

Queensland Clinical Guidelines

Translating evidence into best clinical practice

Maternity and Neonatal **Clinical Guideline**

Guideline Supplement: Primary postpartum haemorrhage (PPH)

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1 Introduction

This document is a supplement to the Queensland Clinical Guideline (QCG) *Primary postpartum haemorrhage (PPH)*. 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. Conflicts of interest were declared and managed in accordance with QCG processes.

1.3 Development process

This version of the guideline followed the [Queensland Clinical Guidelines Peer review 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
02/07/2009	MN0907.1-V1-R11	First publication
22/08/2011	MN09.1-V2-R11	New website: updated name and format changes
07/12/2012	MN12.1-V3-R17	First full review original guideline <ul style="list-style-type: none"> • Supplement and flow charts added/amended
14/10/2013	MN12.1-V4-R17	<ul style="list-style-type: none"> • Flow chart: Emergency donor panel activation: Target results: '<i>Base excess < minus 6</i>', amended to '<i>Base excess > minus 6</i>' • Section 3.2 Monitoring in the fourth stage of labour; Table 5 Recommended observations post birth: <ul style="list-style-type: none"> ◦ Removed <i>Normal birth</i> column ◦ Added oxygen saturation and level of consciousness to observations (as per National consensus statement: essential elements for recognising and responding to clinical deterioration¹) • Section 4.1 Tone: Carboprost information moved to Section 4.1.2 • Section 4.1.2 Uterine atonia and second line drugs: New section, Dinoprost added as carboprost not readily obtainable within Australia • Minor formatting and branding updates
15/03/2017	MN12.1-V5-R17	<ul style="list-style-type: none"> • Section 4.1.2 and Flowchart–initial response: Clarified administration instructions for carboprost • Oxytocin infusion regimen updated from 40 IU in 1 L IV solution to 30 IU in 500 mL IV solution to align with <i>Induction of labour</i> clinical guideline • Minor formatting/branding updates
March 2018 <i>QCG Steering Committee</i> <i>Statewide Maternity and Neonatal Clinical Network</i>	MN18.1-V6-R23	Second full review <ul style="list-style-type: none"> • Removed: <ul style="list-style-type: none"> ◦ Emergency donor panel ◦ Blood transfusion administration ◦ PPH proforma • Added: <ul style="list-style-type: none"> ◦ Point of care blood clot analyser use ◦ Fibrinogen concentrate

Publication date <i>Endorsed by:</i>	Identifier	Summary of major change
		<ul style="list-style-type: none"> ○ Tranexamic acid administration ○ Prophylactic misoprostol ○ Requirements and actions for low resource settings
March 2018	MN18.1-V7-R23	<p>Amendment to flowchart Initial response to PPH</p> <p>Added: Dose of carboprost if administered intramyometrial (500 micrograms)</p>
April 2019 <i>Statewide Maternity and Neonatal Clinical Network</i>	MN18.1-V8-R23	<p>Initiated following evidence updates to carbetocin use for PPH</p> <ul style="list-style-type: none"> • 2.3 Intrapartum risk management <ul style="list-style-type: none"> ○ Emergency caesarean section: Use of carbetocin added ○ Elective caesarean section: Evidence for carbetocin use deleted (use of carbetocin retained) • 2.3.1 Third stage management <ul style="list-style-type: none"> ○ Added new evidence for oxytocin IV versus IM • 2.3.2 Syntometrine <ul style="list-style-type: none"> ○ Moved from third stage management ○ Added carbetocin preferred to syntometrine • 2.3.3 Carbetocin <ul style="list-style-type: none"> ○ Added. New content • 2.3.4 Secondary prevention with misoprostol <ul style="list-style-type: none"> ○ Moved from postnatal risk management (no change to content) • Minor formatting updates
September 2020	MN18.1-V9-R23	<p>Amended following request arising from RCA and other change requests.</p> <ul style="list-style-type: none"> • 2.1 Risk factors <ul style="list-style-type: none"> ○ Added: Precipitate labour • 3.4.2 Second line pharmacological therapy for uterine atonia <ul style="list-style-type: none"> ○ Reworded: Prescribing considerations—observations required for carboprost administration • 3.6 Tissue <ul style="list-style-type: none"> ○ Added: Unexpected placenta accrete • 3.4.3 Intractable bleeding <ul style="list-style-type: none"> ○ Added new content: Medical procedures—care after intrauterine balloon tamponade insertion ○ Separated medical and surgical treatment of intractable bleeding into separate tables • Appendix A: Updated to align with Section 3.4 changes • Minor formatting updates
July 2021	MN18.1-V10-R23	<p>Amended following notification of error: Flowchart Massive haemorrhage protocol (MHP)</p> <ul style="list-style-type: none"> • The acronym <i>CBP</i> (critical bleeding protocol) replaced with <i>MHP</i> (massive haemorrhage protocol) • Minor formatting updates

Publication date <i>Endorsed by:</i>	Identifier	Summary of major change
July 2024 <i>QCG Steering Committee</i> <i>Queensland Maternity and Neonatal Clinical Network</i>	MN24.1-V11-R29	<p>Peer review</p> <ul style="list-style-type: none"> • Amended PPH definition to 500 mL irrespective of mode of birth • Added risk factors: placenta praevia, oxytocin use in labour, MROP, SSRI, inherited blood disorders • Amended prophylactic oxytocin recommendations: <ul style="list-style-type: none"> ◦ If vaginal birth with IV access, administer oxytocin 10 International Units IV ◦ If CS birth, administer oxytocin 3–5 International Units IV • Amended prophylactic carbetocin recommendations: <ul style="list-style-type: none"> ◦ CS under regional anaesthetic, consider IV carbetocin as a cost effective uterotonic • Added recommendation to weigh blood loss if visual estimation exceeds 300 mL • Section 8.3 Tissue <ul style="list-style-type: none"> ◦ Added: if placenta retained and excessive bleeding, consider oxytocin infusion ◦ Added: conservative management approach for unexpected placenta accreta • Section 8.4.2 Correction of coagulopathy <ul style="list-style-type: none"> ◦ Added: recommended blood product transfusion ratio ◦ Added: if actively bleeding, transfuse platelets if less than $75 \times 10^9/L$ to maintain target ◦ Added: indications for FFP administration without haemostatic testing ◦ Added: considerations for earlier use of fibrinogen replacement therapy • Amended major haemorrhage protocol activation criteria to align with National Blood Authority <ul style="list-style-type: none"> ◦ FROM 4 units RBC in less than 4 hours plus haemodynamic instability ◦ TO actual or anticipated need for 5 or more units RBC in 4 hours or haemodynamic instability • Added: Appendix B Surgical ligation procedures • Added: Appendix E POC (ROTEM® and TEG®) testing obstetric specific reference ranges • Updated: formatting, flow and references and flow charts to align with text
November 2024	MN24.1-V12-R29	<p>Change request</p> <ul style="list-style-type: none"> • Deleted: recommendation for Trendelenburg position if hypotensive during initial response to PPH

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 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 following framework.

Table 2. Scope framework

Scope framework	
Population	<ul style="list-style-type: none"> • Women who are pregnant • Women within 24 hours of birth
Purpose	Identify relevant evidence related to: <ul style="list-style-type: none"> • Risk assessment and prophylaxis for PPH • Recognition, assessment and management of PPH
Outcome	Support: <ul style="list-style-type: none"> • Early identification of pregnant women at risk of PPH • Risk management/mitigation strategies • Accurate recognition and assessment of a PPH • Best practice management of PPH
Exclusions	<ul style="list-style-type: none"> • Management of anaesthesia • Routine antenatal, intrapartum and postpartum care • Detailed instructions for surgical procedures to manage PPH • Elements specific to Queensland Clinical Guideline <i>Standard care</i> • Secondary PPH

2.3 Clinical questions

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

- How is primary postpartum haemorrhage classified?
- What are the risk factors for PPH?
- What measures reduce the risk and severity of PPH?
- How is a PPH recognised, assessed and managed?
- What care is recommended following a PPH?

2.4 Search strategy

A search of the literature was conducted during January 2024–May 2024. A further search was conducted in June 2024. 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 textbooks

2.4.1 Keywords

The following keywords were used in the basic search strategy: postpartum haemorrhage, obstetric haemorrhage, PPH, major haemorrhage, uterine atonia, oxytocin, uterotronics, tranexamic acid, misoprostol, carbetocin, balloon tamponade, coagulopathy, fibrinogen, TEG, ROTEM. Other keywords may have been used for specific aspects of the guideline.

2.5 Consultation

Major consultative and development processes occurred between May 2024 and July 2024.

Table 4. Peer review development process

Process	Activity
Original development	<ul style="list-style-type: none"> • Original consultative and development processes occurred in 2009 • This included formation of a working party as per usual QCG process • A survey of clinician opinion was also conducted
Decision for peer review	<ul style="list-style-type: none"> • A review of the guideline scope, clinical questions and current literature was undertaken during January 2024 and May 2024. Areas of clinical practice change were identified • Clinical leads <ul style="list-style-type: none"> ◦ Reviewed the previous scope and version of the guideline ◦ Reviewed identified areas of clinical practice change ◦ Confirmed aspects of the guideline for update and new inclusions ◦ Reached consensus agreement that a peer review process was appropriate
Consultation	<ul style="list-style-type: none"> • Expert clinicians and consumer representatives were identified and invited to peer review the updated guideline in May 2024 • Peer review panel was supported by the clinical leads • 24 invited members accepted

2.6 Endorsement

The guideline was endorsed by the:

- Queensland Clinical Guidelines Steering Committee in July 2024
- Queensland Maternity and Neonatal Clinical Network in July 2024

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.

EXAMPLE:

Queensland Clinical Guidelines. Primary postpartum haemorrhage. Guideline No. MN24.1-V12-R29. Queensland Health 2024. Available from: www.health.qld.gov.au/qcg.

3 Levels of evidence

The levels of evidence identified in the NATA consensus statement for patient blood management in obstetrics: prevention and treatment of postpartum haemorrhage (2019)² were used to inform summary recommendations.

The NATA consensus statement reflects the position of the Network for the Advancement of Patient Blood Management, Haemostasis and Thrombosis (NATA), the International Federation of Gynaecology and Obstetrics (FIGO), the European Board and College of Obstetrics and Gynaecology (EBCOG), and the European Society of Anaesthesiology (ESA).²

Table 5. Evidence grading system

Grading system					
Strength of recommendation: is risk/benefit clear?					
Yes	Grade 1	Strong recommendation “we recommend”			
No	Grade 2	Weak recommendation “we suggest”			
Quality of evidence					
A	High quality evidence—meta analysis, randomised controlled trials				
B	Moderate quality evidence—randomised controlled trials with limitations, observational studies with large effects				
C	Low or very low quality evidence—observational studies, randomised controlled trials with major limitations				
Possible Grades of recommendation					
• Grade 1 A	• Grade 1 B	• Grade 1 C	• Grade 2 A	• Grade 2 B	• Grade 2 C

3.1 Summary recommendations

Summary recommendations and levels of evidence are outlined in Table 6. Summary recommendations.

Table 6. Summary recommendations

Recommendation		Strength of recommendation
1.	Define primary PPH as blood loss of more than 500 mL within 24 hours, whatever the mode of delivery	1B
2.	Define severe PPH as ongoing blood loss of more than 1000 mL within 24 hours or blood loss accompanied by signs/symptoms of hypovolaemia, and massive life-threatening PPH as ongoing blood loss of more than 2500 mL or hypovolemic shock, whatever the mode of delivery	1B
3.	Be aware of risk factors for PPH, allowing prompt action towards prevention	1C
4.	Every effort should be made to correct anaemia of pregnancy prior to delivery	1A
5.	Multidisciplinary planning and management for women with abnormal placentation, with or without previous caesarean section	1C
6.	Actively manage third stage of labour to prevent PPH	1A
7.	Preventative administration of uterotonics after vaginal and CS birth. Adjusted oxytocin doses (5–10 IU) administered intravenously are the preferred prophylactic treatment	1A
8.	All healthcare professionals be trained to prevent PPH, to recognise the early signs of PPH, and to use pharmacological, mechanical and surgical methods to arrest PPH, according to the causative factor	1C
9.	Restrictive crystalloid resuscitation (1–2 mL of crystalloid for every 1 mL of blood loss) as initial fluid resuscitation according to the clinical condition and estimated blood loss	1C
10.	First line uterotonic treatment for PPH with the use of oxytocin 5–10 IU IV or IM given as a slow infusion/injection	1A
11.	Administer tranexamic acid (1 g by intravenous route) as soon as possible within the first 3 hours after PPH onset. This dose can be repeated after 30 minutes if bleeding continues	1B
12.	If bleeding does not stop despite treatment with uterotonics and other available conservative interventions (e.g. uterine massage, balloon tamponade), recommend the use of invasive surgical interventions	1C

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: Initial response to postpartum haemorrhage
- Flowchart: Major haemorrhage protocol
- Education resource: Primary postpartum haemorrhage (PPH)
- Knowledge assessment: Primary postpartum haemorrhage (PPH)
- Parent information: Bleeding after birth
- Parent information: Haemorrhage after birth

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:

- Standardised template to provide comprehensive and consistent documentation and reporting of PPH
- Local procedure/work instruction for PPH management techniques identified in the guideline (e.g. reduction of inverted uterus, manual removal of placenta, postnatal care of woman with intrauterine balloon tamponade)

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

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) Standards³ [Refer to Table 7. NSQHS Standard 1]. Suggested audit and quality measures are identified in Table 8. Clinical quality measures.

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.	Proportion of women experiencing PPH defined by blood loss volume: <ul style="list-style-type: none"> 500 mL to 999 mL Severe: 1000 mL to 2499 mL Major haemorrhage: 2500 mL or more 	Section 1.1
2.	Proportion of women given uterotonics to actively manage third stage who have a PPH	Section 4.1
3.	Proportion of women who have an estimated blood loss greater than 300 mL quantified by measurement	Section 6.1
4.	Proportion of women who require a blood transfusion following PPH	Section 7 Section 8.4
5.	Proportion of women experiencing major haemorrhage (blood loss greater than 2500 mL) where activation of the major haemorrhage protocol is initiated	Section 10
6.	Proportion of women requiring blood products who are treated using PoC blood clotting analysers	Section 7.3 Section 10.1

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.

- Most appropriate method to accurately assess blood loss after birth
- Optimal blood transfusion ratio for the management of obstetric haemorrhage
- Obstetric specific reference ranges for TEG[®] parameters to aid management of PPH
- Safety and efficacy of intrauterine vacuum-induced device for management of PPH
- Difference in side effects of intravenous versus intramuscular oxytocin for prevention of PPH following vaginal or caesarean section birth
- Optimal oxytocin dosing regimen following caesarean section birth
- Prophylactic use of tranexamic acid at caesarean section birth

4.6 Safety and quality

In conjunction with the Queensland Clinical Guideline *Standard care*⁴ implementation of this guideline provides evidence of compliance with the National Safety and Quality Health Service Standards.³

Table 9. NSQHS

NSQHS Criteria	Actions required	☑ Evidence of compliance
NSQHS Standard 1: Clinical governance		
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.	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	☑ 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
Clinical performance and effectiveness The workforce has the right qualifications, skills and supervision to provide safe, high-quality health care to patients.	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	☑ 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
	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	☑ 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

NSQHS Criteria	Actions required	☑ Evidence of compliance
NSQHS Standard 1: Clinical governance		
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.	Policies and procedures 1.07 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	☑ 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 Standard 2: Partnering with Consumers		
Health literacy Health service organisations communicate with consumers in a way that supports effective partnerships.	Communication that supports effective partnerships 2.08 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 2.09 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	☑ 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
Partnering with consumers in organisational design and governance Consumers are partners in the design and governance of the organisation.	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	☑ 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 Criteria	Actions required	☑ Evidence of compliance
NSQHS Standard 2: Partnering with Consumers		
Partnering with consumers in their own care Systems that are based on partnering with patients in their own care are used to support the delivery of care. Patients are partners in their own care to the extent that they choose	Healthcare rights and informed consent 2.04 The health service organisation ensures that its informed consent processes comply with legislation and best practice 2.05 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	☑ This guideline and consumer information provides information for consumers to make informed decisions ☑ This guideline promotes informed consent
	Shared decisions and planning care 2.06 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 2.07 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	☑ Consumer information is available for this guideline ☑ Consumers are members of guideline working parties
NSQHS Standard 3: Preventing and controlling infections		
Clinical governance and quality improvement systems are in place to prevent and control infections, and support antimicrobial stewardship and sustainable use of infection prevention and control resources Systems are in place to support and promote prevention and control of infections, improve antimicrobial stewardship, and support appropriate, safe and sustainable use of infection prevention and control resources in the health service organisation.	Integrating clinical governance 3.01 The workforce uses the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for infection prevention and control b. Identifying and managing risks associated with infections c. Implementing policies and procedures for antimicrobial stewardship d. Identifying and managing antimicrobial stewardship risks	☑ The guideline provides evidence-based and best practice recommendations for care ☑ Recommendations for use of antimicrobials are evidence based
Infection prevention and control systems Patients, consumers and members of the workforce with suspected or confirmed infection are identified promptly, and appropriate action is taken. This includes persons with risk factors for transmitting or acquiring infection, or colonisation with an organism of local, national or global significance.	Standard and transmission-based precautions 3.06 The health service organisation has processes to apply standard transmission-based precautions that are consistent with the current edition of the <i>Australian Guidelines for the Prevention and Control of Infection in Healthcare</i> , jurisdictional requirements, and relevant jurisdictional laws and policies, including work health and safety laws.	☑ The guideline provides evidence-based and best practice recommendations for care ☑ Assessment and care appropriate to the cohort of patients is identified in the guideline ☑ High risk groups are identified in the guideline if applicable

NSQHS Criteria	Actions required	☑ Evidence of compliance
NSQHS Standard 3: Preventing and controlling infections		
Antimicrobial stewardship The health service organisation has systems for the safe and appropriate prescribing and use of antimicrobials as part of an antimicrobial stewardship program	Antimicrobial stewardship 3.18 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	☑ The guideline provides evidence-based and best practice recommendations for care ☑ Recommendations for use of antimicrobials are evidence based ☑ If applicable, Australian therapeutic guidelines and resources were used to develop guideline recommendations
NSQHS Standard 4: Medication safety		
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	Integrating clinical governance 4.01 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	☑ The guideline provides current evidence based recommendations about medication
NSQHS Standard 5: Comprehensive care		
Clinical governance and quality improvement to support comprehensive care Systems are in place to support clinicians to deliver comprehensive care	Integrating clinical governance 5.01 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 5.03 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	☑ 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 Criteria	Actions required	☑ Evidence of compliance
NSQHS Standard 6: Communicating for safety		
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.	Integrating clinical governance 6.01 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 6.03 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 6.04 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	☑ 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
Communication of critical information Systems to effectively communicate critical information and risks when they emerge or change are used to ensure safe patient care.	Communicating critical information 6.09 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	☑ Requirements for effective clinical communication of critical information are identified ☑ Requirements for escalation of care are identified

NSQHS Criteria	Actions required	<input checked="" type="checkbox"/> Evidence of compliance
NSQHS Standard 6: Communicating for safety (continued)		
Correct identification and procedure matching Systems to maintain the identity of the patient are used to ensure that the patient receives the care intended for them.	Correct identification and procedure matching 6.05 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
Communicating at clinical handover Processes for structured clinical handover are used to effectively communicate about the health care of patients.	Clinical handover 6.07 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 6.08 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	☑ Evidence of compliance
NSQHS Standard 7: Blood management		
Clinical governance and quality improvement to support blood management 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.	Integrating clinical governance 7.01 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	☑ The guideline provides evidence-based and best practice recommendations for use of blood products
Prescribing and clinical use of blood and blood products The clinical use of blood and blood products is appropriate, and strategies are used to reduce the risks associated with transfusion.	Optimising and conserving patients' own blood 7.04 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 Prescribing and administering blood and blood products 7.06 The health service organisation supports clinicians to prescribe and administer blood and blood products appropriately, in accordance with national guidelines and national criteria	☑ The guideline provides evidence-based and best practice recommendations for use of blood products ☑ The guideline is consistent with recommendations of national guidelines

NSQHS 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</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>Integrating clinical governance</p> <p>8.01 Clinicians use the safety and quality systems from the Clinical Governance Standard when:</p> <ul style="list-style-type: none"> 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>Partnering with consumers</p> <p>8.03 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"> a. Actively involve patients in their own care b. Meet the patient's information needs c. Share decision-making <p>Recognising acute deterioration</p> <p>8.04 The health service organisation has processes for clinicians to detect acute physiological deterioration that require clinicians to:</p> <ul style="list-style-type: none"> 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 	<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

References

1. Belfort MA, Dildy GA. Postpartum hemorrhage and other problems of the third stage. In: James D, editor. High risk pregnancy: management options. St Louis: Elsevier Saunders; 2011. vol 4 p. 1283-312.
2. Muñoz M, Stensballe J, Ducloy-Bouthors AS, Bonnet MP, De Robertis E, Fornet I, et al. Patient blood management in obstetrics: prevention and treatment of postpartum haemorrhage. A NATA consensus statement. Blood Transfus 2019;17(2):112-36.
3. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards. Second edition. [Internet] 2021 [cited 2024 June 19]. Available from: www.safetyandquality.gov.au.
4. Queensland Clinical Guidelines. Standard care. Guideline No. MN22.50-V2-R27. [Internet]. Queensland Health. 2022. [cited 2024 March 11]. Available from: <https://www.health.qld.gov.au/qcg>.