



Children's Health Ireland
at Crumlin

**PAEDIATRIC EARLY WARNING SYSTEM (PEWS)
A Guideline for Medical and Nursing Staff**


Version Number	<i>Version 1</i>
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1.0 MEDICAL ESCALATION AGREEMENT (MEA)

- A child experiencing an **acute** episode of illness may have vital sign measurements that deviate from expected normal limits for their age, and as a result trigger a PEWS score.
- MEA will not always be appropriate, for example with a very ill child under close medical surveillance, and should be considered on an individual basis only.
- Appropriate caution should be utilised in cardiac conditions, newly admitted patients, PICU transfers, on-call and non-respiratory parameters.
- Following assessment, if s/he is considered unlikely to deteriorate and remains ill but stable in this new range- *a temporary, conditional medical escalation agreement* may be ordered.
- Clinical Impression should be documented in addition to **upper and lower** vital sign acceptable limits.
- Senior decision, registrar level or **above**.
- MEA should be reviewed at a **maximum** of every 24 hours; earlier reviews should be encouraged if there is clinical concern, and a planned review may occur sooner than the planned expiry date and time.
- MEAs should be reviewed and updated daily (if required) by the patient's primary team following patient review, and within normal working hours.
- If the child is clinically improving from the existing MEA, it is acceptable for the medical team to not renew the MEA when it expires.
- An out of date MEA does not require an urgent PEWS call if the patient remains stable and within the amended parameters. This can be updated when medical registrar is free to review the patient.
- If the PEWS chart is full and a new PEWS chart is required, the MEA on the original PEWS chart is still valid if still within the correct time frame.

HOW TO DOCUMENT MEA (Medical Staff)	HOW TO SCORE (Nursing Staff)
<ul style="list-style-type: none"> • Use medical escalation agreement (MEA) box on front page of the chart. • Record the impression/rationale for the MEA in the HCR. • Assign a safe, individualised range to the selected parameters. 	<ul style="list-style-type: none"> • Record the value of the observation in the correct position on the chart. • The PEWS score is calculated as normal; a medical escalation agreement <u>DOES NOT</u> alter the patient's PEWS score. • If nursing staff are satisfied that the patient is clinically stable and within escalation agreement - a call to the medical team is not required at this time.

Example of a Medical Escalation Agreement: A 5 year old child with acute exacerbation of asthma
(1st and 2nd review of the same patient).

Date/Time	Max Duration	Following clinical assessment, if appropriate, state clinical impression, permitted parameters and calling criteria	Senior Doctor Initials/MCRN/ Designation
12/1/2020 09.15am	2 hours	IMPRESSION: <u>Moderate exacerbation of asthma</u> Permit RR 15 – 40, RE Moderate (wheeze, recession) HR 70-150 (salbutamol being administered hourly). Call to review if any deterioration or clinical concern.	J.Blogs 445561 MROC
12/1/2020 11.00am	8 hours	IMPRESSION: <u>Acute asthma - responding to nebulisers</u> Permit RR 15 – 25, RE Mild, HR 70-130 (due to salbutamol use), and no O ₂ required to maintain SpO ₂ ≥ 94%. Call to review if any deterioration of clinical concern.	J.Blogs 445561 MROC

*MEA for HHFNC must document the components of FI02: Flow (pressure) and Oxygen Litres as FI02 does not score.

2.0 PARAMETER AMENDMENT (PA)

- Used for a child with a chronic condition where his/her accepted baseline physiological parameters are altered from expected range for his/her age.
- Senior decision, Registrar level or above.* *Please see exception below*
- Parameter amendment renewed on each admission and/or as clinical condition or supportive therapies change for long stay patients.
- The PEWS chart containing the active parameter amendment should be kept with the patients current PEWS chart at all times and used as a reference if required.
- Parameter amendment may be used for patients who are stable and receiving long term ventilation with set prescribed pressures.
- If the PEWS chart is full and a new PEWS chart is required, the PA on the original PEWS chart is still valid if still within the correct time frame.

HOW TO DOCUMENT A PARAMETER AMENDMENT (Medical Staff)	HOW TO SCORE (Nursing Staff)
<ul style="list-style-type: none"> • Use parameter amendment box on inside page of the chart. • Assign a range to the selected parameter. • Document rationale in the healthcare record (HCR). 	<ul style="list-style-type: none"> • Record the value of the observation in the correct position on the chart. • If the value is within the new documented parameter range, score as 0. • If the value is outside the new documented parameter range, score as 3 and an urgent medical review is required.

Example of a Parameter Amendment: A 2 year old with chronic lung disease on BiPAP

Date/Time	Clinical Parameters	New Acceptable Range	Next Medical Review	Doctor Signature/Print Name/MRC
10.04.20 10.30am	Oxygen Therapy Pressure/Flow	Ventilation Pressures 15/8	Next admission or as clinical condition changes	Dr J Blogs 445561

Example of a Parameter Amendment: A 7 year old child with CHRONIC renal impairment and known hypertension.

	Clinical Parameters	New Acceptable Range	Next Medical Review	Doctor Signature/Print Name/MRC
12.04.20 15.30pm	Systolic BP	135-140mmHg	One week	Dr J Blogs 445561

****HHFNC should never have a PA as it is used to treat acute respiratory illness***

***The Irish PEWS promotes the application of experience and clinical judgement alongside the scoring and the escalation guide.** Conversely, there may be situations where escalation to review may not be clinically necessary. In these circumstances, a senior clinician will also include the role of the Advance Nurse Practitioner who has approval from their supervising clinician and from the PEWS oversight committee to order a variance pertaining to their specialty (parameter amendment only) as appropriate.



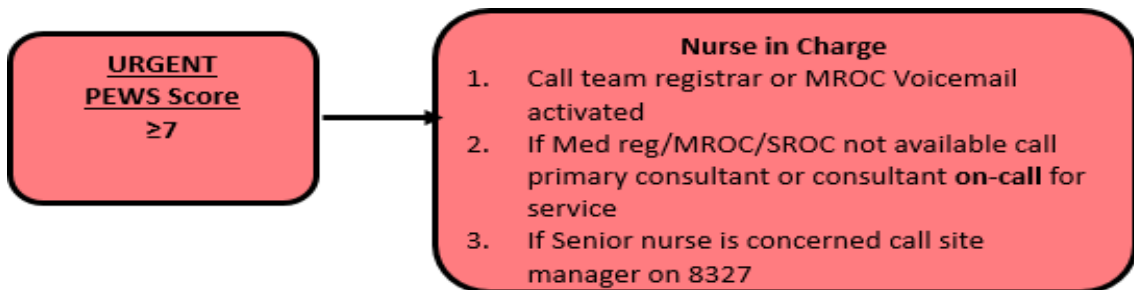
The level of variance permitted is decided by the local PEWS Governance Group
 Variances to escalation may be made only by SENIOR members of the clinical team

3.0 Urgent Review – single parameter with a score of 3 (pink trigger) OR a total PEWS score ≥ 4 .

- Firstly, the patient should be assessed by the Nurse in Charge and any appropriate nursing interventions carried out which may be impacting on PEWS score e.g. administration of analgesia, repositioning, airway suctioning etc.
- Following nursing assessment, and use of clinical judgement, an urgent review may also be indicated for a patient with a single parameter with a score of 3 (pink trigger) **OR** a total PEWS score ≥ 4 .
- Contact team SHO or Registrar using the normal bleep system during normal working hours or the on call SHO or Registrar outside of normal working hours.
- Use the ISBAR₃ communication tool to handover patient information; do not handover a total PEWS score only.

- If despite on-going efforts, nursing staff are unable to contact SHO or Registrar, escalate to Consultant (*on-call Consultant after hours*).
- Inform Site Manager on call 24/7 regarding situation.
- Urgent review must take place no longer than **30 minutes** from time of notification. If review has not taken place within this time frame, nursing staff will escalate to Consultant where appropriate.
- **Total PEWS score of 6 requires an urgent Registrar review and Consultant to be informed by attending registrar where appropriate.**

Urgent PEWS call - PEWS score ≥ 7 .



If for any reason you feel this child requires a Critical Care Review you must make this call on 8652/8468 – clearly detailing the clinical reason for the call

To activate Bleep-voicemail:

8 to activate bleep system

9 to replace first digit of bleep number


e.g. Bleep **8 730** becomes **8 930** (voicemail)

And "On Call" **8 800** becomes **8 900**

Leave bleep - voicemail e.g. Hi, it's {name} {title} {Dept./area/ward}, we have Urgent PEWS of {score}

Leave this message on both Bleep-Voicemails

Paula McGrath, 14.12.2015. Version 2 updated by FON July 2019. Version 3 WOB JAN 2020

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URGENT PEWS CALL WITH A PEWS SCORE OF ≥ 7

The child should be assessed by the Nurse in charge and appropriate additional nursing interventions if required such as analgesia, repositioning, or airway suctioning.

CONSULTANT MUST BE INFORMED BY ATTENDING REGISTRAR OR THE NURSE IN CHARGE/SITE MANAGER

- The ward nurse most familiar with the patient's condition should handover the patient information when all the team arrive, if the clinical situation permits.
- If the patient is under the care of a medical team, however following review surgical input is required, the Medical registrar attending the PEWS call should contact the Surgical Registrar to request their attendance.
- If the child is under the care of the surgeons and they are not available the MROC is called –urgent PEWS.
- In the event that no MROC, SROC or none of the team are available then the consultant must be phoned immediately by the Nurse in Charge.

If for any reason you feel this child requires a Critical Care Review, you must make this call on 8652/8468 – clearly detailing the clinical reason for the call

FAQs

- Does a score of 7 with an MEA need Urgent escalation? No, providing the child's agreed parameters are within the specified range. Clinical Judgement must be utilised
- Can I escalate an Urgent PEWS if concerned despite having an MEA insitu attributing to the agreed score? YES
- What is the frequency of observations for patients with an MEA who score >3 ? Any deviation from the minimum observations frequency must be collaboratively agreed with the medical team and documented
- Do I need to activate the Urgent PEWS Voicemail Bleep when the Registrar is on the ward? YES, this aids data collection for audit purposes.

① Continuous observations indicates careful consideration should be given for electronic monitoring if appropriate/available.

Assessment and documentation of observations should continue to be undertaken as clinically appropriate to the child's needs agreed with senior nursing/medical personnel.

4.0 CHI at Crumlin PEWS Committee

CHI at Crumlin PEWS COMMITTEE		
NAME	GRADE	SIGNATURE
Mr. Paul Oslizlok	Medical Director(Chairperson)	
Mr. Warren O'Brien	CNM3 Quality, PEWS lead (Deputy Chair)	
Ms. Ciara Yeates	Administration Quality Department(Secretary)	
Ms. Tracey Wall	Director of Nursing	
Ms. Cathy Mc Mahon	Paediatric Intensive Care Consultant	
Ms. Suzanne Crowe	Paediatric Intensive Care Consultant	
Ms. Fionnuala O' Neill	Nurse Practice Development Co-Ordinator	
Ms. Aoife Dillon	Nurse Tutor Centre of Children's Nurse Education	
Ms. Josephine Chacko	CNM3 Quality Assurance	
Ms. Suzanne Dunne	Enterprise Risk Coordinator	
Ms. Linda Farren	Resuscitation Officer	
Ms. Bridget Conway	CNM3 Emergency Department	
Lead NCHD	6 monthly rotation	
Ms. Caroline Reddy	CNEF	
Ms. Nuala Clarke	ADON Sepsis	
Ms. Meghan O'Byrne	Staff Nurse	
Ms. Niamh Maguire	ANP Cardiology	
Ms. Jennifer Jones	NCHD Lead	
Ms. Denise Guiney	CNM2, St. Peter's Ward	
TBC	CNS REP	
Name <i>(Other contributors)</i>	Grade	Signature

5.0 References

Health Service Executive (2017) PAEDIATRIC EARLY WARNING SYSTEM (PEWS) USER MANUAL. 2ND ed. (ONLINE) Available at: <https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/pews-user-manual.pdf>

Department of Health (2015) The Irish Paediatric Early Warning System (PEWS) National Clinical Guideline No. 12 (ONLINE) Available at: <https://assets.gov.ie/11584/b591d589d8fa4d8482ccfd8429baa0cc.pdf>

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