

# Queensland Clinical Guidelines

*Translating evidence into best clinical practice*

## Maternity and Neonatal **Clinical Guideline**

### Guideline Supplement: Rh D negative women and pregnancy



The Department of Health acknowledges the Traditional Custodians of the lands, waters and seas across the State of Queensland on which we work and live. We also acknowledge First Nations peoples in Queensland are both Aboriginal Peoples and Torres Strait Islander Peoples and pay respect to the Aboriginal and Torres Strait Islander Elders past, present and emerging.

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# **1 Introduction**

This document is a supplement to the Queensland Clinical Guideline (QCG) *Rh D negative women and pregnancy*. 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 Development process**

This version of the guideline followed the [New development process](#).

## 1.4 Summary of changes

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
<b>March 2023</b> <i>Queensland Maternity and Neonatal Clinical Network</i>	MN23.74-V1-R28	First publication
<b>April 2024</b>	MN23.74-V2-R28	Updated to align with new recommendations from National Blood Authority <ul style="list-style-type: none"> <li>Amended flowcharts and Section: <i>Sensitising events</i> <ul style="list-style-type: none"> <li><b>From:</b> First 12+6 weeks of pregnancy. Termination of pregnancy surgical at any gestation, medical after 10+0 weeks gestation</li> <li><b>To:</b> First 12+6 weeks of pregnancy. Termination of pregnancy (medical or surgical) from 10+0 weeks gestation</li> </ul> </li> <li>Updated definition of 'woman' and 'women'</li> </ul>
<b>March 2025</b>	MN23.74-V3-R28	Updated to align with new recommendations from National Blood Authority <ul style="list-style-type: none"> <li>Added recommendation for Rh D–NIPT for all Rh D negative women who are non-alloimmunised</li> <li>Amended flowcharts to align with text and combined into one flowchart</li> </ul>

## 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 literature, 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 to improve internal QCG processes and avoid duplication between guidelines.

### 2.2 Scope

The scope of the guideline was determined using the following framework.

Table 2. Scope framework

Scope framework	
<b>Population</b>	Pregnant women with an Rh D negative blood type
<b>Purpose</b>	Identify relevant evidence related to: <ul style="list-style-type: none"> <li>• Prevention of alloimmunisation</li> <li>• Recognition and referral of alloimmunised women</li> </ul>
<b>Outcome</b>	Support: <ul style="list-style-type: none"> <li>• Best practice management of women with Rh D negative blood type during pregnancy, labour and postpartum</li> </ul>
<b>Exclusions</b>	<ul style="list-style-type: none"> <li>• Management of women with risk of alloimmunisation to antigens other than D</li> <li>• Routine antenatal, intrapartum and postpartum care</li> <li>• Ongoing care and management of the baby born to an Rh D negative woman</li> <li>• Management of established alloimmunisation</li> <li>• Care considered standard or usual as specified in the Queensland Clinical Guideline <i>Standard care</i></li> </ul>

### 2.3 Clinical questions

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

- What is Rh D alloimmunisation?
- What are the risk factors for alloimmunisation?
- What are the risks to the fetus/baby of an alloimmunised Rh D negative woman?
- How are women identified as being at risk of Rh D alloimmunisation?
- What is the management of Rh D negative women who have a negative antibody screen for Rh D?
- What is the management of Rh D negative women if no NIPA for Rh D has been done, or if NIPA identifies an Rh D positive fetus/baby, or results are uncertain?
- What is the recommended use and administration of Rh D immunoglobulin?
- What screening/testing does the baby born to a woman who is Rh D negative require at birth?

## 2.4 Search strategy

A search of the literature was conducted during July 2021–March 2022. A further search was conducted in September 2022. 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"> <li>• This may include national and/or international guideline writers, professional organisations, government organisations, state based groups.</li> <li>• This assists the guideline writer to identify:               <ul style="list-style-type: none"> <li>○ The scope and breadth of what others have found useful for clinicians and informs the scope and clinical question development</li> <li>○ Identify resources commonly found in guidelines such as flowcharts, audit criteria and levels of evidence</li> <li>○ Identify common search and key terms</li> <li>○ Identify common and key references</li> </ul> </li> </ul>
2.	Undertake a foundation search using key search terms	<ul style="list-style-type: none"> <li>• Construct a search using common search and key terms identified during Step 1 above</li> <li>• Search the following databases               <ul style="list-style-type: none"> <li>○ PubMed</li> <li>○ CINAHL</li> <li>○ Medline</li> <li>○ Cochrane Central Register of Controlled Trials</li> <li>○ EBSCO</li> <li>○ Embase</li> </ul> </li> <li>• 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</li> <li>• Save and document the search</li> <li>• Add other databases as relevant to the clinical area</li> </ul>
3.	Develop search word list for each clinical question	<ul style="list-style-type: none"> <li>• This may require the development of clinical sub-questions beyond those identified in the initial scope.</li> <li>• 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</li> <li>• Save and document the search strategy undertaken for each clinical question</li> </ul>
4.	Other search strategies	<ul style="list-style-type: none"> <li>• Search the reference lists of reports and articles for additional studies</li> <li>• Access other sources for relevant literature               <ul style="list-style-type: none"> <li>○ Known resource sites</li> <li>○ Internet search engines</li> <li>○ Relevant textbooks</li> </ul> </li> </ul>

### 2.4.1 Keywords

The following keywords were used in the basic search strategy: Rh D, RHD, alloimmunisation, antibody screen, immunoglobulin, direct antiglobulin titre, immunoprophylaxis.

Other keywords may have been used for specific aspects of the guideline.

## 2.5 Consultation

Major consultative and development processes occurred between March 2022 and March 2023.

Table 4. Major guideline development processes

Process	Activity
<b>Clinical lead</b>	<ul style="list-style-type: none"> <li>The nominated Clinical Lead was approved by QCG Steering Committee</li> </ul>
<b>Consumer participation</b>	<ul style="list-style-type: none"> <li>Consumer participation was invited from a range of consumer focused organisations who had previously accepted an invitation for on-going involvement with QCG</li> </ul>
<b>Working party</b>	<ul style="list-style-type: none"> <li>An EOI for working party membership was distributed via email to Queensland clinicians and stakeholders in October 2022</li> <li>The working party was recruited from responses received</li> <li>Working party members who participated in the working party consultation processes are acknowledged in the guideline supplement</li> <li>Working party consultation occurred in a virtual group via email</li> </ul>
<b>Statewide consultation</b>	<ul style="list-style-type: none"> <li>Consultation was invited from Queensland clinicians and stakeholders during October 2022–March 2023</li> <li>Feedback was received primarily via email</li> <li>All feedback was compiled and provided to the clinical lead and working party members for review and comment</li> </ul>

## 2.6 Endorsement

The guideline was endorsed by the:

- Queensland Clinical Guidelines Steering Committee in March 2023
- Statewide Maternity and Neonatal Clinical Network (Queensland) in March 2023

## 2.7 Citation

The recommended citation of Queensland Clinical Guidelines is in the following format:

Queensland Clinical Guidelines. **[Insert Guideline Title]**. Guideline No. **[Insert Guideline Number]**. Queensland Health. **[Insert Year of Publication]**. Available from: [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg).

### EXAMPLE:

Queensland Clinical Guidelines. Normal birth. Guideline No. MN17.25-V3-R22. Queensland Health 2017. Available from: [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg).

### 3 Levels of evidence

Summary recommendations were informed by:

- Review of literature
- Expertise and experience of clinical leads and working party
- Statewide consultation
- Established Queensland Clinical Guidelines development process

Formal grading of levels of evidence and strength of recommendations were adopted from Royal College of Obstetricians (RCOG)<sup>1</sup> and the National Blood Authority (NBA)<sup>2</sup>.

Table 5 RCOG Levels of evidence

RCOG Levels of evidence	
<b>1++</b>	High-quality meta-analyses, systematic reviews of randomised controlled trials or randomised controlled trials with a very low risk of bias
<b>1+</b>	Well-conducted meta-analyses, systematic reviews of randomised controlled trials or randomised controlled trials with a low risk of bias
<b>1-</b>	Meta-analyses, systematic reviews of randomised controlled trials or randomised controlled trials with a high risk of bias
<b>2++</b>	High-quality systematic reviews of case-control or cohort studies or high quality case-control or cohort studies with a very low risk of confounding, bias or chance and a high probability that the relationship is causal
<b>2+</b>	Well-conducted case-control or cohort studies with a low risk of confounding, bias or chance and a moderate probability that the relationship is causal
<b>2-</b>	Case-control or cohort studies with a high risk of confounding, bias or chance and a significant risk that the relationship is not causal
<b>3</b>	Non-analytical studies, e.g. case reports, case series
<b>4</b>	Expert opinion.
<b>Consensus</b>	Agreement between clinical lead, working party and other clinical experts.

Table 6 RCOG Grades of recommendations

RCOG Grades of recommendations	
<b>A</b>	At least one meta-analysis, systematic review or randomised controlled trial rated as 1++ and directly applicable to the target population; or a systematic review of randomised controlled trials or a body of evidence consisting principally of studies rated as 1+ directly applicable to the target population and demonstrating overall consistency of results
<b>B</b>	A body of evidence including studies rated as 2++ directly applicable to the target population, and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 1++ or 1+
<b>C</b>	A body of evidence including studies rated as 2+ directly applicable to the target population and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 2++
<b>D</b>	Evidence level 3 or 4; or extrapolated evidence from studies rated as 2+
<b>Good practice point</b>	Recommended best practice based on the clinical experience of the guideline development group

Table 7. NBA recommendations

National Blood Authority	
<b>Expert opinion point (EOP)</b>	Based on consensus of expert reference group



### 3.1 Summary recommendations

Summary recommendations and levels of evidence are outlined in Table 8. Summary recommendations.

Table 8. Summary recommendations

Recommendations		GRADE of evidence
1.	All women should have their blood group and antibody status determined at booking and at 28 weeks of gestation.	Level D (RCOG) <sup>1</sup>
2.	Anti-D immunoglobulin prophylaxis is given to prevent Rh D negative women forming anti-D antibodies in the event of a potentially sensitising event during pregnancy and/or as part of routine antenatal anti-D prophylaxis	Level 2++ (RCOG) <sup>1</sup>
3.	If the fetus carries the corresponding antigen for a maternal antibody which is capable of causing fetal anaemia and if the antibody levels/titres rise beyond [ $> 4$ IU] then the pregnancy should be monitored weekly by ultrasound, specifically assessing the fetal middle cerebral artery peak systolic velocities (MCA PSV).	Level B (RCOG) <sup>1</sup>
4.	If immune anti-D is detected, prophylaxis is no longer necessary.	Level D (RCOG) <sup>1</sup> /EOP (NBA) <sup>2</sup>
5.	All women should have an ABO / Rh D type and antibody screen performed early in pregnancy.	EOP (NBA) <sup>2</sup>
6.	Administer Rh D immunoglobulin within 72 hours of sensitising event.	EOP (NBA) <sup>2</sup>
7.	Test cord blood following birth to determine baby's blood group and type.	EOP (NBA) <sup>2</sup>

## 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](http://www.health.qld.gov.au/qcg)

### 4.1 Guideline resources

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

- Flowchart: Routine management of Rh D negative woman excluding NIPA
- Flowchart: Routine management of Rh D negative woman including NIPA
- Education resource: Rh D negative women and pregnancy
- Knowledge assessment: Rh D negative women and pregnancy
- Parent information: Rh D negative blood group and pregnancy

### 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:

- Extended Practice Authority-Midwives for administration of Rh D immunoglobulin

### 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

#### 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](http://www.health.qld.gov.au/qcg)

#### 4.3.3 Implications for implementation

The following areas may have implications for local implementation of the guideline recommendations. It is suggested they be considered for successful guideline implementation.

- Economic considerations including opportunity costs
- Human resource requirements including clinician skill mix and scope of practice
- Clinician education and training
- Equipment and consumables purchase and maintenance
- Consumer acceptance
- Model of care and service delivery

## 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<sup>3</sup> [Refer to Table 9. NSQHS Standard 1]. Suggested audit and quality measures are identified in Table 10. Clinical quality measures.

Table 9. 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 10. Clinical quality measures

No	Audit criteria	Guideline section
1.	All women have blood group and type determined at booking appointment	Introduction Antenatal management
2.	Women who are Rh D negative and do not have preformed anti-D antibodies are administered prophylactic Rh D immunoglobulin at 28 and 34 weeks gestation	Routine Rh D immunoglobulin prophylaxis
3.	Rh D immunoglobulin is administered to women within 72 hours of a sensitising event	Rh D immunoglobulin for sensitising event
4.	Women who are Rh D negative and do not have preformed anti-D antibodies are administered prophylactic Rh D immunoglobulin within 72 hours of birth	Routine Rh D immunoglobulin prophylaxis
5.	Cord blood is tested for ABO Rh D blood group and if indicated direct antiglobulin test (DAT)	Neonatal care

## 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.

- Is a single-dose of Rh D immunoglobulin for routine antenatal prophylaxis sufficient in terms of safety, efficacy, uptake and a woman's acceptability?
- What is the volume of fetal cells in the maternal circulation that increases the risk of Rh D alloimmunisation?
- What is the accuracy of non-invasive prenatal tests (NIPTs) for fetal RHD in Rh D negative women with multiple pregnancies?
- What is the prevalence of RHD genotype in pregnant women from the current ethnic populations in Australia?
- What is the incidence of Rh D alloimmunisation in women with a BMI of > 30 kg/m<sup>2</sup> following routine doses of Rh D immunoglobulin?

## 4.1 Safety and quality

In conjunction with the Queensland Clinical Guideline *Standard care*<sup>4</sup>, implementation of this guideline provides evidence of compliance with the National Safety and Quality Health Service Standards.<sup>5</sup>

Table 11. NSQHS

NSQHS Criteria	Actions required	☑ Evidence of compliance
<b>NSQHS Standard 1: Clinical governance</b>		
<b>Patient safety and quality systems</b> 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.	<b>Diversity and high risk groups</b> 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	☑ 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
<b>Clinical performance and effectiveness</b> The workforce has the right qualifications, skills and supervision to provide safe, high-quality health care to patients.	<b>Evidence based care</b> 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	☑ 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
	<b>Performance management</b> 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	☑ 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 <a href="http://www.health.qld.gov.au/qcg">http://www.health.qld.gov.au/qcg</a>

NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 1: Clinical governance</b>		
<b>Patient safety and quality systems</b> 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.	<b>Policies and procedures</b> 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	<input checked="" type="checkbox"/> QCG has established processes to review and maintain all guidelines and associated resources <input checked="" type="checkbox"/> Change requests are managed to ensure currency of published guidelines <input checked="" type="checkbox"/> Implementation tools and checklist are provided to assist with adherence to guidelines <input checked="" type="checkbox"/> Suggested audit criteria are provided in guideline supplement <input checked="" type="checkbox"/> The guidelines comply with legislation, regulation and jurisdictional requirements
<b>NSQHS Standard 2: Partnering with Consumers</b>		
<b>Health literacy</b> Health service organisations communicate with consumers in a way that supports effective partnerships.	<b>Communication that supports effective partnerships</b> 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	<input checked="" type="checkbox"/> Consumer consultation was sought and obtained during the development of the guideline. Refer to the acknowledgement section of the guideline for details <input checked="" type="checkbox"/> Consumer information is developed to align with the guideline and included consumer involvement during development and review <input checked="" type="checkbox"/> The consumer information was developed using plain English and with attention to literacy and ease of reading needs of the consumer
<b>Partnering with consumers in organisational design and governance</b> Consumers are partners in the design and governance of the organisation.	<b>Partnerships in healthcare governance planning, design, measurement and evaluation</b> 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	<input checked="" type="checkbox"/> Consumers are members of guideline working parties <input checked="" type="checkbox"/> The guideline is based on the best available evidence <input checked="" type="checkbox"/> 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 Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 2: Partnering with Consumers</b>		
<b>Partnering with consumers in their own care</b> Patients are partners in their own care to the extent that they choose	<b>Healthcare rights and informed consent</b> 2.4 The health service organisation ensures that its informed consent processes comply with legislation and best practice 2.5 The health service organisation has processes to identify: a. The capacity of a patient to make decisions about their own care b. A substitute decision-maker if a patient does not have the capacity to make decisions for themselves	<input checked="" type="checkbox"/> This guideline and consumer information provides information for consumers to make informed decisions <input checked="" type="checkbox"/> This guideline promotes informed consent
	<b>Shared decisions and planning care</b> 2.6 The health service organisation has processes for clinicians to partner with patients and/or their substitute decision-maker to plan, communicate, set goals, and make decisions about their current and future care 2.7 The health service organisation supports the workforce to form partnerships with patients and carers so that patients can be actively involved in their own care	<input checked="" type="checkbox"/> Consumer information is available for this guideline <input checked="" type="checkbox"/> Consumers are members of guideline working parties
<b>NSQHS Standard 3: Infection prevention and control systems</b>		
<b>Clinical governance and quality improvement to prevent and control healthcare-associated infections, and support antimicrobial stewardship</b> Systems are in place to support and promote prevention and control of healthcare-associated infections, and improve antimicrobial stewardship.	<b>Integrating clinical governance</b> 3.1 The workforce uses the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for healthcare-associated infections and antimicrobial stewardship b. Managing risks associated with healthcare-associated infections and antimicrobial stewardship	<input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for care <input checked="" type="checkbox"/> Recommendations for use of antimicrobials are evidence based
<b>Infection prevention and control systems</b> Patients presenting with, or with risk factors for, infection or colonisation with an organism of local, national or global significance are identified promptly, and receive the necessary management and treatment.	<b>Standard and transmission-based precautions</b> 3.6 Clinicians assess infection risks and use transmission-based precautions based on the risk of transmission of infectious agents, and consider: a. Patients' risks, which are evaluated at referral, on admission or on presentation for care, and re-evaluated when clinically required during care	<input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for care <input checked="" type="checkbox"/> Assessment and care appropriate to the cohort of patients is identified in the guideline <input checked="" type="checkbox"/> High risk groups are identified in the guideline if applicable
<b>Antimicrobial stewardship</b> Systems are implemented for safe and appropriate prescribing and use of antimicrobials as part of an antimicrobial stewardship program	<b>Antimicrobial stewardship</b> 3.15 The health service organisation has an antimicrobial stewardship program that: a. Includes an antimicrobial stewardship policy b. Provides access to, and promotes the use of, current evidence-based Australian therapeutic guidelines and resources on antimicrobial prescribing	<input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for care <input checked="" type="checkbox"/> Recommendations for use of antimicrobials are evidence based <input checked="" type="checkbox"/> If applicable, Australian therapeutic guidelines and resources were used to develop guideline recommendations

NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 4: Medication safety</b>		
<b>Clinical governance and quality improvement to support medication management</b> 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	<b>Integrating clinical governance</b> 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	<input checked="" type="checkbox"/> The guideline provides current evidence based recommendations about medication
<b>NSQHS Standard 5: Comprehensive care</b>		
<b>Clinical governance and quality improvement to support comprehensive care</b> Systems are in place to support clinicians to deliver comprehensive care	<b>Integrating clinical governance</b> 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 <b>Partnering with consumers</b> 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	<input checked="" type="checkbox"/> 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 <a href="http://www.health.qld.gov.au/qcg">http://www.health.qld.gov.au/qcg</a> <input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for care <input checked="" type="checkbox"/> Consumer information is developed for the guideline

NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 6: Communicating for safety</b>		
<p><b>Clinical governance and quality improvement to support effective communication</b> Systems are in place for effective and coordinated communication that supports the delivery of continuous and safe care for patients.</p>	<p><b>Integrating clinical governance</b> 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 <b>Partnering with consumers</b> 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 <b>Organisational processes to support effective communication</b> 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"> <li><input checked="" type="checkbox"/> Requirements for effective clinical communication by clinicians are identified</li> <li><input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for communication between clinicians</li> <li><input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for communication with patients, carers and families</li> <li><input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for discharge planning and follow –up care</li> </ul>
<p><b>Communication of critical information</b> Systems to effectively communicate critical information and risks when they emerge or change are used to ensure safe patient care.</p>	<p><b>Communicating critical information</b> 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"> <li><input checked="" type="checkbox"/> Requirements for effective clinical communication of critical information are identified</li> <li><input checked="" type="checkbox"/> Requirements for escalation of care are identified</li> </ul>



NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 6: Communicating for safety (continued)</b>		
<b>Correct identification and procedure matching</b> Systems to maintain the identity of the patient are used to ensure that the patient receives the care intended for them.	<b>Correct identification and procedure matching</b> 6.5 The health service organisation: a. Defines approved identifiers for patients according to best-practice guidelines b. Requires at least three approved identifiers on registration and admission; when care, medication, therapy and other services are provided; and when clinical handover, transfer or discharge documentation is generated	<input checked="" type="checkbox"/> Requirements for safe and for correct patient identification are identified
<b>Communicating at clinical handover</b> Processes for structured clinical handover are used to effectively communicate about the health care of patients.	<b>Clinical handover</b> 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	<input checked="" type="checkbox"/> 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 Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 7: Blood management</b>		
<b>Clinical governance and quality improvement to support blood management</b> Organisation-wide governance and quality improvement systems are used to ensure safe and high-quality care of patients' own blood, and to ensure that blood product requirements are met.	<b>Integrating clinical governance</b> 7.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for blood management b. Managing risks associated with blood management c. Identifying training requirements for blood management	<input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for use of blood products
<b>Prescribing and clinical use of blood and blood products</b> The clinical use of blood and blood products is appropriate, and strategies are used to reduce the risks associated with transfusion.	<b>Optimising and conserving patients' own blood</b> 7.4 Clinicians use the blood and blood products processes to manage the need for, and minimise the inappropriate use of, blood and blood products by: a. Optimising patients' own red cell mass, haemoglobin and iron stores b. Identifying and managing patients with, or at risk of, bleeding c. Determining the clinical need for blood and blood products, and related risks <b>Prescribing and administering blood and blood products</b> 7.6 The health service organisation supports clinicians to prescribe and administer blood and blood products appropriately, in accordance with national guidelines and national criteria	<input checked="" type="checkbox"/> The guideline provides evidence-based and best practice recommendations for use of blood products <input checked="" type="checkbox"/> The guideline is consistent with recommendations of national guidelines

NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
<b>NSQHS Standard 8: Recognising and responding to acute deterioration</b>		
<p><b>Clinical governance and quality improvement to support recognition and response systems</b></p> <p>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><b>Integrating clinical governance</b></p> <p>8.1 Clinicians use the safety and quality systems from the Clinical Governance Standard when:</p> <ul style="list-style-type: none"> <li>a. Implementing policies and procedures for recognising and responding to acute deterioration</li> <li>b. Managing risks associated with recognising and responding to acute deterioration</li> <li>c. Identifying training requirements for recognising and responding to acute deterioration</li> </ul> <p><b>Partnering with consumers</b></p> <p>8.3 Clinicians use organisational processes from the Partnering with Consumers Standard when recognising and responding to acute deterioration to:</p> <ul style="list-style-type: none"> <li>a. Actively involve patients in their own care</li> <li>b. Meet the patient's information needs</li> <li>c. Share decision-making</li> </ul> <p><b>Recognising acute deterioration</b></p> <p>8.4 The health service organisation has processes for clinicians to detect acute physiological deterioration that require clinicians to:</p> <ul style="list-style-type: none"> <li>a. Document individualised vital sign monitoring plans</li> <li>b. Monitor patients as required by their individualised monitoring plan</li> <li>c. Graphically document and track changes in agreed observations to detect acute deterioration over time, as appropriate for the patient</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The guideline is consistent with National Consensus statements recommendations</li> <li><input checked="" type="checkbox"/> The guideline recommends use of tools consistent with the principles of recognising and responding to clinical deterioration</li> <li><input checked="" type="checkbox"/> Consumer information is developed for the guideline</li> </ul>

## References

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