i>Statewide Maternity and Neonatal Clinical Network</i> <i>Queensland Health Patient Safety and Quality Executive Committee</i>	NN0911.5-V1-R11	First publication
October 2011 <i>Statewide Maternity and Neonatal Clinical Network</i> <i>Queensland Health Patient Safety and Quality Executive Committee</i>	MN11.5-V2-R16	Full review. Replaces NN0911.5-V1-R11 <ul style="list-style-type: none"> · Scope revised to focus on care considerations rather than didactic instruction · Flow chart revised to align with the Australian Resuscitation Council · Section 3.1 Supplemental oxygen administration – target oxygen saturations amended · Laryngeal mask information provided · Formatting alterations · Supplement developed

Publication date <i>Endorsed by:</i>	Identifier	Summary of major change
<p>July 2016</p> <p><i>Queensland Clinical Guidelines Steering Committee</i></p> <p><i>Statewide Maternity and Neonatal Clinical Network (Qld)</i></p>	MN16.5-V3-R21	<p>Full review—amended for consistency with Australian and New Zealand Council on Resuscitation (ANZCOR)</p> <p>Replaces MN11.5-V2-R16</p> <ul style="list-style-type: none"> • Temperature management and monitoring expanded • Equipment list amended • Timing of cord clamping clarified • Attendance at training or refresher courses by clinicians recommended • Initial assessment including use of oximetry clarified • Indications for suctioning clarified • Management of meconium exposed baby amended • Initial pressure settings for PPV amended • Endorsement of two thumb technique for cardiac compressions when two clinicians available • UVC as preferred route for adrenaline (epinephrine) administration • Naloxone doses and method of administration removed • Reference to critical blood loss protocol added
<p>August 2016</p> <p><i>Clinical lead</i></p>	MN16.5-V4-R21	<p>ETT dose and administration, second dot point corrected (page 25, Table 21):</p> <ul style="list-style-type: none"> • From: “Do not delay attempts at vascular access as effectiveness of IV adrenaline (epinephrine) has not been established” • To: “Do not delay attempts at vascular access as effectiveness of ETT adrenaline (epinephrine) has not been established.” <p>Replaces MN16.5-V3-R21</p>
<p>July 2018</p>	MN16.5-V5-R21	<ul style="list-style-type: none"> • Alignment with ANZCOR. Appendix A: Equipment and medications for neonatal resuscitation updated: <ul style="list-style-type: none"> From: Intraosseous needles 50 mm length 18/G To: Intraosseous needles • Oxygen saturation target ranges updated to align with QNSAG recommendations (Section 4.3 Oxygen saturation monitoring) <ul style="list-style-type: none"> From: After 10 minutes of age the target differs for example: For term babies the target is 94%–99% SpO₂. For preterm babies requiring ongoing respiratory support the target is 91%–95% SpO₂. To: In the absence of good quality evidence, Queensland Neonatal Services Advisory Group (QNSAG) endorse the following consensus recommendation for oxygen saturation targets for preterm and term babies after 10 minutes of age. For term babies the target SpO₂ range is 92–98%. For preterm babies the target SpO₂ range is 90–95% • Minor typo corrections • Supplement: Section 4: Safety and Quality Standards updated

2 Methodology

Queensland Clinical Guidelines (QCG) follows a rigorous process of guideline development. This process was endorsed by the Queensland Health Patient Safety and Quality Executive Committee in December 2009. The guidelines are best described as 'evidence informed consensus guidelines' and draw from the evidence base of existing national and international guidelines and the expert opinion of the working party.

2.1 Topic identification

The topic was identified as a priority by the Statewide Maternity and Neonatal Clinical Network at a forum in 2009.

2.2 Scope

The scope of the guideline was determined using the PICO Framework (Population, Intervention, Comparison, and Outcome) as outlined in Table 2.

Table 2. PICO Framework

PICO	
Population	Newborn baby
Intervention	Resuscitation based on ANZCOR guidelines
Comparison	N/A
Outcome	Early identification of at risk pregnancies and labours Evidence based neonatal resuscitation Ethical issues are considered

2.3 Clinical questions

The following clinical questions were generated to inform the guideline scope and purpose:

- What are the risk factors for neonatal resuscitation?
- How is the baby assessed?
- How is the baby managed/resuscitated?
- What interventions are required to support perinatal transition to extra-uterine life?
- What fluid and drug interventions are required?
- What aftercare is required?
- What are the ethical considerations in neonatal resuscitation?

2.4 Exclusions

The following exclusions were identified in the guideline scope:

- Ongoing management
- Stabilisation prior to retrieval

2.5 Search strategy

A search of the literature was conducted during October 2015 and January 2016. The QCG search strategy is an iterative process that is repeated and amended as guideline development occurs (e.g. if additional areas of interest emerge, areas of contention requiring more extensive review are identified or new evidence is identified). All guidelines are developed using a basic search strategy. This involves both a formal and informal approach.

Table 3. Basic search strategy

Step		Consideration
1.	Review clinical guidelines developed by other reputable groups relevant to the clinical speciality	<ul style="list-style-type: none"> • This may include national and/or international guideline writers, professional organisations, government organisations, state based groups. • This assists the guideline writer to identify: <ul style="list-style-type: none"> ○ The scope and breadth of what others have found useful for clinicians and informs the scope and clinical question development ○ Identify resources commonly found in guidelines such as flowcharts, audit criteria and levels of evidence ○ Identify common search and key terms ○ Identify common and key references
2.	Undertake a foundation search using key search terms	<ul style="list-style-type: none"> • Construct a search using common search and key terms identified during Step 1 above • Search the following databases <ul style="list-style-type: none"> ○ PubMed ○ CINAHL ○ Medline ○ Cochrane Central Register of Controlled Trials ○ EBSCO ○ Embase • Studies published in English less than or equal to 5 years previous are reviewed in the first instance. Other years may be searched as are relevant to the topic • Save and document the search • Add other databases as relevant to the clinical area
3.	Develop search word list for each clinical question.	<ul style="list-style-type: none"> • This may require the development of clinical sub-questions beyond those identified in the initial scope. • Using the foundation search performed at Step 2 as the baseline search framework, refine the search using the specific terms developed for the clinical question • Save and document the search strategy undertaken for each clinical question
4.	Other search strategies	<ul style="list-style-type: none"> • Search the reference lists of reports and articles for additional studies • Access other sources for relevant literature <ul style="list-style-type: none"> ○ Known resource sites ○ Internet search engines ○ Relevant text books

2.5.1 Keywords

The following keywords were used in the basic search strategy. Other keywords may have been used for specific aspects of the guideline:

Neonatal, newborn, baby, resuscitation, oximetry, oxygen saturation

2.6 Consultation

Major consultative and development processes occurred between March 2016 and June 2016. These are outlined in Table 4.

Table 4. Major guideline development processes

Process	Activity
Clinical lead	<ul style="list-style-type: none"> The nominated Clinical Lead was approved by QCG Steering Committee
Consumer participation	<ul style="list-style-type: none"> Consumer participation was invited from a range of consumer focused organisations who had previously accepted an invitation for on-going involvement with QCG
Working party	<ul style="list-style-type: none"> An EOI for working party membership was distributed via email to Queensland clinicians and stakeholders (~1000) in March 2016 The working party was recruited from responses received Working party members who participated in the working party consultation processes are acknowledged in the guideline Working party consultation occurred in a virtual group via email
Statewide consultation	<ul style="list-style-type: none"> Consultation was invited from Queensland clinicians and stakeholders (~1000) between April 2016 and June 2016 Feedback was received primarily via email All feedback was compiled and provided to the clinical lead and working party members for review and comment

2.7 Endorsement

The guideline was endorsed by the:

- Queensland Clinical Guidelines Steering Committee in July 2016
- Statewide Maternity and Neonatal Clinical Network [Queensland] in July 2016

2.8 Publication

The guideline and guideline supplement were published on the QCG website in July 2016

The guideline can be cited as:

Queensland Clinical Guidelines Neonatal resuscitation Guideline No. MN16.5-V5-R21.
Queensland Health. 2016. Available from: <http://www.health.qld.gov.au/qcg/>

The guideline supplement can be cited as:

Queensland Clinical Guidelines. [Supplement: Neonatal resuscitation Guideline No. MN16.5-V5-R21. Queensland Health. 2016. Available from: <http://www.health.qld.gov.au/qcg/>

3 Levels of evidence

The levels of evidence identified [in the National Health and Medical Research Council (NHMRC), Levels of evidence and grades for recommendations for developers of guidelines (2009) were used to inform the summary recommendations]. Levels of evidence are outlined in Table 5. Summary recommendations are outlined in Table 6.

Note that the 'consensus' definition* in Table 4 is different from that proposed by the NHMRC and instead relates to forms of evidence not identified in the NHMRC's level of evidence and/or the clinical experience of the guideline's clinical lead and working party. Specifically for this guideline the consensus on resuscitation and treatment recommendations are as provided by the International Liaison Committee on Resuscitation (ILCOR) using the GRADE consensus process.

Table 5. Levels of evidence

Levels of evidence	
I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
II	Evidence obtained from at least one properly designed randomised controlled trial.
III-1	Evidence obtained from well-designed pseudo randomised controlled trials (alternate allocation or some other method).
III-2	Evidence obtained from comparative studies including systematic review of such studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group.
III-3	Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without parallel control group.
IV	Evidence obtained from case series, either post-test or pre-test and post-test.
Consensus*	Opinions based on respected authorities, descriptive studies or reports of expert committees or clinical experience of the working party.

3.1 Summary recommendations

Summary recommendations and levels of evidence are outlined in Table 5.

Table 6. Summary recommendations

Recommendation		Grading of evidence
1	Clinician training occurs annually	Consensus
2	Resuscitation equipment and medications available for all births and checked on a regular basis	Consensus
3	Umbilical cord is not milked in babies	Consensus
4	Use pulse oximetry placed on right hand or wrist to measure oxygen saturation	Consensus
5	Titrate supplemental oxygen if used to keep oxygen saturations below 90% in the first 10 minutes of life	Consensus
6	Target normal body temperature between 36.5 °C and 37.5 °C	Consensus
7	Only perform endotracheal tube suctioning in meconium exposed baby prior to stimulation and onset of respirations	Consensus
8	Laryngeal mask airway considered when mask or endotracheal ventilation unsuccessful or unfeasible	Consensus
9	Use cushioned rim masks	III-2
10	Commence resuscitation in air for term babies and air–30% for preterm babies	Consensus
11	Use paediatric end-tidal CO ₂ detector attached to ETT to confirm tube placement in neonate with spontaneous circulation	IV
12	Preterm baby less than 28 weeks placed in polyethylene bag to manage temperature during resuscitation	Consensus
13	Measure cord blood gases in every resuscitated baby	Consensus
14	Take temperature of baby on admission to neonatal unit or postnatal ward	Consensus
15	Use standard resuscitation form for record keeping	Consensus

4 Implementation

This guideline is applicable to all Queensland public and private maternity facilities. It can be downloaded in Portable Document Format (PDF) from www.health.qld.gov.au/qcg

4.1 Guideline resources

The following guideline components are provided on the website as separate resources:

- Flowchart: Neonatal resuscitation: Newborn Life Support
- Flowchart: Neonatal resuscitation reference chart
- Education resource: Neonatal resuscitation
- Knowledge assessment: Neonatal resuscitation
- Parent information: Neonatal resuscitation

4.2 Suggested resources

During the development process stakeholders identified additional resources with potential to complement and enhance guideline implementation and application. The following resources have not been sourced or developed by QCG but are suggested as complimentary to the guideline:

- Neonatal resuscitation training program

4.3 Implementation measures

Suggested activities to assist implementation of the guideline are outlined below.

4.3.1 QCG measures

- Notify Chief Executive Officer and relevant stakeholders
- Monitor emerging new evidence to ensure guideline reflects contemporaneous practice
- Capture user feedback
- Record and manage change requests
- Review guideline in 2021

4.3.2 Hospital and Health Service measures

Initiate, promote and support local systems and processes to integrate the guideline into clinical practice, including:

- Hospital and Health Service (HHS) Executive endorse the guidelines and their use in the HHS and communicate this to staff
- Promote the introduction of the guideline to relevant health care professionals
- Support education and training opportunities relevant to the guideline and service capabilities
- Align clinical care with guideline recommendations
- Undertake relevant implementation activities as outlined in the *Guideline implementation checklist* available at www.health.qld.gov.au/qcg

4.4 Quality measures

Auditing of guideline recommendations and content assists with identifying quality of care issues and provides evidence of compliance with the National Safety and Quality Health Service (NSQHS) Standards.¹ Suggested audit and quality measures are identified in Table 7. NSQHS Standard 1.

Table 7. NSQHS Standard 1

NSQHS Standard 1: Clinical governance	
Clinical performance and effectiveness	
Criterion 1.27:	Actions required:
Evidence based care	a. Provide clinicians with ready access to best-practice guidelines, integrated care pathways, clinical pathways and decision support tools relevant to their clinical practice
	b. Support clinicians to use the best available evidence, including relevant clinical care standards developed by the Australian Commission on Safety and Quality in Health Care

The following clinical quality measures are suggested:

Table 8. Clinical quality measures

No	Audit criteria	Guideline Section
1	Annual training or refresher on neonatal resuscitation is provided to clinicians	Section 1.2 Table 2
2	Resuscitation equipment and medications available for all births and checked on a regular basis	Section 3 Table 4
3	Umbilical cord is not milked in newborn babies	Section 4.1 Table 9
4	Pulse oximetry is monitored and recorded at resuscitation	Section 4.3 Table 8
5	Target oxygen saturations achieved for term babies	Section 4.3 Table 8
6	Temperature is maintained between 36.5 °C and 37.5 °C during resuscitation	Section 4.3.1 Table 9
7	Routine suctioning is not performed	Section 5.1 Table 10
8	Laryngeal mask airway used when mask or endotracheal tube ventilation unsuccessful or unfeasible	Section 5.2 Table 11
9	Cushion rim masks only available for use in resuscitation	Section 5.2 Table 11
10	Resuscitation commenced with air for term babies and air–30% for preterm babies	Section 5.3 Table 12
11	Paediatric end tidal CO ₂ detector is attached to endotracheal tube or laryngeal mask airway during resuscitation	Section 5.6.2 Table 18
12	Preterm babies (less than 28 weeks gestation) placed in polyethylene bag to manage temperature	Section 8.2 Table 22
13	Arterial cord blood gases measured in every resuscitated baby	Section 9.1.1
14	Temperature documented on admission to neonatal unit or postnatal ward	Section 9.3 Table 28
15	Resuscitation recorded on standard resuscitation form	Section 9.2 Table 27

4.5 Areas for future research

During development the following areas were identified as having limited or poor quality evidence to inform clinical decision making. Further research in these areas may be useful.

- Optimal timing of cord clamping
- Outcomes for babies after intact placental circulation during resuscitation (i.e. cord not clamped)
- Feasibility of skin to skin during resuscitation
- Tracheal intubation or no tracheal intubation for suctioning in non-vigorous babies: benefit versus harm
- Appropriate time-specific oxygen saturation targets for preterm babies after 10 minutes of age
- Effectiveness of laryngeal mask airway compared with mask ventilation in term and preterm babies

4.6 Safety and quality

Implementation of this guideline provides evidence of compliance with the NSQHS and Australian Council on Healthcare Standards (ACHS) EQUiPNational accreditation programs.^{1,2}

Table 9. NSQHS/EQUiPNational Criteria

NSQHS/EQUiPNational Criteria	Actions required	Evidence of compliance
NSQHS Standard 1: Clinical governance		
<p>Patient safety and quality systems Safety and quality systems are integrated with governance processes to enable organisations to actively manage and improve the safety and quality of health care for patients.</p>	<p>Diversity and high risk groups 1.15 The health service organisation: a. Identifies the diversity of the consumers using its services b. Identifies groups of patients using its services who are at higher risk of harm c. Incorporates information on the diversity of its consumers and higher-risk groups into the planning and delivery of care</p>	<ul style="list-style-type: none"> ⌋ Assessment and care appropriate to the cohort of patients is identified in the guideline ⌋ High risk groups are identified in the guideline ⌋ The guideline is based on the best available evidence
<p>Clinical performance and effectiveness The workforce has the right qualifications, skills and supervision to provide safe, high-quality health care to patients.</p>	<p>Evidence based care 1.27 The health service organisation has processes that: a. Provide clinicians with ready access to best-practice guidelines, integrated care pathways, clinical pathways and decision support tools relevant to their clinical practice b. Support clinicians to use the best available evidence, including relevant clinical care standards developed by the Australian Commission on Safety and Quality in Health Care</p>	<ul style="list-style-type: none"> ⌋ Queensland Clinical Guidelines is funded by Queensland Health to develop clinical guidelines relevant to the service line to guide safe patient care across Queensland ⌋ The guideline provides evidence-based and best practice recommendations for care ⌋ The guideline is endorsed for use in Queensland Health facilities. ⌋ A desktop icon is available on every Queensland Health computer desktop to provide quick and easy access to the guideline
	<p>Performance management 1.22 The health service organisation has valid and reliable performance review processes that: a. Require members of the workforce to regularly take part in a review of their performance b. Identify needs for training and development in safety and quality c. Incorporate information on training requirements into the organisation's training system</p>	<ul style="list-style-type: none"> ⌋ The guideline has accompanying educational resources to support ongoing safety and quality education for identified professional and personal development. The resources are freely available on the internet http://www.health.qld.gov.au/qcg
<p>Patient safety and quality systems Safety and quality systems are integrated with governance processes to enable organisations to actively manage and improve the safety and quality of health care for patients.</p>	<p>Policies and procedures 1.7 The health service organisation uses a risk management approach to: a. Set out, review, and maintain the currency and effectiveness of, policies, procedures and protocols b. Monitor and take action to improve adherence to policies, procedures and protocols c. Review compliance with legislation, regulation and jurisdictional requirements</p>	<ul style="list-style-type: none"> ⌋ QCG has established processes to review and maintain all guidelines and associated resources ⌋ Change requests are managed to ensure currency of published guidelines ⌋ Implementation tools and checklist are provided to assist with adherence to guidelines ⌋ Suggested audit criteria are provided in guideline supplement ⌋ The guidelines comply with legislation, regulation and jurisdictional requirements

NSQHS/EQUIPNational Criteria	Actions required	Evidence of compliance
NSQHS Standard 2: Partnering with Consumers		
<p>Health literacy Health service organisations communicate with consumers in a way that supports effective partnerships.</p>	<p>Communication that supports effective partnerships 2.8 The health service organisation uses communication mechanisms that are tailored to the diversity of the consumers who use its services and, where relevant, the diversity of the local community 2.9 Where information for patients, carers, families and consumers about health and health services is developed internally, the organisation involves consumers in its development and review 2.10 The health service organisation supports clinicians to communicate with patients, carers, families and consumers about health and health care so that: a. Information is provided in a way that meets the needs of patients, carers, families and consumers b. Information provided is easy to understand and use c. The clinical needs of patients are addressed while they are in the health service organisation d. Information needs for ongoing care are provided on discharge</p>	<ul style="list-style-type: none"> ⊖ Consumer consultation was sought and obtained during the development of the guideline. Refer to the acknowledgement section of the guideline for details ⊖ Consumer information is developed to align with the guideline and included consumer involvement during development and review ⊖ The consumer information was developed using plain English and with attention to literacy and ease of reading needs of the consumer
<p>Partnering with consumers in organisational design and governance Consumers are partners in the design and governance of the organisation.</p>	<p>Partnerships in healthcare governance planning, design, measurement and evaluation 2.11 The health service organisation: a. Involves consumers in partnerships in the governance of, and to design, measure and evaluate, health care b. Has processes so that the consumers involved in these partnerships reflect the diversity of consumers who use the service or, where relevant, the diversity of the local community 2.14 The health service organisation works in partnership with consumers to incorporate their views and experiences into training and education for the workforce</p>	<ul style="list-style-type: none"> ⊖ Consumers are members of guideline working parties ⊖ The guideline is based on the best available evidence ⊖ The guidelines and consumer information are endorsed by the QCG and Queensland Statewide Maternity and Neonatal Clinical Network Steering Committees which includes consumer membership
NSQHS Standard 4: Medication safety		
<p>Clinical governance and quality improvement to support medication management Organisation-wide systems are used to support and promote safety for procuring, supplying, storing, compounding, manufacturing, prescribing, dispensing, administering and monitoring the effects of medicines</p>	<p>Integrating clinical governance 4.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for medication management b. Managing risks associated with medication management c. Identifying training requirements for medication management</p>	<ul style="list-style-type: none"> ⊖ The guideline provides current evidence based recommendations about medication

NSQHS/EQUIPNational Criteria	Actions required	Evidence of compliance
NSQHS Standard 5: Comprehensive care		
<p>Clinical governance and quality improvement to support comprehensive care Systems are in place to support clinicians to deliver comprehensive care</p>	<p>Integrating clinical governance 5.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for comprehensive care b. Managing risks associated with comprehensive care c. Identifying training requirements to deliver comprehensive care Partnering with consumers 5.3 Clinicians use organisational processes from the Partnering with Consumers Standard when providing comprehensive care to: a. Actively involve patients in their own care b. Meet the patient's information needs c. Share decision-making</p>	<ul style="list-style-type: none"> ⊐ The guideline has accompanying educational resources to support ongoing safety and quality education for identified professional and personal development. The resources are freely available on the internet http://www.health.qld.gov.au/qcg ⊐ The guideline provides evidence-based and best practice recommendations for care ⊐ Consumer information is developed for the guideline
NSQHS Standard 6: Communicating for safety		
<p>Clinical governance and quality improvement to support effective communication Systems are in place for effective and coordinated communication that supports the delivery of continuous and safe care for patients.</p>	<p>Integrating clinical governance 6.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures to support effective clinical communication b. Managing risks associated with clinical communication c. Identifying training requirements for effective and coordinated clinical communication Partnering with consumers 6.3 Clinicians use organisational processes from the Partnering with Consumers Standard to effectively communicate with patients, carers and families during high-risk situations to: a. Actively involve patients in their own care b. Meet the patient's information needs c. Share decision-making Organisational processes to support effective communication 6.4 The health service organisation has clinical communications processes to support effective communication when: a. Identification and procedure matching should occur b. All or part of a patient's care is transferred within the organisation, between multidisciplinary teams, between clinicians or between organisations; and on discharge c. Critical information about a patient's care, including information on risks, emerges or changes</p>	<ul style="list-style-type: none"> ⊐ Requirements for effective clinical communication by clinicians are identified ⊐ The guideline provides evidence-based and best practice recommendations for communication between clinicians ⊐ The guideline provides evidence-based and best practice recommendations for communication with patients, carers and families ⊐ The guideline provides evidence-based and best practice recommendations for discharge planning and follow –up care

NSQHS/EQUIPNational Criteria	Actions required	Evidence of compliance
NSQHS Standard 6: Communicating for safety (continued)		
<p>Communication of critical information Systems to effectively communicate critical information and risks when they emerge or change are used to ensure safe patient care.</p>	<p>Communicating critical information 6.9 Clinicians and multidisciplinary teams use clinical communication processes to effectively communicate critical information, alerts and risks, in a timely way, when they emerge or change to: a. Clinicians who can make decisions about care b. Patients, carers and families, in accordance with the wishes of the patient 6.10 The health service organisation ensures that there are communication processes for patients, carers and families to directly communicate critical information and risks about care to clinicians</p>	<ul style="list-style-type: none"> ⊐ Requirements for effective clinical communication of critical information are identified ⊐ Requirements for escalation of care are identified
<p>Communicating at clinical handover Processes for structured clinical handover are used to effectively communicate about the health care of patients.</p>	<p>Clinical handover 6.7 The health service organisation, in collaboration with clinicians, defines the: a. Minimum information content to be communicated at clinical handover, based on best-practice guidelines b. Risks relevant to the service context and the particular needs of patients, carers and families c. Clinicians who are involved in the clinical handover 6.8 Clinicians use structured clinical handover processes that include: a. Preparing and scheduling clinical handover b. Having the relevant information at clinical handover c. Organising relevant clinicians and others to participate in clinical handover d. Being aware of the patient's goals and preferences e. Supporting patients, carers and families to be involved in clinical handover, in accordance with the wishes of the patient f. Ensuring that clinical handover results in the transfer of responsibility and accountability for care</p>	<ul style="list-style-type: none"> ⊐ The guideline acknowledges the need for local protocols to support transfer of information, professional responsibility and accountability for some or all aspects of care

NSQHS/EQUIPNational Criteria	Actions required	Evidence of compliance
NSQHS Standard 8: Recognising and responding to acute deterioration		
<p>Clinical governance and quality improvement to support recognition and response systems Organisation-wide systems are used to support and promote detection and recognition of acute deterioration, and the response to patients whose condition acutely deteriorates.</p>	<p>Integrating clinical governance 8.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for recognising and responding to acute deterioration b. Managing risks associated with recognising and responding to acute deterioration c. Identifying training requirements for recognising and responding to acute deterioration</p> <p>Partnering with consumers 8.3 Clinicians use organisational processes from the Partnering with Consumers Standard when recognising and responding to acute deterioration to: a. Actively involve patients in their own care b. Meet the patient's information needs c. Share decision-making</p> <p>Recognising acute deterioration 8.4 The health service organisation has processes for clinicians to detect acute physiological deterioration that require clinicians to: a. Document individualised vital sign monitoring plans b. Monitor patients as required by their individualised monitoring plan c. Graphically document and track changes in agreed observations to detect acute deterioration over time, as appropriate for the patient</p>	<ul style="list-style-type: none"> ⊐ The guideline is consistent with National Consensus statements recommendations ⊐ The guideline recommends use of tools consistent with the principles of recognising and responding to clinical deterioration ⊐ Consumer information is developed for the guideline
EQUIP Standard 12 Provision of care		
<p>Criterion 1: Assessment and care planning 12.1 Ensuring assessment is comprehensive and based upon current professional standards and evidence based practice</p>	<p>12.1.1 Guidelines are available and accessible by staff to assess physical, spiritual, cultural, physiological and social health promotion needs</p>	<ul style="list-style-type: none"> ⊐ Assessment and care appropriate to the cohort of patients is identified in the guideline ⊐ The guideline is based on the best available evidence

5 References

1. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards [Internet]. 2017 [cited 2018 January 08]. Available from: <http://www.safetyandquality.gov.au>.
2. The Australian Council on Healthcare Standards. EQUiPNational. [Internet]. 2016 [cited 2018 April 05]; (cited 2018 January 08). Available from: <http://www.achs.org.au>.