# Royal Hospital for Women (RHW)
# BUSINESS RULE
# COVER SHEET

Health
South Eastern Sydney
Local Health District

Ref: T23/64148

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| **NAME OF DOCUMENT** | Clinical Emergency Response System (CERS) – Management of the Deteriorating Patient |
| **TYPE OF DOCUMENT** | Clinical Business Rule |
| **DOCUMENT NUMBER** | RHW CLIN004 |
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| **RISK RATING** | High Risk |
| **REVIEW DATE** | September 2023 |
| **FORMER REFERENCE(S)** | Local Operating Procedure – Clinical. Clinical Emergency Response System (CERS) – Management of the Deteriorating Patient<br><br>SESLHDPR/697 Management of the Deteriorating ADULT inpatient (excluding maternity)<br>SESLHDPR/705 Management of the deteriorating MATERNITY woman<br>SESLHDPR/340 Management of the Deteriorating NEONATAL inpatient<br>NSW Health PD2020_018 Recognition and management of patients who are deteriorating<br>NSW Health PD2014_030 Using Resuscitation Plans in End of Life Decisions<br>NSW Health PD2021_069 Health Care Records – Documentation and Management |
| **EXECUTIVE SPONSOR** | Wayne Hsueh<br>**Director of Medical Services** |
| **AUTHOR** | Stephanie Rhodes<br>**Clinical Nurse Consultant – Clinical Emergency Response System** |
| **SUMMARY** | *This CBR aims to facilitate the early recognitions and management of the deteriorating patient by utilising the Clinical Emergency Response System.* |

The Royal HOSPITAL FOR WOMEN

# Royal Hospital for Women (RHW)
# CLINICAL BUSINESS RULE

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

**RHW CLIN004**



## 1. BACKGROUND

Failure to appropriately recognise, respond, and manage acute deterioration is associated with adverse patient outcomes. This policy 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 CBRs***
***For neonates, please refer to CERS- Management of the Deteriorating Neonate CBR.***

## 2. RESPONSIBILITIES

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

- Recognise and respond to acute deterioration
- Implement care within Scope of Practice
- Recognise life threatening deterioration and call a Code Blue for any admitted patient, visitor, or staff member
- Recognise a Cardiac Arrest, and commence Basic Life Support (BLS)

- Complete Mandatory Training

Endorsed Nurse (EN), Registered Nurse (RN), Registered Midwife (RM):

- Recognise and respond to acute deterioration in accordance with the Standard Adult General Observation Chart (SAGO) or Standard Maternal Observation Chart (SMOC).
- Conduct an A-I (Airway, Breathing, Circulation, Disability, Exposure, Fluids, Glucose, Holistic and Infection) assessment on the woman person. Continue to reassess the patient as clinically indicated.
- Make an appropriate CERS call (Clinical Review/Rapid Response/Code Blue) based on the assessment of the woman or person.
- Make a Code Blue call for any admitted patient or outpatient, visitor, or staff.
- Implement appropriate care within Scope of Practice, including Basic Life Support (BLS) where clinically indicated.
- Increase frequency of observations, as indication by the clinical condition.
- Consider any potential signs of sepsis.

- Check and maintain Emergency equipment, and be aware of nearest Cardiac Arrest Trolley and Defibrillator (see Appendix 1: Cardiac Arrest Trolley and Defibrillator Locations – RHW)
- Escalate response at any time if the woman's condition deteriorates.
- Document all Clinical Review and Rapid Response calls on the appropriate electronic medical records (eMR) form *or* on the Emergency Resuscitation Record (paper).
- Notify the woman, family, or carer of the CERS activation, the outcome of the review, and/or change of location.

- If an issue is identified around recognition and response to deterioration, or processes outlined in this CBR, complete an Incident Management System (IMS+) notification and document in eMR notes.

- Complete Mandatory Training (DETECT, eLearning for Basic Life Support, and yearly Basic Life Support Assessment
- Attend additional training as suitable to role (e.g. Advanced Life Support (ALS), EZ-IO training)

Medical Staff

- Recognise and respond to acute deterioration.
- Make a Code Blue call for any admitted patient, outpatient, visitor, or staff.
- Respond within required time frame to CERS calls.
- Conduct an A-I assessment on the woman or person.
- Implement appropriate care within Scope of Practice, including Basic Life Support (BLS) or Advanced Life Support (ALS) (if skilled) as clinically indicated.
- Alter the calling criteria as appropriate for the woman's baseline condition.
- Escalate the response at any time if the condition continues to worsen (e.g. escalate to Prince of Wales Adult Code Blue).
- Consider any potential signs of sepsis.
- Refer to external teams as indicated.
- Document assessment, intervention, management plan and outcome in eMR.
- Notify the woman, family, or carer of the CERS activation, the outcome of the review, and/or change of location.

- If an issue is identified around recognition and response to deterioration, or processes outlined in this CBR, complete an Incident Management System (IMS+) notification and document in eMR notes.

- Complete Mandatory Training (DETECT, eLearning for Basic Life Support, and yearly Basic Life Support Assessment)

- Attend additional training as suitable to role (e.g. Advanced Life Support (ALS), EZ-IO training)

## 3. PROCEDURE

See Appendix 2: RHW Clinical Emergency Response System flowchart.

In the absence of an individualised monitoring plan, frequency of observations should occur at a minimum requirement of six hourly intervals

### 3.1 Assessment of Deterioration

In alignment with the NSW health Policy Health Care Records – Documentation and Management (PD2021_069), there is a **minimum requirement** to perform and document a systematic A-G assessment, to establish a baseline for the patient, and identify deterioration. At RHW, an A-I assessment is recommended.

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 maybe characterised by an acute or gradual change in mental state. Assess and incorporate mental state changes (i.e. cognition, perception, behaviour or emotional state) as part of A-I systematic assessment and escalate any changes from the woman's' baseline using CERS to ensure appropriate investigation, diagnosis and treatment can occur with possible referral to specialist teams

**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

### 3.2 Activating a CERS Call

- **Dial '2222'** from any phone in the hospital
- Request appropriate level of escalation (Clinical Review, Rapid Response, Code Blue)
- State exact location
- If known, state the Admitting Medical Officer (if a CERS call is activated in Birth Unit, care defers to the on-call 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 to reverse and/or halt deterioration.
- Findings of A-I assessment, nursing/maternity intervention and reason for non-escalation should be documented in the woman clinical record.
- If the senior nurse/midwife determines that a Clinical Review is required, follow the Clinical Review pathway below.

If required, activation of a Clinical Review prompts a **30 minute response time** for:

- A woman (following consultation with the nurse/midwife in charge) when one observation is in the yellow zone

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
- To Activate, see Section 5.1 How to Activate a CERS Call

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

Medical Responders should consider escalating repeated Clinical Reviews to their Registrar, Fellow and/or AMO.

### 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 maternal preparation and receiving the Neonate CBR)***

- If there has been no response to a Clinical Review call (30 minutes)

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)

At least one of the medical responders will be skilled in Advanced Life Support.

In the event that a Rapid Response call is activated, whilst another is still in progress; the team responding to the initial call will conduct a clinical assessment and then negotiate who is the most appropriate person to remain with the patient. The rest of the team members will attend the second call.

The AMO should be notified of 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
- 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
- Acute Care 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.

Remain with the patient once a Code Blue call has been made. Escalate early to POWH (Stand Down as indicated). 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 an Advanced Life Support trained practitioner is present.

- 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 **ext. 29987 or 0428 652 614.** Please refer to the 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 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'.

#### 3.6.1 Acute

Acute alterations must be set for a defined period of time 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.

### 3.6.2 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.

### 3.6.3 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
    - Acute alterations: time frame must reflect expected progression of patient condition, and have a **maximum** time frame of 8 hours.
    - 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.

## 4. 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. 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

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

## 6. 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 |
|---|---|---|
| April 2023 | 4 | Author: S Rhodes (CERS CNC)<br>Reviewed:<br>Approval: |
| 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 escalation (Pace) criteria and escalation |
| Aug 2019 | | Change from PACE to CERS |
| Feb 2019 | | Change ‘777’ to ‘2222’ |
| Jun 2018 | | Approved Quality and Patient Care Committee 21/6/2018 |
| 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 Safety Committee 17/7/14 |
| Nov 2010 | | Approved Quality and Patient Safety Committee 18/11/10 |

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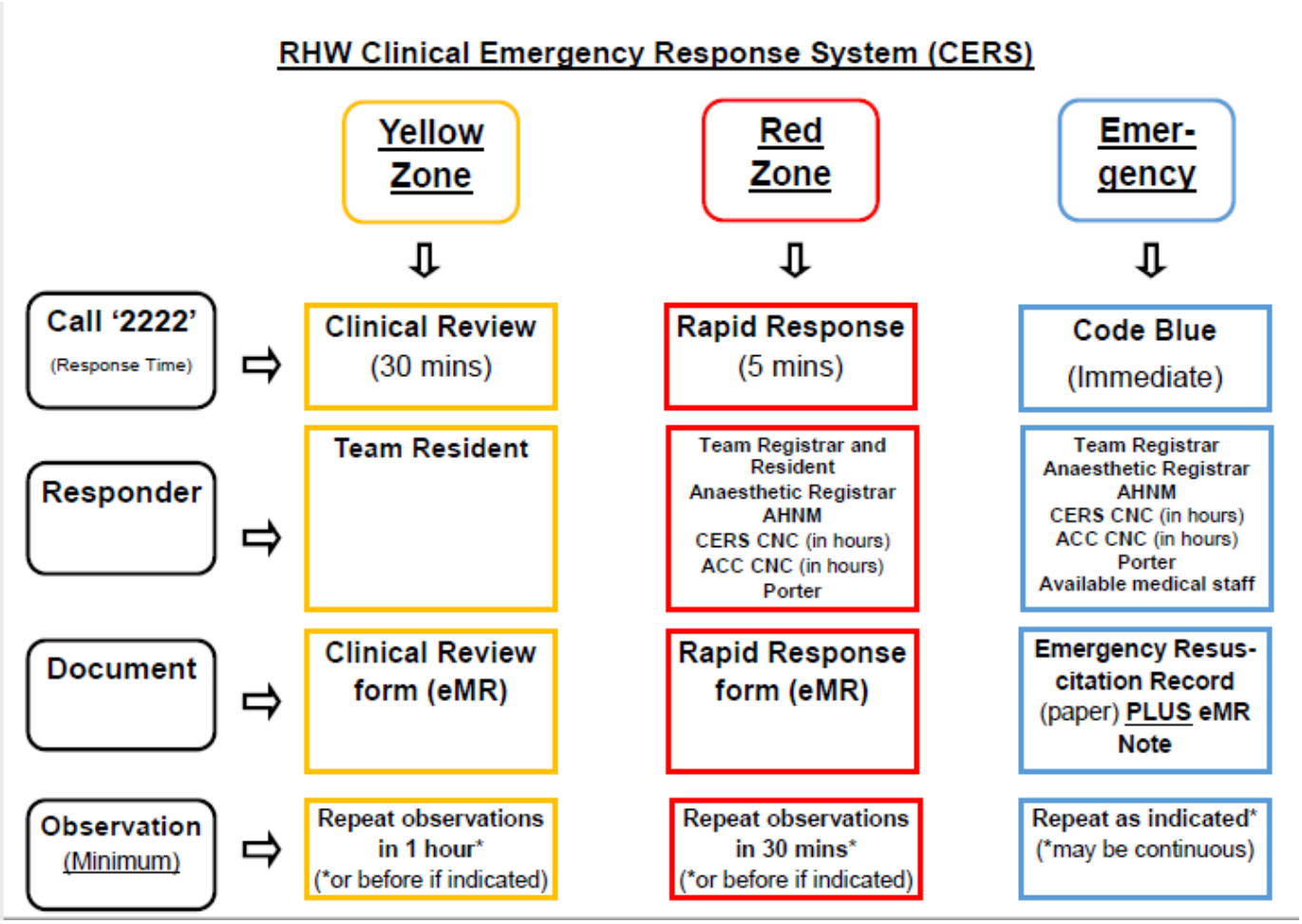
| | | Approved Gynaecology Services Management Committee 11/11/10 |

## 8. APPENDICES

### 8.1 Appendix 1: Emergency Trolley and Defibrillator Locations RHW

| LEVEL | WARD | DEFIBRILLATOR |
|---|---|---|
| Level 4 | Acute Care Centre (ACC) | Yes –R Series and Automated External Defibrillator (AED) |
| Level 3 | Oxford (North) | Yes – 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 | Delivery Suite | Yes – AED |
| Level 1 | Recovery RHW | Yes – R Series |
| Ground | Admissions – Behind front desk | Yes – AED |
| Ground | Reproductive Medicine | No defibrillator – Cardiac arrest trolley only |

## 8.2 Appendix 2: RHW Clinical Emergency Response System (CERS)



### 8.3 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) hourly | Respiratory rate, oxygen saturation, heart rate, blood | Mental state assessment of patients within a mental health |

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| **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 | |
| **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*.<br>For fetal heart rate monitoring requirements refer to Maternity – Fetal heart rate monitoring GL2018_025 | SMOC is recommended for women greater than twenty (20) weeks gestation and less than six (6) week post-partum. |

| Patient group | Minimum required frequency of assessment | Minimum set of vital sign observations | Comments |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **Maternity/ postnatal inpatient with no identified risk factors** | **Before leaving the birth environment**<br>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.<br>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 twenty (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 |