

Royal Hospital for Women (RHW)
BUSINESS RULE
COVER SHEET



Health
 South Eastern Sydney
 Local Health District

REF: T23/64148

NAME OF DOCUMENT	Clinical Emergency Response System (CERS) - Management of the Deteriorating Patient
TYPE OF DOCUMENT	Clinical Business Rule
DOCUMENT NUMBER	RHW CLIN004
DATE OF PUBLICATION	8.11.24
NATIONAL STANDARDS	Standard 8
RISK RATING	High risk
REVIEW DATE	November 2026
FORMER REFERENCE(S)	Patient (Adult) with acute condition for escalation (Pace) criteria and escalation Adult Clinical Emergency Response System (CERS) and escalation
EXECUTIVE SPONSOR	Director of Medical Services
AUTHOR	Jessi Mossman Clinical Nurse Consultant – Clinical Emergency Response System RHW Recognising and Responding to Acute Deterioration Committee
SUMMARY	This CBR aims to facilitate the early recognitions and management of the deteriorating patient by utilising the Clinical Emergency Response System.
Key Words	Clinical Emergency Response System (CERS)

This Clinical Business Rule (CBR) is developed to guide safe clinical practice at the Royal Hospital for Women (RHW). Individual patient circumstances may mean that practice diverges from this Clinical Business Rule. Using this document outside RHW or its reproduction in whole or part, is subject to acknowledgement that it is the property of RHW and is valid and applicable for use at the time of publication. RHW is not responsible for consequences that may develop from the use of this document outside RHW.

1. BACKGROUND

Failure to appropriately recognise, respond, and manage acute deterioration is associated with adverse patient outcomes. This clinical business rule aims to facilitate the early recognition and management of the deteriorating person by utilising the Clinical Emergency Response System (CERS).

N.B For mental health deterioration, please refer to [RHW Mental Health Escalation – Maternity and Gynaecology - inpatient / outpatient](#) CBRs For neonates, please refer to [Management of the Deteriorating NEONATAL Inpatient CBR. SESLHDPR/340 Management of the Deteriorating Neonatal Inpatient. RHW Recognition and Management of Neonate who is Clinically Deteriorating outside of Newborn Care Centre \(NCC\)](#)

2. RESPONSIBILITIES

2.1 All Clinical Staff (including nursing and midwifery, allied health, and medical teams)

- Be aware of, and know how to activate local CERS escalation pathway
- Escalate care of deteriorating patient as per:
- PD2020_018 Recognition and Management of Patients who are Deteriorating
SESLHDPR/705 Management of the Deteriorating MATERNITY woman
SESLHDPR/697 Management of the Deteriorating ADULT inpatient (excluding maternity)
- Conduct a systematic physical assessment inclusive of mental state (A-I assessment)
- Initiate appropriate clinical care within scope of practice
- Document any actions interventions and escalation in the patients' health care record
- Increase monitoring of vital signs when there is evidence of deterioration
- Complete appropriate CERS forms
- Responsible for undergoing mandatory training as outlined as per My Health Learning
- Involve and inform women, family and carers in assessment and how to escalate any concerns related to deterioration and associated outcome
- Complete mandatory training as per My Health Learning
- Escalate an Adult Code Blue call for all outpatients, members of the public, visitor or staff and not a Clinical Review or Rapid Responder
- Complete Mandatory Training as per My Health Learning

Medical Staff

- Ensure any alterations to calling criteria are reviewed for appropriateness and formally authorised
- Document assessment, intervention, management plan and outcome in eMR. document in eMR notes.

3. PROCEDURE

See [Appendix 2: RHW Clinical Emergency Response System flowchart](#).

See [Appendix 3: Minimum number and frequency for vital sign observations](#)

See [Appendix 4: Management of patients with suspected or identified acute stroke symptoms at RHW flowchart](#)

See [Appendix 5: Escalation of care for patients admitted under the POWH Plastic's team and Escalation of care of Breast patients admitted under the POWH Breast team](#)

See [Appendix 6: Clinical Excellence Commission \(CEC\) Sepsis Pathways](#)

3.1 Assessment of Deterioration

All nursing and midwifery staff should observe and document daily any changes in a woman's cognitive function, perception, behaviour, or emotional state. These changes may be characterised by an acute or gradual change in mental state. Assess and incorporate mental state changes as part of A-I systematic assessment and escalate any changes from the woman's baseline using CERS. Referral to specialist teams and retrieval services if required.

Minimum requirements for vital sign monitoring are outlined by [NSW Health in PD2020_018 Recognition and management of patients who are deteriorating](#). A copy of these requirements can be found in [Appendix 3: Minimum number and frequency for vital sign observation](#)

3.1 Assessment of the deteriorating fetus antenatal and intrapartum

For guidance for electronic fetal heart rate monitoring and escalation of care, refer to [Maternity - Fetal heart rate monitoring GL2018_025](#) section 2.3.3 Escalation of care

3.2 Activating a CERS Call

Dial '2222' from any phone in the hospital

- Request appropriate level of escalation (Clinical Review, Rapid Response, Adult or Neonatal Code Blue)
- State exact location
- If known, state the Admitting Medical Officer (if a CERS call is activated in Birth Unit, state admitting Obstetric Consultant).
- This activation is determined by deviations from:
 - Standard Maternity Observation Chart (SMOC)
 - Standard Adult Observation Chart (SAGO)

- A CERS call **MUST** be made through switch, including when the medical team is already present

3.3 Clinical Review (Yellow Zone)

A CERS Call is not mandatory for an isolated observation in the Yellow Zone of the SMOC/SAGO chart. If an observation falls into the Yellow Zone, a senior nurse/midwife must be consulted.

- If the senior nurse/midwife determines that a Clinical Review is not required, they should review the woman. Consideration should be given to increasing the frequency of observations as indicated by the woman's condition, and include intervention reverse and/or halt deterioration. Findings of A-I assessment, nursing/maternity intervention and reason for non-escalation should be documented in the patient healthcare record.
- If the senior nurse/midwife determines that a Clinical Review is required, follow the CERS escalation pathway

Activation of a Clinical Review prompts a **30-minute response time**

- Activation of a Clinical Review **MUST** occur if:
- Two or more observations are in the Yellow Zone
- A staff member, patient, family or carer is concerned

Medical Responders to a Clinical Review will be the Admitting Medical Team Resident.

Two or more Clinical Reviews within 8 hours, a Registrar must review the patient.

If there has been no response to a Clinical Review call, please activate a rapid response

3.4 Rapid Response (Red Zone)

Activation of a Rapid Response prompts a **5-minute response time**.

Activation of a Rapid Response **MUST** occur if:

- A patient has any observations in the **red zone**
- A woman requires a 30-minute or 60-minute emergency caesarean section (**For 30 and 60 min LSCS criteria please refer to Caesarean Birth - Maternal Preparation and Receiving the Neonates CBR**)

Medical Response will consist of:

- Admitting Medical Team Registrar (in-hours) or rostered Registrar (after hours)
- Anaesthetists (rostered to respond to Rapid Response and Code Blue calls at RHW)

If a Rapid Response call is activated, whilst another CERS call is ongoing; the team responding to the initial call will conduct a clinical assessment and negotiate who is the most appropriate person to remain with the patient. The rest of the team members will attend the second CERS call.

Discussion regarding management plan with the AMO should occur if there are 2 or more Rapid Response calls as soon as practicable

3.5 Code Blue (Life Threatening)

Activation of a Code Blue prompts an immediate response time.

Activate a Code Blue immediate response for:

- Patients with **any potentially life-threatening condition**, such as cardiac/respiratory arrest, airway obstruction, stridor, threatened airway, seizures (new or prolonged), or significant stroke. See Appendix 4: Management of patients with suspected or identified acute stroke symptoms at RHW flowchart
- Serious concern by staff member, patient, family and/or carer
- If there has been no response to a Rapid Response call
- **Any non-admitted woman, visitor, or staff member who requires medical assistance**

Medical Responders to a Code Blue will consist of:

- Admitting Medical Team Registrar (in-hours) or rostered Registrar (after hours)
- Anaesthetists (rostered to respond to Rapid Response and Code Blue calls at RHW)
- All medical staff should attend as able

Additional Responders to a Code Blue include:

- CERS Clinical Nurse Consultant (CNC) – in hours
- COU CNC – in hours
- After-Hours Nurse Manager
- Porter

Additional assistance is available by escalating to the **Prince of Wales Hospital (POWH) Code Blue Team**. The POWH Code Blue team can be activated by dialling '2222' and requesting the '**POWH Adult Code Blue Team**', include the exact location. It is advised to have a staff member direct the POWH team in from the elevators.

Provide clinical handover to the responding teams using ISBAR (Introduction, Situation, Background, Assessment and Recommendation). Perform an A-I assessment, unless the patient is in Cardiac Arrest, whereby commence Basic Life Support until specialist team arrives. For Basic life support Please refer to [ANZCOR guidelines Basic Life Support](#). For Advanced life support please refer to ANZCOR guidelines Advanced life support within scope.

- If required, a maxi lifter is located in Macquarie Ward or slide lifter located next to the emergency trolley at admissions, to lift person from the floor to a bed or trolley
- If an acute stroke is suspected a Rapid Response (or Code Blue if life threatening criteria present) call must be activated and the patient assessed immediately. If the patient is deemed safe for transfer, the patient must be transferred to POWH Emergency Department (ED) for urgent assessment by the Neurology team. POW ED CNUM must be informed of the immediate transfer **on 0428 652 614**. Please refer to Appendix 4: Management of patients with suspected or identified acute stroke symptoms at RHW flowchart

Documentation of ALL Code Blue calls must be on the paper based SESLHD Resuscitation Form (located on every emergency trolley) and the yellow copy send to the CERS CNC for review. The white copy remains in the patient's clinical notes. An eMR note must also be documented.

The AMO should be notified of all Code Blues as soon as practicable

3.6 Breast and Plastics service

For escalation of care for patients admitted to RHW under the care of Prince of Wales Hospital Plastic's/ Breast team please see Appendix 5: Escalation of care for patients admitted under the POWH Plastic's team and Escalation of care of Breast patients admitted under the POWH Breast team

3.7 Altered Calling Criteria

Altered Calling Criteria (ACC) are changes made to the Standard Calling Criteria by the AMO/delegated clinician responsible, to take account of a woman's unique physiological circumstances and/or medical condition. ACC are only to be used to align the calling criteria with the patient's baseline vital sign observation parameters when they are above or below the standard calling criteria.

Establishment of the woman's baseline should involve an assessment of the patient, and consultation with the woman, carers and/or family. Alter standard calling criteria only if **appropriate**, and where possible identify other agreed signs of deterioration. Alterations may be 'acute' or 'chronic'.

3.7.1 Acute

Acute alterations must be set for a defined period as determined by the clinician altering the calling criteria but cannot be set for longer than eight hours. Acute alterations should be reviewed sooner than the set time if indicated by changes in the clinical condition

3.7.2 Chronic

Chronic alterations may be set for the entirety of the woman's episode of care and can be made when the woman's chronic and baseline observations fall outside standard parameters. This function is expected to be used rarely in the maternity patient

3.7.3 Process of Altering Calling Criteria:

A medical officer must consult with the Admitting Medical Officer or delegated clinician prior to altering the standard calling criteria

Document alterations to calling criteria on the appropriate electronic observation chart in the electronic medical record, and must include:

- Rationale for the alteration, and the new calling criteria
- Authorisation of the alterations by the AMO/delegated clinician responsible
- The **minimum** time frame for review of the altered calling criteria
 - o Acute alterations: time frame must reflect expected progression of patient condition and have a **maximum** time frame of 8 hours.
 - o Chronic alterations: time frame must be documented, and may be set for a specific time frame, up to a maximum duration of the patient's admission, but needs formal acknowledgement by the admitting clinical team during routine reviews.
- After the time frame has lapsed, the Calling Criteria reverts to the standard calling criteria on the SAGO/SMOC chart.
- Individualised treatment plans, including Resuscitation Plans, may also require alterations to the yellow/red zone triggers, and this must also be documented in the woman's health care record

3.8 REACH

For guidance around REACH program and the patient's / family / carer's activating a REACH call please refer to RHW CBR - [REACH, Recognise, Engage, Act, Call, Help is on the way.](#)

3.9 SEPSIS

Sepsis is **infection** with organ **dysfunction** and is a '**medical emergency.**' Conduct an A-I assessment for the deteriorating patient and if there are signs of sepsis, commence the appropriate pathway (see 8.4, Appendix 6). All sepsis resources can be accessed through the [Clinical Excellence Commission \(CEC\) website.](#)

NOTE: All sepsis pathways are paper form sourced from individual wards

4.0 Adult ECMO at the Royal Hospital for Women

The Prince of Wales ECMO Service will provide emergency ECMO for adult patients at the Royal Hospital for Women (RHW)

These patients may present with conditions specific to the peri-partum period that are acute and reversible, therefore amenable to ECMO support. These include:

- Peri-partum cardiomyopathies
- Amniotic fluid embolus
- Pulmonary embolus
- Acute exacerbations of chronic conditions
- Haemorrhagic shock or arrest is a contraindication to ECMO
- The activation pathway for ECMO is unchanged – the resuscitation team leader activates via the emergency number 2222
- The operating theatres at the RHW is a suitable ECMO location. If the patient is already in theatre the ECMO team should bring equipment and staff to the operating theatres.
- Patients in any other location at the RHW should be moved to a suitable ECMO Location using the Location Algorithm, [Location Algorithm](#). Directions to Cath Lab from RHW are located in, [Map of Royal Hospital for Women to Cath Lab](#).

5.1 Maternal Collapse

For antenatal, intrapartum, or postnatal women experiencing an acute event involving cardiorespiratory systems and/or central nervous system, resulting in a reduced or absolute loss of consciousness please refer to [RHW Maternal Collapse CBR](#)

5.2 Educational Notes

At least one Code Blue responder will be skilled in Advanced Life Support

5.3 Implementation and communication plan

This revised CBR will be distributed to all medical, nursing and midwifery staff via the assigned health email. The CBR will be discussed at ward meetings, Recognising and Responding to Acute Deterioration Committee, and patient quality and safety meetings. Education will occur through an open forum and local ward implementation strategies to address changes to practice. The CBR will be uploaded to the CBR tab on the intranet to replace the existing CBR

5.4 Related Policies and procedures

SESLHDPR/697 Management of the Deteriorating ADULT inpatient (excluding maternity)

SESLHDPR/705 Management of the deteriorating MATERNITY woman

SESLHDPR/340 Management of the Deteriorating NEONATAL inpatient

RHW Recognition and Management of Neonate who is Clinically Deteriorating outside of Newborn Care Centre (NCC)

NSW Health PD2020_018 Recognition and management of patients who are deteriorating

NSW Health PD2014_030 Using Resuscitation Plans in End-of-Life Decisions

NSW Health PD2021_069 Health Care Records – Documentation and Management

NSW Health GL20018_025 Maternity- Fetal Heart rate monitoring

RHW Mental health Escalation – Maternity and Gynaecology – inpatient

RHW Mental health Escalation – Maternity and Gynaecology – Outpatient

RHW REACH – recognise, engage, act, call, help is on the way

RHW Maternal Collapse

Clinical Excellence Commission (CEC) Sepsis Pathways

RHW Close Observation Unit: Admission, Escalation, Transfer and Discharge

Australian and New Zealand Committee on Resuscitation (2021). *Guideline 8: Cardiopulmonary resuscitation* (ANZCOR Guideline 8). <https://resus.org.au/guidelines/>

6.0 Cultural Support

When clinical risks are identified for an Aboriginal woman, she may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.

For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours

If the woman is from a non-English speaking background, call the interpreter service: [NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.](#)

7. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
23.10.24	5	RHW BRGC
April 2024	5	Author: J Mossman (CERS CNC) Recognising and Responding to Acute Deterioration Committee
Sep 2023	4	Reviewed and approved RHW Safety and Quality Committee
Dec 2019	3	Reviewed and Approved RHW Safety and Quality Committee
Nov 2019		Reviewed and endorsed Maternity Services LOPS Group – previous title Patient (Adult) with acute condition for scalation (Pace) criteria and escalation
Aug 2019		Changed from PACE to CERS
Feb 2019		Changed '777' to '2222'
Jun 18		Reviewed and endorsed Maternity Services LOPs 19/6/18 – previous title Adult Clinical Emergency Response System (CERS) and escalation
Jul 2014		Approved Quality and Patient Care Committee 17/7/14
Nov 2010		Approved Quality and Patient Safety Committee 18/11/10
Nov 10		Approved Gynaecology Services Management Committee 11/11/10

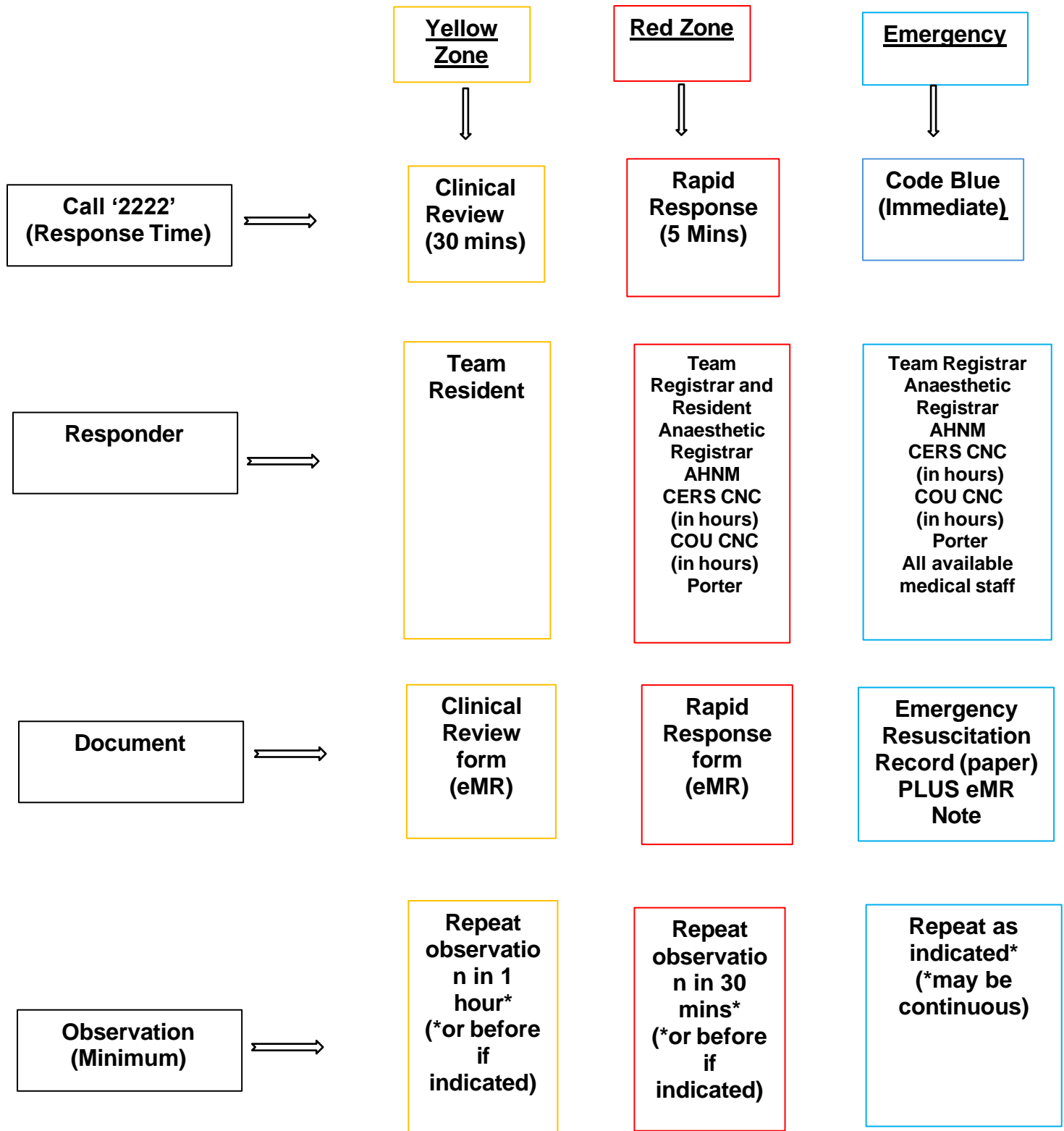
7. APPENDICES

7.1 Appendix 1: Emergency trolley and Defibrillator Locations RHW

LEVEL	WARD	DEFIBRILLATOR
Level 4	Close Observation Unit (COU)	Yes- R Series and Automated External Defibrillator (AED)
Level 3	Paddington (South)	Yes- AED
Level 2	Day Surgery	Yes- AED
Level 2	Gynaecology Outpatients	Yes- AED
Level 2	Macquarie Ward	Yes- AED
Level 1	Birthing Services	Yes- AED
Level 1	Recovery RHW	Yes- R Series Yes- AED
Level 1	Newborn Care Centre	Yes- R Series
Ground	Admissions – Behind front desk	Yes- AED
Ground	Reproductive Medicine	Yes- AED
Ground (Hospital campus Avoca Street entrance)	Menopause hub	Yes- AED

7.2 Appendix 2: RHW Clinical Emergency Response System (CERS)

RHW Clinical Emergency Response System (CERS)



7.3 Appendix 3: Minimum number and frequency for vital sign observations

[NSW Health PD2020_018 Recognition and management of patients who are deteriorating](#)

Patient group	Minimum required frequency of assessment	Minimum set of vital sign observations	Comments
Adult inpatients	Four (4) times per day at six (6) hourly intervals.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, pain score	Including pregnant women greater than twenty (20) weeks gestation and less than six (6) week post-partum admitted for a condition unrelated to pregnancy who are monitored on the Standard Maternity Observation Chart (SMOC).
Mental health acute and	Three (3) times per day at eight (8) <u>hourly</u>	Respiratory rate, oxygen saturation, heart rate, blood	Mental state assessment of patients within a mental health

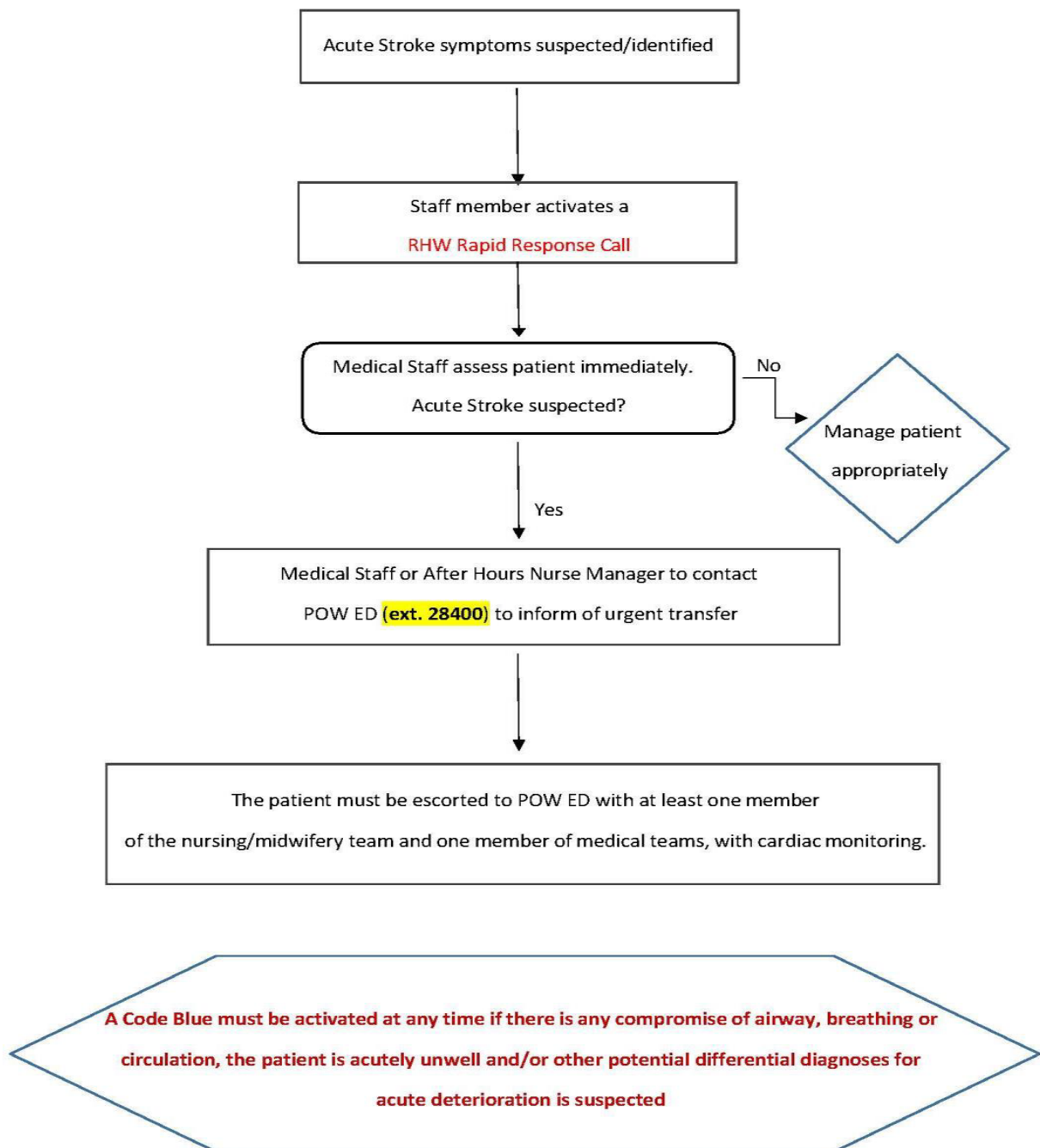
Patient group	Minimum required frequency of assessment	Minimum set of vital sign observations	Comments
subacute	intervals for a minimum of 48 hours. Then daily thereafter.	pressure, temperature, level of consciousness, pain score	inpatient unit are to be completed in line with Engagement and Observation in Mental Health Inpatient Units PD2017_025 .
Mental health non-acute	Three (3) times per day at eight (8) hourly intervals for a minimum of 48 hours. Then monthly thereafter.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, pain score	Patients with active comorbid physical health conditions or aged 65 years and over are to have observations no less than weekly and are to have a comprehensive systematic physical assessment completed at least monthly.
Hospital in the Home	At least once during each consultation/visit ⁽¹⁷⁾	To be determined locally based on the models of care and assessment of risk	
Special Care Nursery	Six (6) times per day at four (4) hourly intervals	Respiratory rate, respiratory distress, oxygen saturation, heart rate, temperature, behaviour change*, pain score	
Newborn	Before leaving the birthing environment One (1) full set of vital signs observations and a newborn risk assessment completed If perinatal risk factors are identified and/or observations within the blue, yellow or red zone and/or additional criteria present, further observations must be recorded on a Standard Newborn Observation Chart (SNOC) six (6) times per day at four (4) hourly intervals.	Respiratory rate, oxygen saturations, heart rate and temperature	Newborns with low or no identifiable risk factors are to be monitored/assessed in-line with local protocols.
Paediatric inpatients	Six (6) times per day at four (4) hourly intervals	Respiratory rate, respiratory distress, oxygen saturation, heart rate, temperature, level of consciousness, new onset confusion or behaviour change*, pain score	Baseline blood pressure (BP) is required within 24 hours of admission. Additional BPs are to be taken as clinically indicated (PD2010_32)

Patient group	Minimum required frequency of assessment	Minimum set of vital sign observations	Comments
Maternity/ antenatal inpatient	Four (4) times per day at six (6) hourly intervals.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*. For fetal heart rate monitoring requirements refer to Maternity – Fetal heart rate monitoring GL2018_025	SMOC is recommended for women greater than <u>twenty</u> (20) weeks gestation and less than six (6) week post-partum.
Maternity/ postnatal inpatient with no identified risk factors	Before leaving the birth environment One (1) full set of vital signs observations and a maternity risk assessment completed.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, accumulated blood loss.	If a woman has observations in a coloured zone or identified risk factors, vital sign observations are to be performed four times per day at six hourly intervals. Women receiving midwifery care in the home are to be monitored according to local protocol, refer to section 4.6.
Maternity/ postnatal inpatient with risk factors	Four (4) times per day at six (6) hourly intervals.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, accumulated blood loss.	SMOC is recommended for women greater than <u>twenty</u> (20) weeks gestation and less than six (6) week post-partum.
Inpatient sub-acute/ long stay/ rehabilitation	Twice a day at a maximum interval of 12 hours apart	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, pain score	If a patient develops an acute medical/ physiological problem the required frequency of observations reverts to a minimum of four (4) times per day at six (6) hourly intervals
Inpatient palliative care	Twice a day at a maximum interval of 12 hours apart	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, pain score	If a patient develops acute medical/physiological problems are managed in line with their goals of care and Resuscitation Plan

7.4 Appendix 4: Management of patients with suspected or identified acute stroke symptoms at RHW flowchart



Management of patients with suspected or identified acute stroke symptoms at RHW



8.4 Appendix 5: Escalation of care for patients admitted under the POWH Plastic's team and Escalation of care of Breast patients admitted under the POWH Breast team

Applies to the following settings:

Close Observation Unit, Macquarie Ward, Day Surgery Ward, Recovery Unit

Patient shows signs of deterioration

CODE BLUE criteria met → Activate RHW Code Blue

RED ZONE criteria met → Activate RHW Rapid response call

CLINICAL REVIEW criteria met → Request Clinical Review by the relevant admitting team

0800-1700 weekdays

Breast surgery → POWH breast/endocrine registrar

Breast plastics → POWH breast plastics registrar

1630 – 0800 weekdays/WE/PH

A: Surgical site issues identified

Patient under care of Breast surgery team – POWH Surgical registrar

Patient under care of Breast plastics patient – POWH Plastics registrar

B: NO surgical site issues identified - RHW RMO

Contacting POWH surgical teams for clinical reviews

1. Activate a RHW Clinical Review and ask:
“Please put me through to POWH switch. I need to contact the plastics registrar”.
2. Once onto POWH switch state “I need to be put through to the Adults Plastics Registrar”. **STAY ON THE LINE.** POWH switch will contact the plastics registrar who will CONNECT the NURSE on the line to the DOCTOR.
3. OR contact the plastics registrar directly (numbers available in the post-operative instructions or ward contact list)
4. If unable to contact the Registrar, contact the admitting consultant surgeon.

Breast surgical site issues requiring clinical reviews in breast/breast plastics patients include:


Breast is:

- Cold, dark, pink, or purplish/ white with cap refill >3s and Doppler signal lost
- Sudden increase in drain output of frank blood
- Swelling, discoloration, signs of bleeding within breast
- Signs of poor perfusion in breast skin/ nipple


**Clinical Emergency Response System (CERS) –
 Management of the Deteriorating Patient**

RHW CLIN004

8.4 Appendix 6: CEC sepsis pathways; Adult, Maternal, Paediatric and Neonatal



SMR060400

 <p>NSW Health</p> <p>Facility:</p> <p style="font-size: 1.2em; font-weight: bold;">ADULT SEPSIS PATHWAY</p>	FAMILY NAME MRN	GIVEN NAME <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
	D.O.B. ____/____/____ M.O.	
	ADDRESS	
	LOCATION / WARD	
	COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE	

Use for patients 16 years or older in any clinical setting to support recognition and management of sepsis
 For pregnant women and up to six weeks post-pregnancy use the CEC Maternal Sepsis Pathway
 Use local febrile neutropenia guideline where relevant

COULD IT BE SEPSIS?

Sepsis is infection with organ dysfunction and is a **medical emergency**

Does the patient have any signs or symptoms of INFECTION?

<input type="checkbox"/> Looks very unwell <input type="checkbox"/> History of fever, rigors, hypothermia <input type="checkbox"/> Tachypnoea, short of breath, cough, new O ₂ requirement <input type="checkbox"/> New confusion, change in behaviour or altered level of consciousness, delirium	<input type="checkbox"/> Unexplained pain <input type="checkbox"/> Wound or line redness, pain, swelling, exudate <input type="checkbox"/> Non-blanching rash <input type="checkbox"/> Abdominal pain, distension, vomiting, diarrhoea <input type="checkbox"/> Dysuria, oliguria, frequency, odour <input type="checkbox"/> Raised lactate, WCC or CRP (if known)
--	---

AND/OR any of the following risk factors?

<input type="checkbox"/> Aged ≥ 65 years <input type="checkbox"/> Frail, chronic condition or recent fall <input type="checkbox"/> Aboriginal and Torres Strait Islander people <input type="checkbox"/> Immunocompromised <input type="checkbox"/> Indwelling medical device or line	<input type="checkbox"/> Patient, carer or family concern <input type="checkbox"/> Recent trauma, surgery, procedure <input type="checkbox"/> Known infection not responding to treatment <input type="checkbox"/> Re-presentation, deterioration or no improvement with the same illness
---	--

Commence A-G systematic assessment and document a full set of vital sign observations

Does the patient have signs of ORGAN DYSFUNCTION?
Early signs include hypotension, tachypnoea, altered mental state, raised lactate

<input type="checkbox"/> ANY RED ZONE observation OR additional criteria (including lactate ≥ 4 mmol/L)	<input type="checkbox"/> TWO or more YELLOW ZONE observations OR additional criteria (including lactate ≥ 2 mmol/L)
Call a RAPID RESPONSE (as per local CERS) and refer to any Resuscitation Plan	Call for a CLINICAL REVIEW within 30 minutes (as per local CERS) AND consult with the SENIOR CLINICIAN
This patient has PROBABLE SEPSIS with a high risk of deterioration and SEPTIC SHOCK	Does the senior clinician consider the patient has POSSIBLE SEPSIS?
Commence sepsis treatment (over page) AND inform the Attending Medical Officer Discuss the management plan with the patient, carer or family including any Advance Care Plan	

Consider other causes of deterioration

If infection treat with antibiotics

Increase frequency of vital sign observations as indicated by the patient's condition

Reconsider sepsis if the patient deteriorates


ADULT SEPSIS PATHWAY




SMR060400

Holes Punched as per AS2925 1: 2019
 BINDING MARGIN - NO WRITING

NO WRITING

Page 1 of 2

 NSW Health	FAMILY NAME	MRN
	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
	D.O.B. ____/____/____	M.O.
	ADDRESS	
Facility:		
ADULT SEPSIS PATHWAY	LOCATION / WARD	
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		

RESUSCITATE	Complete actions 1 to 5 within 60 minutes with ongoing A-G systematic assessment		
	1. Get help 2. Commence monitoring	• Escalate as per local CERS (if not already called) • Give oxygen as required to maintain SpO ₂ ≥ 95% (88 - 92% for COPD)	WITHIN 
	3. Obtain access and collect pathology <input type="checkbox"/> Vascular access <input type="checkbox"/> Lactate (unless collected) <input type="checkbox"/> Pathology (FBC, EUC, LFTs, VBG + CRP if available) <input type="checkbox"/> Blood cultures <input type="checkbox"/> Other cultures / investigations <input type="checkbox"/> Blood glucose level	• Call for expert assistance after 2 failed attempts at cannulation and prepare for intraosseous access • Collect venous blood gas or point of care test if available • Collect 2 sets of blood cultures from 2 separate sites; if difficult to obtain do not delay antibiotics • If CVAD in situ, take 1 blood culture set from CVAD and 1 set peripherally Do not wait for test results: commence fluids and antibiotics	WITHIN 
	4. Commence fluid resuscitation <input type="checkbox"/> First fluid bolus given <input type="checkbox"/> Second fluid bolus given <input type="checkbox"/> IDC considered <input type="checkbox"/> Vasopressors commenced	• Give 500mL crystalloid bolus STAT e.g. sodium chloride 0.9% / Hartmann's / Plasma-Lyte • Assess response, aim for systolic blood pressure ≥ 100mmHg • Monitor and document strict fluid input / output • Repeat 500mL bolus if ongoing hypotension • Closely monitor patients with cardiac or renal dysfunction, pulmonary oedema, elderly or frail when giving repeated fluid boluses If ongoing hypotension, consider commencement of vasopressors and escalate to Intensive Care or retrieval service	WITHIN 
	5. Commence antibiotics <input type="checkbox"/> First / new antibiotic commenced	• Document source of infection if known • Use <u>Therapeutic Guidelines: Antibiotic</u> or local sepsis guideline • Consult expert advice for complex patient or multiple sources	
	REASSESS & REFER	6. Reassess <input type="checkbox"/> Repeat lactate taken	• Re-examine for other sources of infection • Update nurse in charge and Attending Medical Officer - use ISBAR • Discuss the management plan with the patient, carer, family • Repeat lactate within 2 hours
		7. Refer <input type="checkbox"/> Intensive Care / retrieval service contacted	• Refer for surgical source control if required • Escalate to Intensive Care or retrieval service if no improvement or further deterioration
Continue to monitor vital sign observations and fluid balance – minimum frequency every 30 minutes for 2 hours then hourly for 4 hours Actively seek microbiology and other investigation results and review treatment plan Escalate as per local CERS if any signs of deterioration			

Print Name: _____	Signature: _____
Designation: _____	Date: ____/____/____



**Clinical Emergency Response System (CERS) –
 Management of the Deteriorating Patient**


RHW CLIN004



SMR060402

Notes Punched as per AS2828.1:2019
 BINDING MARGIN - NO WRITING

NH00307 050224

 NSW Health	FAMILY NAME		MRN
	GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
Facility:	D.O.B. ____/____/____		M.O.
ADDRESS			
LOCATION / WARD			
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE			

MATERNAL SEPSIS PATHWAY

Use for all pregnant women and up to six weeks post-pregnancy, including any perinatal loss, in any clinical setting to support recognition and management of sepsis
 Use local febrile neutropenia guideline where relevant



RECOGNISE

COULD IT BE SEPSIS?
 Sepsis is infection with organ dysfunction and is a **medical emergency**

Does the woman have any signs or symptoms of INFECTION?

<input type="checkbox"/> Myalgia, back pain, general malaise, headache	<input type="checkbox"/> History of fevers, rigors or feeling cold
<input type="checkbox"/> Unexplained abdominal pain, distension	<input type="checkbox"/> Flu-like symptoms, cough, sputum, breathless
<input type="checkbox"/> Vomiting, diarrhoea	<input type="checkbox"/> Breast, wound or line redness, swelling, pain (including epidural block site)
<input type="checkbox"/> New confusion, change in behaviour or altered level of consciousness	<input type="checkbox"/> Dysuria, oliguria, frequency, odour

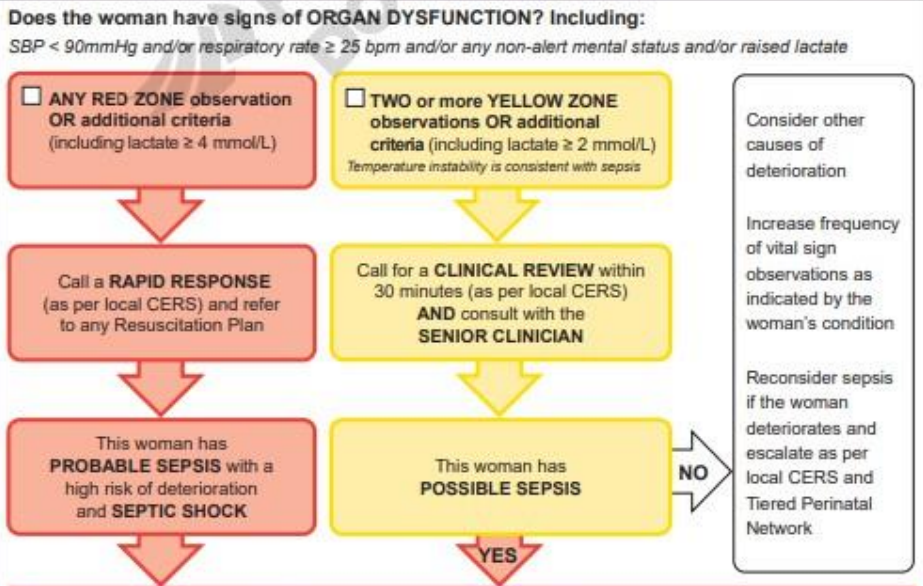
AND/OR any of the following risk factors?

<input type="checkbox"/> Recent surgery, procedure, wound	<input type="checkbox"/> Indwelling medical device or line
<input type="checkbox"/> At risk of intrauterine infection (prolonged rupture of membranes, prolonged labour, retained products of conception, fetal tachycardia)	<input type="checkbox"/> Iron-deficiency anaemia
<input type="checkbox"/> Immunocompromised, chronic illness	<input type="checkbox"/> Unwell children, household members
	<input type="checkbox"/> Concern by woman, family, clinician
	<input type="checkbox"/> Aboriginal and Torres Strait Islander people

Maternal sepsis often presents with vague non-specific symptoms

Commence A-G systematic assessment and document a full set of vital sign observations

RESPOND & ESCALATE



Commence sepsis treatment (over page)
 Discuss the management plan with the woman, family, carer including any Advance Care Plan
Assess the fetal / baby wellbeing unless there has been a perinatal loss

MATERNAL SEPSIS PATHWAY

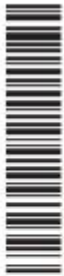
SMR060402

	NSW Health	FAMILY NAME	MRN
	Facility:	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
MATERNAL SEPSIS PATHWAY	D.O.B. ____/____/____	M.O.	
	ADDRESS		
	LOCATION / WARD		
	COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		

RESUSCITATE		Complete actions 1 to 5 within 60 minutes with ongoing A-G systematic assessment including fetal / baby wellbeing as relevant	
	1. Get help	<ul style="list-style-type: none"> Escalate as per local CERS (if not already called) Consult with Obstetrician / senior clinician 	WITHIN
	2. Commence monitoring	<ul style="list-style-type: none"> Give oxygen as required to maintain SpO₂ ≥ 95% 	
	3. Obtain access and collect pathology	<ul style="list-style-type: none"> Call for expert assistance after 2 failed attempts at cannulation Collect venous blood gas or point of care test if available Collect 2 sets of blood cultures from 2 separate sites; if difficult to obtain do not delay antibiotics Collect microbiological samples according to suspected source (e.g. urine, vaginal swabs / lochia, breast milk, stool, wound, placental, viral swabs and throat) <p style="color: red; font-size: small;">Do not wait for test results: commence fluids and antibiotics</p>	WITHIN
	<input type="checkbox"/> Vascular access <input type="checkbox"/> Lactate (unless collected) <input type="checkbox"/> Pathology (FBC, EUC, LFTs, fibrinogen, coagulation screen, VBG + CRP if available) <input type="checkbox"/> Blood cultures <input type="checkbox"/> Other cultures / investigations <input type="checkbox"/> Blood glucose level		
	4. Commence fluid resuscitation	<ul style="list-style-type: none"> Give initial 1000mL sodium chloride 0.9% bolus STAT Aim for systolic blood pressure (SBP) > 90mmHg If SBP < 90mmHg after initial bolus call a RAPID RESPONSE Monitor and document strict fluid input / output <p style="color: red; font-size: small;">If ongoing hypotension, consider commencement of vasopressors and escalate to Intensive Care or retrieval service</p>	WITHIN
<input type="checkbox"/> Fluid bolus commenced <input type="checkbox"/> IDC inserted			
5. Commence antibiotics	<ul style="list-style-type: none"> Document source of infection if known Use <u>Therapeutic Guidelines: Antibiotic</u> or local sepsis guideline Consult expert advice if the woman is already on antibiotics and / or has septic shock 		
<input type="checkbox"/> First / new antibiotic commenced			
REASSESS & REFER	6. Reassess	<ul style="list-style-type: none"> Re-examine for other sources of infection Update midwife in charge and Attending Medical Officer – use ISBAR Sepsis management plan documented by a medical officer Discuss the management plan with the woman and family Update the baby's care team on the woman's condition (if applicable) Repeat lactate within 2 hours 	
	<input type="checkbox"/> Repeat lactate taken		
	7. Refer	<ul style="list-style-type: none"> Refer for surgical source control if required Escalate via the Tiered Perinatal Network in line with service capability levels if no improvement or further deterioration 	
<input type="checkbox"/> Intensive Care / retrieval service contacted			
Continue to monitor vital sign observations and fluid balance – minimum frequency every 30 minutes for 2 hours then hourly for 4 hours Actively seek microbiology and other investigation results and review treatment plan Escalate as per local CERS if any signs of deterioration			
Print Name: _____		Signature: _____	
Designation: _____		Date: ____/____/____	

Holes Punched as per AS2929 1: 2019
BINDING MARGIN - NO WRITING





SMR060399



Holes Punched as per AS2828.1:2019
BINDING MARGIN - NO WRITING



NSW Health Facility:	FAMILY NAME	MRN
	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
PAEDIATRIC SEPSIS PATHWAY	D.O.B. ____ / ____ / ____	M.O.
	ADDRESS	
	LOCATION / WARD	
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		

Use for patients from 28 days corrected age to 16 years in any clinical setting to support recognition and management of sepsis
 Babies up to 28 days corrected age use CEC Neonatal Sepsis Pathway
 Use febrile neutropenia guideline where relevant

RECOGNISE

COULD IT BE SEPSIS?
 Sepsis is infection with organ dysfunction and is a **medical emergency**

Does the patient have any **signs of INFECTION** or history / evidence of **fever** or **hypothermia**, **PLUS ANY** of the following:

<input type="checkbox"/> Looks sick or toxic – grunting, rigors, pallor, poor feeding	<input type="checkbox"/> Parental, carer or clinician concern
<input type="checkbox"/> Change in behaviour or decreased level of consciousness	<input type="checkbox"/> Immunocompromised or complex medical history
<input type="checkbox"/> Persistent tachycardia	<input type="checkbox"/> Re-presentation or worsening with same illness
<input type="checkbox"/> Severe unexplained pain	<input type="checkbox"/> Under 3 months of age
<input type="checkbox"/> Non-blanching rash	<input type="checkbox"/> Central line or invasive device
	<input type="checkbox"/> Recent surgery, burn, wound
	<input type="checkbox"/> Aboriginal and Torres Strait Islander people

Commence A-G systematic assessment and document a full set of vital sign observations including blood pressure

Does the patient have ANY features of SEVERE ILLNESS?
 Laboratory features of **severe illness / organ dysfunction** include acidosis, low platelets, elevated creatinine, elevated CRP or coagulopathy

- Any of the following **RED ZONE** criteria:
- Respiratory rate OR distress
 - Heart rate
 - Blood pressure (or drop in diastolic pressure or widening pulse pressure)
 - Lactate \geq 4 mmol/L
 - Level of consciousness ACVPU

- Any of the following **YELLOW ZONE** criteria:
- Respiratory rate OR distress
 - Heart rate
 - Blood pressure
 - Central capillary refill \geq 3 seconds
 - Lactate 2.0 to 3.9 mmol/L
 - Change in behaviour

Call a **RAPID RESPONSE**
 (as per local CERS)

Call for a **CLINICAL REVIEW** within 30 minutes (as per local CERS) **AND** consult with the **SENIOR CLINICIAN**

Does the senior clinician consider the patient has sepsis?

PROBABLE SEPSIS
 (with or without signs of shock)
 • Resuscitate (over page)
 • Treat within 60 minutes

POSSIBLE SEPSIS
 (no signs of shock)
 • Investigate
 • Treat within 3 hours

SEPSIS UNLIKELY
 • Consider other causes of deterioration
 • Reconsider sepsis if the patient deteriorates

NH00131 270324

PAEDIATRIC SEPSIS PATHWAY

SMR060.399

**Clinical Emergency Response System (CERS) –
 Management of the Deteriorating Patient**

RHW CLIN004

<p>NSW GOVERNMENT</p> <p>Facility: _____</p> <p style="text-align: center;">PAEDIATRIC SEPSIS PATHWAY</p>	<p>DATE: _____ / _____ / _____ M.O. _____</p> <p>ADDRESS _____</p> <p>LOCATION / WARD _____</p> <p style="text-align: center;">COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE</p>		
RESUSCITATE	<p style="text-align: center; background-color: #f0f0f0;">Complete actions 1 to 5 within 60 minutes with ongoing A-G systematic assessment</p> <div style="border: 1px solid black; padding: 5px;"> <p>1. Get help • Consult with Paediatrician / Emergency Physician / ICU / NETS WITHIN 5 min</p> <p>2. Commence monitoring • Give oxygen as required to maintain SpO₂ ≥ 95%</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>3. Obtain access and collect pathology • Obtain vascular access within 5 minutes (intraosseous access if no vascular access) WITHIN 30 min</p> <p><input type="checkbox"/> Vascular access</p> <p><input type="checkbox"/> Blood culture</p> <p><input type="checkbox"/> Blood gas</p> <p><input type="checkbox"/> Lactate</p> <p><input type="checkbox"/> Blood glucose level (BGL)</p> <p>• Take blood culture prior to antibiotics (3mL in paediatric or 10mL in adult bottle)</p> <p>• Where possible collect all relevant cultures</p> <p style="color: red; font-size: small;">Do not wait for test results: commence fluids and antibiotics</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>4. Commence antibiotics • Use Therapeutic Guidelines: Antibiotic OR local guideline OR Australian Clinical Practice Guidelines – antimicrobial guidelines</p> <p><input type="checkbox"/> First antibiotic commenced</p> <p>• Give IM ceftriaxone if IV or intraosseous access is not obtained within 15 minutes</p> <p>• Document source of infection if known</p> <p>5. Commence fluid resuscitation • Administer 20 mL/kg sodium chloride 0.9% IV or intraosseous rapid bolus WITHIN 60 min</p> <p><input type="checkbox"/> Fluid bolus given</p> <p>• Assess response</p> <p>• If BGL < 3 mmol/L give 2 mL/kg glucose 10%</p> <p>• Consider giving a second 20 mL/kg sodium chloride 0.9% IV or intraosseous rapid bolus</p> </div>		
REASSESS & REFER	<p>6. Reassess</p> <p><input type="checkbox"/> Repeat lactate taken</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">Does the patient have any persistent signs of sepsis following 40 mL/kg bolus fluid?</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; background-color: #FFDAB9; padding: 5px;"> <p style="text-align: center;">Any of the following RED ZONE criteria:</p> <p><input type="checkbox"/> Respiratory rate or distress</p> <p><input type="checkbox"/> Heart rate</p> <p><input type="checkbox"/> Blood pressure (or drop in diastolic / widening pulse pressure)</p> <p><input type="checkbox"/> Lactate ≥ 4 mmol/L (or not improving)</p> <p><input type="checkbox"/> Level of consciousness ACVPU</p> </td> <td style="width:50%; background-color: #FFFACD; padding: 5px;"> <p style="text-align: center;">Any of the following YELLOW ZONE criteria:</p> <p><input type="checkbox"/> Blood pressure</p> <p><input type="checkbox"/> Central capillary refill ≥ 3 seconds</p> <p><input type="checkbox"/> Urine output < 1 mL/kg/hr</p> </td> </tr> </table> <p style="text-align: center; font-weight: bold; color: red;">OR hypoglycaemia, acidosis, low white cell count or abnormal coagulation</p> </div> <p style="text-align: center; font-weight: bold; font-size: 24px; color: gray;">↓ YES</p> <p style="text-align: center;">Seek advice immediately from local / regional paediatric experts AND Contact Intensive Care / NETS Tel: 1300 36 25 00</p> <p>• Prepare adrenaline (epinephrine) infusion as per the NETS Clinical Calculator - can be given via peripheral IV or intraosseous access</p> <p>• Discuss management plan with the family / carers</p>	<p style="text-align: center;">Any of the following RED ZONE criteria:</p> <p><input type="checkbox"/> Respiratory rate or distress</p> <p><input type="checkbox"/> Heart rate</p> <p><input type="checkbox"/> Blood pressure (or drop in diastolic / widening pulse pressure)</p> <p><input type="checkbox"/> Lactate ≥ 4 mmol/L (or not improving)</p> <p><input type="checkbox"/> Level of consciousness ACVPU</p>	<p style="text-align: center;">Any of the following YELLOW ZONE criteria:</p> <p><input type="checkbox"/> Blood pressure</p> <p><input type="checkbox"/> Central capillary refill ≥ 3 seconds</p> <p><input type="checkbox"/> Urine output < 1 mL/kg/hr</p>
<p style="text-align: center;">Any of the following RED ZONE criteria:</p> <p><input type="checkbox"/> Respiratory rate or distress</p> <p><input type="checkbox"/> Heart rate</p> <p><input type="checkbox"/> Blood pressure (or drop in diastolic / widening pulse pressure)</p> <p><input type="checkbox"/> Lactate ≥ 4 mmol/L (or not improving)</p> <p><input type="checkbox"/> Level of consciousness ACVPU</p>	<p style="text-align: center;">Any of the following YELLOW ZONE criteria:</p> <p><input type="checkbox"/> Blood pressure</p> <p><input type="checkbox"/> Central capillary refill ≥ 3 seconds</p> <p><input type="checkbox"/> Urine output < 1 mL/kg/hr</p>		
	<p>7. Refer</p> <p>Prepare inotropic support and consider respiratory support</p> <p><input type="checkbox"/> Intensive Care / NETS contacted</p> <p><input type="checkbox"/> Inotropes commenced</p>		
	<p>Print Name: _____ Signature: _____</p> <p>Designation: _____ Date: ____ / ____ / ____</p>		

BINDING MARGIN - NO WRITING
 SMR060399



Holes Punched as per AS2828 1: 2019
BINDING MARGIN - NO WRITING

NSW Health	FAMILY NAME		MRN
	GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
Facility:	D.O.B. ____/____/____	M.O.	
ADDRESS			
LOCATION / WARD			
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE			

NEONATAL SEPSIS PATHWAY

Use for neonates (babies up to 28 days corrected age) in any clinical setting to support recognition and management of sepsis

RECOGNISE

COULD IT BE SEPSIS?
Sepsis is infection with organ dysfunction and is a **medical emergency**

Does the baby have any of the following:

<p>Signs or symptoms of INFECTION?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fever, hypothermia, temperature instability <input type="checkbox"/> Pale, mottled, central cyanosis <input type="checkbox"/> Lethargy, poor feeding, floppy / poor tone <input type="checkbox"/> Apnoea(s) <input type="checkbox"/> New or worsening signs of respiratory distress 	<ul style="list-style-type: none"> <input type="checkbox"/> New rash, red umbilicus, cellulitis, joint swelling <input type="checkbox"/> Seizure(s), abnormal movements, high pitched cry, irritability, increased tone, jitteriness <input type="checkbox"/> Abdominal distension / tenderness, vomiting, diarrhoea, blood in stool
<p>Maternal risk factors?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prolonged rupture of membranes > 18 hours <input type="checkbox"/> Maternal pyrexia ≥ 38°C <input type="checkbox"/> Maternal infection <input type="checkbox"/> Group B streptococcus (GBS) <input type="checkbox"/> Bacterial growth on placental swab <input type="checkbox"/> Increased sepsis probability on Neonatal Early-Onset Sepsis Calculator* 	<p>Other risk factors?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Family, carer or clinician concern the baby is sick <input type="checkbox"/> Unwell family members <input type="checkbox"/> Re-presentation for ongoing condition or concern <input type="checkbox"/> Known or suspected infection - not improving <input type="checkbox"/> Indwelling line(s) with signs of infection <input type="checkbox"/> Prematurity (immunocompromised) <input type="checkbox"/> Aboriginal and Torres Strait Islander people

***Neonatal Early-Onset Sepsis Calculator**

ONLY for babies < 24 hours old AND ≥ 34 weeks gestation
Entered details must be exact
Set incidence to 0.4/1000 births
Note: Does not replace the senior clinician decision to commence treatment

© Copyright 2023 Kaiser Permanente Division of Research

Commence A-G systematic assessment and document a full set of vital sign observations including blood pressure

RESPOND & ESCALATE

Does the baby have ANY features of SEVERE ILLNESS?
Laboratory features of severe illness / organ dysfunction include acidosis, lactate ≥ 4 mmol/L, neutropenia, thrombocytopenia, elevated CRP

<input type="checkbox"/> ANY RED ZONE observation OR additional criteria	<input type="checkbox"/> ANY YELLOW ZONE observation OR additional criteria
<p>Call a RAPID RESPONSE (as per local CERS) and consult with SENIOR CLINICIAN</p>	<p>Call for a CLINICAL REVIEW (as per local CERS) and SENIOR CLINICIAN review within 30 minutes</p>
<p>Consider other causes (e.g. postnatal transition, respiratory distress syndrome, congenital heart disease, hypovolaemia or metabolic disease)</p> <p>Does the senior clinician consider the baby has POSSIBLE SEPSIS?</p>	
<p>YES</p> <p>COMMENCE SEPSIS TREATMENT (over page)</p>	<p>NO</p> <p>Consider other causes of deterioration and increase frequency of vital sign observations Reconsider sepsis if the baby deteriorates</p>


14/1/2019 10:01:02.4






NEONATAL SEPSIS PATHWAY

SMR060.403

**Clinical Emergency Response System (CERS) –
 Management of the Deteriorating Patient**

RHW CLIN004

 NSW Health	FAMILY NAME	MRN
	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
Facility:	D.O.B. ____/____/____	M.O.
	ADDRESS	
NEONATAL SEPSIS PATHWAY	LOCATION / WARD	
	COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE	

RESUSCITATE	Complete actions 1 to 5 within 60 minutes with ongoing A-G systematic assessment		
	1. Get help	<ul style="list-style-type: none"> Consult with Paediatrician / Neonatologist / Emergency Physician / NETS 	WITHIN 
	2. Monitor Airway, Breathing, Circulation	<ul style="list-style-type: none"> Commence respiratory support if required Give supplemental oxygen to maintain SpO₂ <ul style="list-style-type: none"> 90 – 94% (babies < 48 hours) ≥ 95% (babies > 48 hours) Continually monitor the baby and assess vital sign observations including blood pressure Assess for signs of shock (e.g. delayed capillary refill, poor perfusion, tachycardia, hypotension, acidosis) Provide thermal environment to achieve normothermia 	WITHIN 
	3. Obtain access and collect pathology <input type="checkbox"/> Vascular access <input type="checkbox"/> Blood culture <input type="checkbox"/> Blood gas <input type="checkbox"/> Lactate <input type="checkbox"/> Blood glucose level (BGL)	<ul style="list-style-type: none"> Gain access: IV / umbilical / intraosseous (if baby > 2 kg) Call for expert assistance after 2 failed attempts at cannulation Prioritise blood culture collection (0.5 - 1 mL) prior to antibiotics Collect relevant screening samples (e.g. lumbar puncture, urine) according to suspected source if haemodynamically stable <p style="color: red; font-size: small;">Do not delay antibiotic administration for sample collection or test results</p>	WITHIN 
	4. Commence antibiotics <input type="checkbox"/> Antibiotics commenced <input type="checkbox"/> Consulted with appropriate expert clinician or NETS	Prescribe and administer antibiotics according to the Australasian Neonatal Medicines Formulary (ANMF) BENZYL PENICILLIN OR AMPICILLIN plus GENTAMICIN	
	5. Consider fluid resuscitation	<ul style="list-style-type: none"> If signs of shock, administer 10 mL/kg sodium chloride 0.9% bolus Give 2 mL/kg glucose 10% plus maintenance fluids if: <ul style="list-style-type: none"> BGL < 2.6 mmol/L (babies < 48 hours) BGL < 3.0 mmol/L (babies > 48 hours) 	WITHIN 
REASSESS & REFER	6. Reassess	<ul style="list-style-type: none"> If signs of shock persist, discuss ongoing management including additional fluid bolus and/or vasopressors e.g. adrenaline (epinephrine) with a Neonatologist / NETS Continue to monitor vital sign observations at a minimum frequency every 30 minutes for 2 hours, then hourly for 4 hours Actively seek microbiology and other investigation results Review treatment plan and consider viral screening 	
	7. Refer <input type="checkbox"/> Intensive Care / NETS contacted	<ul style="list-style-type: none"> If no improvement or further deterioration occurs, escalate to higher level of care (e.g. Intensive Care / NETS) Discuss management plan with the family / carers 	
NETS 1300 36 25 00			
Print Name: _____		Signature: _____	
Designation: _____		Date: ____/____/____	

Holes Punched as per AS2828:1:2019
 BINDING MARGIN - NO WRITING
 SMFR060403