Perinatal Morbidity and Mortality Policy

1. Background

Australian research suggests that one in every 10 patients suffers a complication of care during their hospital stay, with half of those complications being avoidable. While most complications will only have a minor impact on patients a minority end in permanent disability or death.

For the great majority, pregnancy and childbirth is a normal physiologic process and should be a positive and happy experience that culminates in a healthy mother and baby. This means, however, that on those occasions when things do go wrong, the effects can be even more devastating than in other areas of healthcare.

Maintaining maternal and neonatal safety in these circumstances depends on being vigilant for signs of deviation from normal and being prepared to take effective and prompt action when they are detected. However, because of their relative rarity, it may be some time before serious incidents become apparent when the overall local statistics seem unremarkable yet care may be suboptimal.

It is vital that any and all incidents of perinatal morbidity and mortality are properly reported and are transparently investigated in order to identify contributing care delivery problems, recommend actions to address these care delivery problems and prevent unnecessary recurrences.

The WA Health MP 0098/18 WA Review of Death Policy and Procedure outlines perinatal death review requirements for maternity sites in order to identify:

a) potentially preventable deaths, and
b) opportunities for improvement in the delivery of health services

WACHS further requires perinatal death review to ensure high quality, systematic investigation and audit of the likely cause/s of the death to reduce future risks and provide appropriate support to the parents / family

Legislative requirements for perinatal deaths

The legislative requirements relating to birth registration, notification of death, coronial reporting, disposal of products of conception (including terminations of pregnancy) under 20 weeks and funeral /cremations for those over 20 weeks gestation are outlined in a table at **Appendix four**.

2. Policy Statement

This policy provides clinical governance assurance that all events resulting in perinatal morbidity or mortality (M & M) are subject to systematic review with central monitoring of patterns, trends and relevant care recommendations for dissemination and action across all maternity service providers.

Central monitoring of perinatal M & M case patterns and trends then dissemination of lessons and recommendations for care across maternity services will be undertaken by the WACHS Perinatal M & M Committee.

2.1 Outcomes – maternal, fetal and neonatal morbidity reviews

- Known complications still require case review by senior clinicians (not involved in the care) to determine whether there was preventable harm
- All cases of significant maternal or neonatal morbidity or mortality, as per the Stork generated monthly Maternal and Infant trigger reports are to be reviewed by the Midwifery manager and /or senior Obstetric doctor – see Appendix 1.
- Where preventable harm is identified, anywhere across the care continuum, the case must be reported as a clinical incident.
- Findings from these case reviews are to be maintained in a local Perinatal M & M trigger review database for record keeping / audit purposes. The local database should be kept on a shared drive with access provided for relevant staff members.
- A template for both the Stork Maternal and Infant Trigger case reviews can be found in the supporting resources on HealthPoint with this policy. Managers should download the templates to their shared drive folder for use.

2.2 Outcomes – SAC1 incidents

- All perinatal SAC 1 incidents are to be reported and investigated as per WA Health MP 0122/19 Clinical Incident Management Policy and WACHS SAC 1 Business Rules see Appendix 1
- SAC 1 investigations should include:
    - at least one senior midwife and/or obstetric doctor from either another WACHS region central office or another WA public health service provider.
    - the maternity manager at that site provide they were not involved in the actual incident
- Maternity SAC 1 investigation reports will be tabled at the WACHS Perinatal M & M Committee meeting

2.3 Outcomes – perinatal death reviews

- All perinatal deaths will be subject to systematic local first and second line review as per the WACHS Review of Death procedure and classified in the WACHS Review of Death (ROD) app – see Appendix 2. Perinatal Review of Death tool
- The second level review should be completed by the most senior midwifery position and lead Obstetric doctor (except where involved in the case)
- These reviews must incorporate care across the continuum (antenatal where records available, intrapartum and postnatal) and not just for the presenting admission
- Findings should be reported to the WACHS Perinatal M & M Committee for tabling and discussion at the next committee meeting

2.4 Conflict of opinion about cases or reporting

Where two clinicians, or Health Service Provider (HSP) staff including non-maternity staff, disagree as to:

- whether a case should be reported as a clinical incident, and/or the SAC classification of an incident
- The classification of a perinatal death or whether a death is a reportable death

then staff should follow the WACHS Maternity Care Clinical Conflict Escalation Pathway

If a staff member remains concerned after following the Maternity Care Clinical Conflict Escalation Pathway they can seek advice of the WACHS Central Office Clinical Leads for Obstetrics or Midwifery

2.5 Resources to support investigation /audit of perinatal deaths

The Perinatal Society of Australia and New Zealand (PSANZ) have a number of resources / tools to support the high quality and systematic investigation of the causes of perinatal deaths. These can be found here https://sanda.psanz.com.au/clinical-practice/clinical-guidelines/ but of particular assistance is the:

- The Australian Perinatal Mortality Audit tool

2.6 Regional maternity care governance

Each region and site should is required to establish a maternity clinical governance committee (however titled), that meets regularly with a defined reporting structure, with representatives from:

- Each maternity site – midwifery and obstetric doctor
- Regional clinical leads for maternity
- Safety and quality
- Education

The maternity clinical governance committee (however titled) is accountable for oversight, actions, recommendations and escalation arising from the :

- WACHS Obstetric dashboard
- monthly Stork Maternal and Infant trigger case review findings
- Stork perinatal database routine reports
- Womens Health Australasia (WHA) Benchmarking Maternity Care reports
- ACHS Clinical Indicator Reports
- Health Round Table
- Local maternity related guidelines /pathways
- Regional maternity care clinical audit results
- First and second line review of perinatal deaths

3. Definitions

Fetal death (stillbirth)	Still born child means a child; a) of at least 20 weeks' gestation, **or**

	b) if it cannot be reliably established whether the child's period of gestation is more or less than 20 weeks, with a body mass of at least 400 grams at birth, that exhibits no sign of respiration or heartbeat, or other sign of life, immediately after birth.
Livebirth	Any child that exhibits any respiration or heartbeat, or other sign of life, immediately after birth (regardless of gestation). **PLEASE NOTE:** *The Coroner's Court of WA has confirmed that where a baby is born alive following a termination procedure and subsequently dies, this is a reportable death under the Coroners Act 1996*
Maternal death	Where a woman dies as the result of pregnancy or childbirth and up to 42 days after birth (WA Health) ***NOTE:*** *These deaths are reportable to the Chief Health Officer (CHO) for WA within 48 hours.* *Further information on how to make a notification and the information to be provided can be found at http://ww2.health.wa.gov.au/Articles/N_R/Notification-of-death-of-a-woman-as-a-result-of-pregnancy-or-childbirth*
Miscarriage	A fetal death occurring before 20 weeks of gestation
Neonatal death	The death of a liveborn infant at any gestation that occurs within 28 days of that birth *These births are registerable as a live birth and subsequent death*
Perinatal	From 20 completed weeks gestation to 28 completed days after birth (AIHW)
Perinatal death See **Appendix three** *for legal requirements*	A fetal death (stillbirth) or neonatal death **PLEASE NOTE:** *The CHO must be notified whenever any child:* *• of more than 20 weeks gestation is stillborn, or* *• under the age of 1 year dies from any cause whatsoever.* *Further information on how to make a notification and the information to be provided can be found at http://ww2.health.wa.gov.au/Articles/N_R/Notification-of-perinatal-and-infant-deaths*
Perinatal morbidity	Maternal, fetal or neonatal medical conditions or complications arising during the perinatal period (AIHW)
Perinatal mortality	Maternal, fetal or neonatal death in the perinatal period
Preventable harm	Unintended physical or emotional patient harm resulting from an act or omission of health care

4. Roles and Responsibilities

Regional Directors of Medicine / Nursing and Midwifery are to establish and maintain a regional maternity clinical governance committee with clear reporting accountability lines.

Midwives and Obstetric doctors are to report clinical incidents as per the Perinatal M & M clinical incident and/or case review trigger list (see Appendix 1). Any staff member can report a clinical incident even where others disagree as to whether it is reportable.

Midwifery Manager / Senior Obstetric doctor to

- To review all Stork Maternal and Infant Trigger report cases monthly to determine if any care delivery problems occurs and report the same as a clinical incident.
- Maternity managers are to create a shared folder (Perinatal M & M case reviews) to store the Stork Trigger report case review databases and all other routine Stork reports for the site (see templates in related documents on HealthPoint). The manager should ensure access to the shared folder for others who require it.
- Ensure first line review of all perinatal deaths occur
- Monitoring of all clinical indicator reports via Stork, Womens Health Australasia (WHA) WHA Benchmarking maternity care reports and Inpatient activity and costing reports, the WACHS Obstetric dashboard and the WA Health Maternity SQUiS dataset.

Central Office Safety and Quality

- Notify the PM&MC of completed Obstetric SAC1 investigation reports and maternity related CIMS data reports
- Provide a report of all ROD reviews conducted in the preceding two months to the PM&MC meeting

Doctors and nurses in emergency departments and in general wards caring for pregnancy loss under 20 weeks must familiarise themselves with the legislative requirements for these perinatal losses (see Table in Appendix 4).

All Staff are required to work within policies and guidelines to make sure that WACHS is a safe, equitable and positive place to be.

5. Compliance

Failure to comply with this policy document may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the Integrity Policy Framework issued pursuant to section 26 of the Health Services Act 2016 (HSA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

6. Records Management

Clinical: Health Record Management Policy

7. Evaluation

Evaluation of implementation of this policy is to be carried out by Regional Nursing and Midwifery Director and the Regional Medical Director 12 months post implementation.

Review of the functions of the PM&MC committee will be undertaken following the first 12 months of activity.

8. Standards

National Safety and Quality Health Service Standards (Second edition 2017) 1.1b/c, 1.7a,1.27a, 6.1,6,11

9. Legislation

The statutory requirement to notify perinatal and infant mortality is specified in Sections 335 1, 5(a) and (c), and 336A of the WA *Health (Miscellaneous Provisions) Act 1911* (Part XIII). https://ww2.health.wa.gov.au/Articles/N_R/Notification-of-perinatal-and-infant-deaths

10. References

Perinatal Society of Australia and New Zealand (PSANZ) PSANZ Clinical Guidelines for care around Stillbirth and Neonatal Death

Douglas, N., et al. *Inquiry into Obstetric and Gynaecological Services at King Edward Memorial Hospital, 2001* https://www.slp.wa.gov.au/publications/publications.nsf/DocByAgency/2DE36253839E4B1748256B280008DA15/$file/Volume+1+-+Complete.pdf

Kirkup, D. (2015) The Morecambe Bay Investigation UK NHS report into serious incidents relating to maternity care

Duckett, S. et al. *Targeting Zero: Supporting the Victorian hospital system to eliminate avoidable harm and strengthen quality of care, Report of the Review of Hospital Safety and Quality Assurance in Victoria* https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/hospital-safety-and-quality-review

Picone, D. and Pehm, K. (2015) *Review of the Department of Health and Human Services' management of a critical issue at Djerriwarrh Health Services*, Australian Commission on Safety and Quality in Health Care

Wallace, E. M. (2015) *Report of an Investigation into Perinatal Outcomes at Djerriwarrh Health Services* *https://www2.health.vic.gov.au/~/media/Health/Files/Collections/Research%20and%20reports/E/DJERRIWARRH%20-%20WALLACE%20REPORT%20-%20EXECUTIVE%20SUMMARY*

Wilson, R. M., et al. (1999) 'An analysis of the causes of adverse events from the Quality in Australian Health Care Study' https://www.mja.com.au/journal/1999/170/9/analysis-causes-adverse-events-quality-australian-health-care-study

11. Related Policies

MP0129/20 Release of Human Tissue and Explanted Medical Devices Policy
MP 0122/19 Clinical Incident Management Policy
MP 0098/18 WA Review of Death Policy and Procedure
WACHS Review of Death procedure

12. Policy Framework

Clinical Governance, Safety and Quality

This document can be made available in alternative formats on request for a person with a disability

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Appendix 1: Perinatal M & M incidents requiring CIMS report

An event or circumstance resulting from health care provision (or lack thereof) which could have, or did lead to, unintended or unnecessary physical or psychological harm to a patient should be reported as a clinical incident into Datix CIMS. There are three Severity Assessment Codes:

- **SAC 1** = serious harm or death
- **SAC 2** = moderate harm
- **SAC 3** = minor or no harm

WA Health defined SAC 1 clinical Incidents:

1. Discharge or release of an infant to an unauthorised person or infant abduction
2. Incorrectly positioned oro/ naso-gastric tube resulting in serious harm or death
3. Maternal death or serious disability associated with pregnancy, birth and the puerperium (up to 42 days after the birth)
4. Delay in recognising or responding to clinical deterioration (*including CTG*)
5. Fetal complications associated with health care delivery
    a. Unrelated to congenital abnormality (birth weight greater than 2500 grams) causing death, or serious and/or ongoing perinatal morbidity.
    b. Complications, not anticipated yet arose, and not managed in an appropriate or timely manner, resulting in death, or serious and/or ongoing morbidity.
    c. Intrapartum transfer to another facility for a higher care resulting in death, or serious and/or ongoing morbidity
    d. complication of resuscitation
6. Hospital process issues contributing to serious harm or death:
    a. triaging, assessment, planning or delivery of care e.g. miscommunication of test results, response to abnormal test results
    b. Delay in transport or transfer
    c. Misidentification of patients

WACHS Stork Maternal and Infant trigger cases requiring clinical review. (If the outcome is a result of health care provision, or lack thereof, the event should be reported in Datix CIMS)

1. Perinatal death not related to lethal congenital anomaly
2. Apgar score < 7 at 5 minutes or Cord blood pH less than 7.1
3. Neonatal trauma requiring extra observations e.g. Haematoma, brachial plexus injury, fractures
4. Unplanned birth at gestation below usual site threshold
5. Cord prolapse and vasa-praevia haemorrhage
6. Uterine rupture
7. Eclampsia
8. Pregnancy associated DVT or pulmonary embolus (up to 6 wks postnatal)
9. Peripartum hysterectomy (up to 6 wks)
10. Attempted operative vaginal birth outside of theatre leading to caesarean
11. Postpartum haemorrhage > 1500 ml **or** associated with transfusion
12. 4th degree tear
13. Postnatal return to theatre i.e. post-LUSCS or perineal repair
14. Maternal admission to HDU or ICU or requiring a special
15. Intrapartum or postnatal transfer to another maternity hospital for ongoing management
16. Bladder (including overdistension), bowel or blood vessel injury associated with birth
17. Incidents arising from baby co-sleeping (parent or carer)
18. Admission to SCN associated with water birth

Appendix 2: Perinatal Review of Death (ROD) tool

Case ID: **Region:**	**Death category:**		
Perinatal death – triggers (Maternal, fetal, neonatal) ***Yes response indicates potential preventability***	**AN**	**Labour**	**PN or Neonatal**
Care delivery issues			
Was there delay in diagnosis /assessment or transfer			
Was there delay in initiating Rx			
Was the information or communication provided inadequate, incorrect or misinterpreted			
Did care deviate from policy or guidelines			
Was there a complication due to Rx, procedure or operation			
Was there a medication error which may have contributed			
Was there failure to seek help / lack of supervision			
Were there any clinical risk factors that weren't identified or referred (i.e. Obstetric, medical, social, EPDS, substance misuse etc)			
Was there a failure to identify / follow up any abnormal test results (imaging, diagnostics or CTG etc)			
Was there failure to recognise deterioration or respond to deterioration appropriately			
Was there an adverse event and was it documented in the medical record			
Staffing issues			
Was no assistance available when required			
Was the skill mix inappropriate			
Was there inadequate staff for the activity demand			
Was there inadequate knowledge or skills			
Did a staff member fail to maintain their competence			
Organisation issues			
Was there misuse of, faulty or unavailable equipment			
Were there barriers to accessing or engaging in services required			
Was there inadequate training and education			
Was there lack of policy or guideline			
Was there inadequate system for information sharing between services			
Is the building design or functionality inadequate			
Patient factors:			
Was a parent co-sleeping with newborn			
Was there poor compliance with recommended care			
Were modifiable risk factors present – high BMI, smoking, alcohol /drugs, FDV etc			

Appendix 3: Perinatal death classification

Health Round Table criteria (for fetal deaths – also consider care preceding the death)	
Category 1	**Anticipated death** due to a life limiting condition (anticipated by clinicians and family at the time)
Category 2	**Not unexpected death** which occurred despite the health service provider taking appropriate measures
Category 3	**Unexpected death** which was not reasonably preventable with appropriate intervention
Category 4	**Preventable death** where steps **may not** have been taken to prevent it
Category 5	**Avoidable death** resulting from health care intervention or omission
Deaths classified as category 4 or 5 require SAC 1 reporting	

Appendix 4: Legislative requirements for all perinatal deaths (conception to 42 days post birth)

< 20 weeks OR < 400 grams if gestion uncertain	**Termination of Pregnancy**	**Miscarriage – no signs of life at birth**	**Neonatal death** (shows any signs of life – gasp / breath, heartbeat or movement)
	• Generic Consent for Procedure (MR295) • Form 1 - Notification by Medical Practitioner of Induced Abortion **IF BORN SHOWING ANY SIGNS OF LIFE:** • Birth Registration Form • Death in Hospital Form • Report to the Coroner • Arrange external funeral director	• Not registerable with Births Deaths and Marriages (BDM) but offer parents option to apply for Recognition of Early Pregnancy Loss certificate (BDM150) • Consent for KEMH cremation (if requested by parents) • Offer consent for pathology examination	• Birth Registration form • Death in hospital form (MR001) • Medical Certification of Stillbirth or Neonatal Death (BDM 201) • Offer consent for pathology examination
Fetal tissue disposal	• Recognisable fetal tissue - send to pathology for disposal • No recognisable fetal tissue – usual local process for human tissue disposal		• External funeral director
≥ 20 weeks OR ≥ 400 grams	**Termination of pregnancy**	**Stillbirth, or** **Neonatal Death** (shows any signs of life – gasp / breath, heartbeat or movement)	
	• Witness to Approval to Termination of Pregnancy (MR256) • Birth registration form Centrelink Payment Claim Form (**Stillbirth** = Bereavement, **NND** = Parenting) • Stork Data Base • **Stillborn:** consent for cremation at KEMH or funeral director **IF BORN SHOWING ANY SIGNS OF LIFE:** • Death in Hospital Form • Report to the Coroner • External funeral director	• Consent for post-mortem (MR 236) • Laboratory request for placental examination • Medical Certification of Stillbirth or Neonatal Death (BDM 201) • Death in Hospital Form (MR 001) • Report to Coroner (if reportable death) • Birth Registration Form • Centrelink Payment Claim Form (**Stillbirth** = Bereavement, **NND** = Parenting) • Stork perinatal data base • Permission to Transport Deceased Baby if taking home • Authorisation and Release of Human Tissue and Explanted Medical Device Consent Form (MR355.10) – if parents taking placenta home **Under 28 weeks:** • **Stillbirth:** Consent for cremation at KEMH or external funeral director • **Neonatal death**: requires external funeral director **All 28 weeks and over:** • External funeral director • Certification of medical attendant (Cremation form 7)	