# Paediatric Acute Recognition and Response Observation Tool

**Age 12 years and above**

**St John of God Murdoch Hospital**

Ward / Area: _____

U.R. Number .....

Surname .....

Given Names .....

Date of Birth ...../...../..... Sex .....

Use Label If Available or BLOCK LETTERS

## Other charts in use

☐ Fluid Balance ☐ Weight ☐ Neurological ☐ Neurovascular ☐ Glucose monitoring ☐ Pain and analgesia ☐ Respiratory assessment ☐ Other

## General instructions

**General instructions for using chart**

- To obtain an Early Warning Score all observations must be recorded
- Record the observation as a dot; connect to previous dot with a straight line to represent a graph
- Any observation outside graph area or in a coloured area must be written as a number in allocated box
- Always refer to local process

**A full set of observations must be completed**

- At time of initial presentation/admission to area and as appropriate for the patient's clinical condition
- When a patient is experiencing, or at risk of experiencing, an episode of acute deterioration
- When the clinician or family are worried about the patient

**If observation falls within coloured area**

- A full set of observations must be completed
- Refer to EWS Escalation or Sepsis Recognition Escalation Pathway for action plan, unless a modification has been made: refer to local process

## Modification to Early Warning Score (EWS)

- Acceptable parameters can be modified based on the patient's specific clinical, treatment and/or pre-existing conditions.
- All modifications must adhere to local process and be reviewed frequently by the treating consultant.
- **Modifications must NEVER be used to normalise a clinically unstable patient.**

| Observations | Accepted parameters and modified EWS | Date and time | Duration (hrs) | Name and signature |
|---|---|---|---|---|
| | | / / : | | Name |
| **Reason:** | | | | Signature |
| | | / / : | | Name |
| **Reason:** | | | | Signature |
| | | / / : | | Name |
| **Reason:** | | | | Signature |

## Events – record event details, including interventions, and concerns from clinician or family

| | Intervention/comment | Initials |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |
| E | | |
| F | | |
| G | | |
| H | | |
| I | | |
| J | | |





METROPOLITAN

Age 12 years and above

HR 480P-E Paediatric Acute Recognition and Response Observation Tool

# Paediatric Acute Recognition and Response Observation Tool

**Age 12 years and above**

## Involve the family

- Include the parent/carer in determining what is normal for their child and what may have changed
- Acknowledge parental concern – they know their child best
- Engage with the parent/carer to agree a management plan and escalation criteria
- If applicable assess observations with parent/carer to review parental concern

## Patients of concern include those with

- Increasing oxygen requirement
- Changes in circulation (e.g.mottled/pallor)
- Altered mental state
- Greater than expected fluid loss
- Reduced urine output (<1mL/kg/hr)
- New, increasing or uncontrolled pain
- Blood glucose level ≤3mmol/L
- Family or clinician worried
- Changes to respiratory distress

## Assessment of respiratory distress

**Instructions – Select the score related to the highest criteria obtained for the patient's clinical condition**

| | MILD – Score 1 | MODERATE – Score 2 | SEVERE – Score 3 |
|---|---|---|---|
| **Airway** | • Stridor on exertion/crying | • Some inspiratory stridor at rest<br>• Partial airway obstruction | • Biphasic stridor at rest<br>• Imminent airway obstruction |
| **Behaviour and feeding** | • Normal<br>• Age appropriate vocalisation | • Some/intermittent irritability<br>• Difficulty talking/crying<br>• Difficulty feeding or eating | • Increased irritability or lethargy<br>• Looks exhausted<br>• Unable to talk or eat<br>• Changes in conscious state such as agitated, confused or drowsy |
| **Respiratory rate/pattern** | • Mildly increased | • Respiratory rate increased<br>• Abnormal pauses | • Respiratory rate significantly increased/absent breath sounds/silent chest<br>• Increased/reduced respiratory rate as child tires |
| **Work of breathing** | • Mild intercostal and suprasternal recession | • Moderate intercostal and suprasternal recession<br>• Nasal flaring or tracheal tug | • Marked intercostal, suprasternal and sternal recession |
| **Other** | | • May have brief apnoeas (5-10 secs) | • Gasping, grunting<br>• Extreme pallor, cyanosis<br>• Increasingly frequent or prolonged apnoeas (≥20 secs) |

## Level of consciousness AVPU

**ALERT** Awake and alert | **VOICE** Responds to verbal stimuli | **PAIN** Responds to painful stimuli | **UNRESPONSIVE** No response to stimuli

| **Level of Sedation** (UMSS – University of Michigan Sedation Scale) ONLY complete if sedation administered as per local policy | **Response** |
|---|---|
| **0** = Awake and alert | Monitor |
| **1** = Minimally sedated: may appear tired/sleepy, responds to verbal conversation and/or sound | Monitor |
| **2** = Moderately sedated: somnolent/sleeping, easily roused with tactile stimulation or simple verbal command | Monitor |
| **3** = Deep sedation: deep sleep, rousable only with deep or physical stimulation | Review by Paediatric Anaesthetist |
| **4** = Unrousable | Medical Emergency Call |

## Pain scales used – select (with tick) appropriate pain assessment tool

☐ **FLACC**
Each category is scored 0-2, resulting in a total score of 0-10. Add the score of each box and total to a score of 10.

☐ **FPS-R**
The face on the left means no pain and on the far right means extreme pain, ask the patient to point to the face that shows how much you hurt right now.

☐ **Numeric**
Ask the patient to indicate the intensity of current pain level on a scale of 0 (no pain) to 10 (worst pain imaginable).

| Categories | Score 0 | Score 1 | Score 2 |
|---|---|---|---|
| **Face** | No particular expression or smile | Occasional grimace or frown, withdrawn, disinterested | Frequent to constant frown, clenched jaw, quivering chin |
| **Legs** | Normal position, or relaxed | Uneasy, restless, tense | Kicking, or legs drawn up |
| **Activity** | Lying quietly, normal position, moves easily | Squirming, shifting back and forth, tense | Arched, rigid or jerking |
| **Cry** | No cry (awake or asleep) | Moans or whimpers, occasional complaint | Crying steadlily, screams or sobs, frequent complaints |
| **Consolability** | Content, relaxed | Reassured by occasional touching, hugging, or being talked to, distractible | Difficult to console or comfort |

## Communicate on the importance of timely action in recognising and responding to a patient's changing condition

**NEEDS**
- What type of review does this patient need?
- What is the time frame for this review?
- What do I need to do or say right now to ensure my patient is safe?

**OBSERVATIONS**
- What are the specific observations raising concerns about the patient?
- What do I know about my patient's condition?
- What clinical signs and symptoms are a problem?

**WHY**
- What are the potential consequences to the patient if there is a delay in taking action?

NOW iSOBAR

**Establish the level of need and urgency, then plan the required communication**



NO WRITING IN MARGINS

U.R. Number .....

Surname .....

Given Names .....

Date of Birth ...../...../..... Sex .....

Use Label If Available or BLOCK LETTERS

**Age 12 years and above**

# Paediatric Acute Recognition and Response Observation Tool

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Time** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Family/clinician concern*** | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| **AIRWAY & BREATHING** | **Any airway threat escalate to MEDICAL EMERGENCY.** If any increase in oxygen requirement, consider early escalation. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Assessment of respiratory distress** See back of chart* | Severe | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | Severe |
| | Moderate | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | Moderate |
| | Mild | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | Mild |
| | Nil | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | Nil |
| **Respiratory rate breaths/minute** Assess for 60 seconds | ≥45 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | ≥45 |
| | 40 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 40 |
| | 35 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 35 |
| | 30 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 30 |
| | 25 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 25 |
| | 20 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 20 |
| | 15 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 15 |
| | 10 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 10 |
| | ≤5 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | ≤5 |
| | | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | |
| **Respiratory rate** (number) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **$O_2$ saturations** | ≥92 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ≥92 |
| | 89-91 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 89-91 |
| | 86-88 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 86-88 |
| | ≤85 | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | ≤85 |
| **$O_2$ saturations %** (number %) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Probe change | | | | | | | | | | | | | | | | | | | | | | | | | | | | Probe Δ |
| **$O_2$ therapy instructions** For HHF only use $FiO_2$ Room air **(RA)** Nasal prongs **(NP)** Face mask **(FM)** Non-rebreather mask **(NRM)** Tracheostomy **(T)** CPAP **(C)** Non-Invasive ventilation **(NIV)** HHFNP **(HHF)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **$O_2$ therapy** litres/minute or $FiO_2$ | ≥10L | >50% | 3 | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| | >5-10L | 40-49% | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| | >2-5L | 30-39% | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| | ≤2L | 21-29% | 0 | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| **Mode of $O_2$ delivery** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **CIRCULATION** | **If the temperature, HR and CRT is increased, refer to Sepsis Recognition Escalation Pathway** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Heart rate beats/minute** Assess for 60 seconds | ≥150 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | ≥150 |
| | 140 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 140 |
| | 130 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 130 |
| | 120 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 120 |
| | 110 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 110 |
| | 100 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 100 |
| | 90 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 90 |
| | 80 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 80 |
| | 70 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 70 |
| | 60 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 60 |
| | 50 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 50 |
| | ≤40 | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | ≤40 |
| **Heart rate** (number) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Blood pressure (mmHg)** Score on systolic. Mark BP as. Mark X for MAP | ≥200 | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | ≥200 |
| | 195 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 195 |
| | 190 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 190 |
| | 185 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 185 |
| | 180 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 180 |
| | 175 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 175 |
| | 170 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 170 |
| | 165 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 165 |
| | 160 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 160 |
| | 155 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 155 |
| | 150 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 150 |
| | 145 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 145 |
| | 140 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 140 |
| | 135 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 135 |
| | 130 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 130 |
| | 125 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 125 |
| | 120 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 120 |
| | 115 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 115 |
| | 110 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 110 |
| | 105 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 105 |
| | 100 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 100 |
| | 95 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 95 |
| | 90 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 90 |
| | 85 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 85 |
| | 80 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 80 |
| | 75 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 75 |
| | 70 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 70 |
| | 65 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 65 |
| | <60 | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | <60 |
| **Blood pressure (mmHg)** Systolic/Diastolic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Capillary refill time** Central (seconds) | ≥4 seconds | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | ≥4 secs. |
| | 2-3 seconds | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2-3 secs. |
| | <2 seconds | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | <2 secs. |
| **DISABILITY** | **If not alert, consider GCS assessment. Consider clinician review for unrelieved/unexpected pain. Pain scale used:** ☐ FLACC ☐ FPS-R ☐ Numeric | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Pain scale*** | 7-10 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 7-10 |
| | 4-6 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4-6 |
| | 0-3 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0-3 |
| Level of Consciousness* **AVPU** | Alert | 0 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | Alert |
| | Voice | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | Voice |
| | Pain | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 | Pain |
| | Unresponsive | ME | | | | | | | | | | | | | | | | | | | | | | | | | ME | Unresp. |
| **Blood sugar level** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **EXPOSURE** | **If suspected infection or temperature <36°C or ≥38°C refer to Sepsis Recognition Escalation Pathway** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Temperature °C** | >40 | – | | | | | | | | | | | | | | | | | | | | | | | | | | >40 |
| | 39.5 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 39.5 |
| | 39 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 39 |
| | 38.5 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 38.5 |
| | 38 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 38 |
| | 37.5 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 37.5 |
| | 37 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 37 |
| | 36.5 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 36.5 |
| | 36 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 36 |
| | 35.5 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 35.5 |
| | 35 | – | | | | | | | | | | | | | | | | | | | | | | | | | | 35 |
| **Temperature °C** (number) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Total Early Warning score** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Events** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Initials** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## Early Warning Score Escalation Pathway

| Score | Clinical response |
|---|---|
| | • Remain vigilant<br>• Complete a full set of observations<br>• Notify nurse in charge<br>• Optimise treatment<br>• A plan must be documented<br>• Reassess EWS after interventions<br>• Consider transfer to higher care<br>• Ensure Treating Team are aware of deterioration |
| 1-3 | **Senior Nursing Review**<br>• Increase frequency of observations<br>• Consider Medical Review |
| 4–5 | **Timely Medical Review**<br>• Request Treating Team to review within 30 mins.<br>• Reassess EWS within 30 mins. of review |
| 6–7 | **Urgent Review / MER**<br>• Request VMO / Anaesthetist to review within 15 mins.<br>• Senior nursing review<br>• Reassess EWS within 15 mins. of review<br>• If no response within 15 minutes, or if clinically concerned place a Medical Emergency Call |
| 8+ | **MER / Code Blue**<br>• Request VMO / Anaesthetist review within 5 mins.<br>• Senior nursing review<br>• Assess the patient and initiate appropriate clinical care<br>• If no response within 5 mins. or if clinically concerned place a Medical Emergency Call |
| ME | **Immediate Medical Emergency Call**<br>• Initiate BLS and/or APLS as required |

**Emergency Call for any of the following:**

- Airway threat
- Cardiac or respiratory arrest
- Apnoea or cyanosis
- Seizure/prolonged convulsion
- Major bleeding
- Severe respiratory distress
- Any observation in the purple zone
- You are worried about the patient

## Sepsis Recognition Escalation Pathway

Use if suspected infection **OR** abnormal temperature (<36°C or ≥38°C)

Consider sepsis, bacterial infection and need for antibiotics. If sepsis recognition prompt not triggered, respond as per early warning score.
Action as per paediatric sepsis guideline.

**High-risk patients – have a lower threshold for requesting medical review if:**

- Infants less than 3 months
- Immunosuppression, chemotherapy, long-term steroids or asplenia
- Invasive devices
- Recent surgery, burn or wound
- Unimmunised/incomplete immunisation
- Rural, remote or low socioeconomic status
- Re-presentation or delayed presentation

| Sepsis recognition prompt | Clinical Response |
|---|---|
| EWS 6-7 **OR** any of the following<br>• Mottled, CRT ≥3 or cold peripheries<br>• Non-blanching rash<br>• Drowsy or confused<br>• Unexplained pain<br>• Lactate 2–4 mmol/L<br>• Family and/or clinician concern is continuing or increasing | **Urgent Review / MER**<br>• Request VMO / Anaesthetist review within 15 mins.<br>• **State "sepsis review required"**<br>• Senior nursing review<br>• Refer to paediatric sepsis guideline<br>• Reassess EWS within 15 mins.<br>• Consider Critical Care referral/transfer of care |
| EWS 8+ **OR** any of the following<br>• Any observation in red zone<br>• AVPU score P<br>• Lactate >4 mmol/L<br>• BGL <3 mmol/L | **MER / Code Blue**<br>• Request VMO / Anaesthetist review within 5 mins.<br>• **State "sepsis review required"**<br>• Senior nursing review<br>• Refer to paediatric sepsis guideline<br>• Assess the patient and initiate appropriate clinical care<br>• If no response within 5 mins. or if clinically concerned place Medical Emergency Call |

## Level of sedation UMSS*

(ONLY complete if sedation administered)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | | | | | | | | | | | | | |
| Time | | | | | | | | | | | | | |
| 0 | 0 | | | | | | | | | | | | |
| 1 | 0 | | | | | | | | | | | | |
| 2 | 0 | | | | | | | | | | | | |
| 3 | RR | | | | | | | | | | | | |
| 4 | ME | | | | | | | | | | | | |