Paediatric Early Warning Scoring Policy

2.3 Final

Paediatric Early Warning Tool

EQUALITY IMPACT

The Trust strives to ensure equality of opportunity for all both as a major employer and as a provider of health care. This policy has therefore been equality impact assessed by the Children's Clinical Governance group to ensure fairness and consistency for all those covered by it regardless of their individual differences, and the results are shown in Appendix 4.

Version:	**2.3 Final**
Authorised by:	**Children's Clinical Governance Group**
Date authorised:	**18th April 2014**
Next review date:	**17th April 2016**
Document author:	**Sonia Keane**

VERSION CONTROL SCHEDULE

paediatric early warning scoring policy

Version : 2.0

Version Number	Issue Date	Revisions from previous issue
0.1 (final)	December 2009	New Policy
2.0 (final)	January 2012	Minor formatting changes
2.1 (final)	February 2012	Change to PEWS tool layout
2.2 (final)	April 2013	Further change to PEWS tool score guideline.
2.3 (final)	April 2014	

INDEX/ TABLE OF CONTENTS

1. INTRODUCTION

Infants and children admitted to hospital require regular clinical observations in order to ensure the early detection of deterioration. The Paediatric Early Warning Score (PEWS) is a specialised tool that measures the infant/ child's clinical status and recommends an appropriate response. This procedure is to be adhered to for all infants and children admitted to all areas within the trust.

2. PURPOSE/RATIONALE/OBJECTIVES

The purpose of this policy is to describe the PEWS tool which has been developed and implemented as a result of research which indicates that the clinical risk to infants and children is reduced by early intervention, and that the PEWS system enables the early identification of signs of deterioration and initiating appropriate responses and management from the medical team.

3. SCOPE

The policy applies to all infants and children who require acute medical assessment in any clinical areas within the trust.

4. DEFINITIONS

The tool is designed to identify children who are at risk of deterioration. Each time clinical observations are taken the nurse should score these against the PEW triggers (Appendix 1). The tool used was originally developed by Monaghan (2005) and adapted with permission making it useable with the facilities available in a District General Hospital. It has been previously audited as effective.

Early Warning tools have successfully been used in the adult sector for some time and are acknowledged as vital in improving patient out comes nationally. The tool generates a numerical score in relation to assessed neurological, cardiovascular and respiratory status. Age appropriate clinical parameters have been taken from advanced paediatric life support (ALSG 2005).

5. ROLES/REPONSIBILITES/ACCOUNTABILITIES

5.1 Chief Executive

The Chief Executive has overall accountability for ensuring that the Trust meets its statutory and non-statutory obligations in respect of maintaining appropriate standards of patient care. The Chief Executive devolves the responsibilites for monitoring and compliance to the medical and executive nursing directors.

5.2 Directors

Directors are responsible for ensuring that the requirements of the Trusts Paediatric Early Warning Scoring Policy for infants and children are effectively managed within their Directorate and that their staff are aware of, and implement, those requirements.

5.3 Director of Nursing/Medical Director

The Director of Nursing and Medical Director are responsible for ensuring that Trust staff uphold the principles of Paediatric Early Warning Scores and that appropriate polices and procedures are developed, maintained, and communicated throughout the organisation in co-ordination with other relevant organisations and stakeholders.

5.4 Divisional Responsiblilities

Divisional leads are responsible for ensuring PEWS completion is communicated and implemented within their areas of responsibility. Any incident arising from the PEWS of a patient must be documented on an incident form and investigated at a local level and actions taken to prevent reoccurrence and to minimise risk.
Documentation should be copied to the Risk Management advisor to allow completion and closure of the incident. Any action plans should be shared at the appropriate forum and the Children's Divisional Risk Management meeting. Any ongoing PEWS risks should be registered on the Divisional Risk / Trust register as appropriate.

5.5 Ward Manager/Departmental Manager/Matron Responsibilities

It is the Ward Manager / Departmental Managers responsiliblity to ensure that staff are made aware of the Trust processes for the completion of PEWS tool in infants and children. This procedure should be included in the induction training of all staff who may be involved in the admission and ongoing care of an infant/ child.

5.6 Medical Staff Responsiblities

All medical staff should ensure that they are familiar with the Trusts procedures for completion of PEWS in infants and children. Medical staff of registrar level or above who are responisible for the supervision and training of junior doctors should ensure that junior medical staff are aware of their role and that they respond appropriately to each individual scoring.

5.7 All Staff

It is the responsibility of every registered nurse to ensure the PEWS Policy is adhered to when assessing infants and children. All staff should report any incidents arising from completion of PEWS via the Risk Management route. The Ward/Departmental Manager should be informed of the incident.

5.8 Risk Management

The Risk Management Department will record on the Trust database all incidents reported relating to PEWS tool, through the risk reporting route. This data will be included in the monthly reports to the Heads of Departments and discussed at the Children's divisional risk management meetings. All untreated risks will be reported to the Trusts Risk Management Committee which reports to the Trust Clinical Governance Committee.

6. POLICY STATEMENT

The purpose of this policy is to provide a consistent, evidence based standard of care which ensures that all sick infants and children are assessed and a PEWS obtained. It effectively signposts nursing and medical staff to act appropriately in relation to the infant/ child's clinical condition. This policy does not encompass Do Not Attempt Resuscitation (DNAR) orders in paediatrics.

7. THE PEWS PROCEDURE

7.1 A complete baseline set of observations including blood pressure is undertaken on ALL children within one hour of admission onto the ward / department with the exception of day case surgery unless indicated by condition.

7.2 Each set of physiological observations taken must be cross referenced with the Paediatric Early Warning tool. (Appendix 1)

7.3 Abnormal observations recorded by student nurses and health care assistants must always be verified by a qualified nurse.

7.4 A Paediatric Early Warning Score(PEWS) must be clearly documented to coincide with each set of observations.

7.5 When a patient meets the trigger score and the tool is activated, the guidelines regarding frequency of observations and the need for medical assessment must be adhered to. (Appendix 2)

7.6 Some children will transgress the PEWS criteria in their normal state due to chronic illness. The medical and nursing staff must jointly agree and set alternative parameters so that they can be alerted of potential deterioration.

7.7 The tool does not replace clinical judgment. If a child is deteriorating acutely or is peri-arrest call the crash team on 2222.

7.8 Once the tool is activated the child is reviewed and examined, a plan of care must be documented which should include; investigations or interventions ordered, re-evaluation within a specific timeframe and physiological observation parameters that are acceptable.

8. POLICY DEVELOPMENT AND CONSULTATION

The policy has been developed by a Paediatric Sister for Children's Services with assistance from a Paediatric Consultant and a member of the Risk Management team in line with the Clinical Care Outreach/PARS policy relating to adults.
During development and on completion it will be circulated to the Senior Medical and Nursing teams in Paediatrics and the Accident and Emergency Department for comments. A final version will be circulated for information after all comments have been taken into account and changes made as needed.

9. IMPLEMENTATION

The policy will be launched through the Trust email system and will be discussed at paediatric departmental meetings to raise awareness of its use. Staff requiring training in the completion of PEWS will be identified through their PDR. Appropriate training sessions will be provided for these staff.

10. MONITORING

The policy will be monitored by two yearly audits and analysis of the findings. Gaps and omissions in the policy will be action planned and outcome assessed.
Where monitoring has identified deficiencies, recommendations and action plans will be developed and changes implemented accordingly. Progress on these will be reported to the Paediatric Divisional Nurse Manager and at the Children's Clinical Governance and Risk management meetings.

11. REVIEW

This policy will be formally reviewed in December 2013 or earlier depending on the results of monitoring.

12. REFERENCES

Advanced Life Support Group (2008), learning Resources: Why Treat Children Differently. ALSG. Paediatric Life support Course: VLE Resource Materials. UK

DOH (2003) Getting the right start: This Children's National Service Framework – Standards for Hospital Services.

Haines C, Perrott, M& Weir P (2005) Promoting Care for Acutely Ill Children – Development and evaluation of a Paediatric Early Warning Tool Intensive & Critical care Nursing. Vol 22 Issue 2 p73 – 81.

Haines C (2005) Acutely Ill Children within ward areas – care provision and possible development strategies Nursing in Critical care vol 10(2): 98-102.

Monaghan, A (2005) Detecting and managing deterioration in children Paediatric Nursing vol 17(1) Feb; 32-35.

NCEPOD (2005) An acute problem – a report of the national confidential enquiry into patient outcome and death.

NMC (2004) Standards of proficiency for pre-registration nursing education.

Resuscitation Council (UK) (2005) 'Resuscitation Guidelines'. London. RC.

APPENDICES

Appendix 1
Paediatric Early Warning Score Audit Tool

09276 PAEDIATRIC EARLY WARNING SCORES

Name: _____ **DOB:** __ __ / __ __ / __ __

Sex: ☐ Male ☐ Female **Length of stay** ☐ <24 hours ☐ >24 hours

Q1 Baseline set of observations done (Temp, HR, RR, SaO2, CRT, BP, Sensorium)
☐ Yes ☐ No ☐ Partial Set

Q2 Baseline observations done within an hour of arrival ☐ Yes ☐ No

Q3 Each set of observations generating a PEWS ☐ Yes ☐ No

Q4 Number of Observations __ __ **Q5 Number of Pews** __ __

Q6 Abnormal observations recorded by Student Nurse/HCA verified by S/N ☐ Yes ☐ No

Q7 Scores actioned and documented ☐ Yes ☐ No

Q8 Action taken adhering to PEWS guidelines ☐ Yes ☐ No

Q9 Action needing medical review ☐ Yes ☐ No

If Yes,

Yes	No	
☐	☐	Plan Documented
☐	☐	Timeframe for re-evaluation documented
☐	☐	Alternative observation parameters set if required

Q10 Score 4 or above ☐ Yes ☐ No

If Yes,

Senior Nurse on ward aware ☐ Yes ☐ No

Time for SHO to review __ __ : __ __

Time for Registrar to review __ __ : __ __

Yes	No	
☐	☐	Consultant informed
☐	☐	Review plan documented
☐	☐	Repeat obs in 15 mins/Continuous monitoring in situ

Moved to resus room after 1 hour ☐ Yes ☐ No ☐ N/A

Outcome ☐ Improved ☐ Death ☐ Transferred Out ☐ Other **Please specify** _____

Version 1 December 2009 Page 01 of 1 09276 PEWS

DRAFT

Appendix 2 Tools of Assessment

Children's Unit observation chart	Tameside Hospital NHS Foundation Trust
Name	Hospital number
Date of birth	NHS number

Modified Paediatric Coma Scale (MGCS)

Adult / Child according to visual ability >5years	*Child / Infant <5years*
Eye Opening (E) E4 Spontaneous E3 To verbal stimuli E2 To painful stimuli E1 None to painful stimuli	**Eye Opening (E)** As for older child
Verbal (V) V5 Orientated (person, place or address) V4 Confused V3 Inappropriate words V2 Inappropriate sounds, Incomprehensible sounds V1 None, S=Silent, T=Intubated	**Verbal (V)** V5 Alert, babbles, coos, words or sentences V4 Less than usual ability or spontaneous irritable cry V3 Cries inappropriately V2 Occasionally whimpers and/or moans V1 As for older child, S=Silent, T=Intubated
Grimace (G) (Use if no verbal response or inutbated) G5 Spontaneous normal facial / oro-motor activity G4 Less than usual spontaneous ability or only response to touch stimuli G3 Vigorous grimace to pain G2 Mild grimace to pain G1 No response to pain NA Not applicable	**Grimace - Use if no verbal (audible) response i.e. silent (S) or intubated (T).**
Motor (M) M6 Obeys commands M5 Localises to painful stimuli M4 Withdraws to painful stimuli M3 Abnormal flexion to pain (de corticated) M1 No response to pain NA Not applicable	**Motor (M)** M6 Or normal spontaneous movements M5 Or withdraws to touch M4 As for older children M3 Abnormal flexion to pain (de corticated) M1 No response to pain NA Not applicable

PAIN SCORE

1 2 3 4

– NONE

– MILD

– MODERATE

- SEVERE

	0	**1**	**2**	**3**
Behaviour/ Neurological	Playing / appropriate Alert	Sleeping Responds to voice	Irritable Responds to pain	Lethargic / confused. Unresponsive
Cardiovascular	Pink or capillary refill 1-2 seconds	Pale or capillary refill 3 seconds	Grey or capillary refill 4 seconds Tachycardia of 20 above normal rate	Grey and mottled or capillary refill 5 seconds or above. Tachycardia of 30 above normal rate or bradycardia
Respiratory	Within normal parameters. No recession or tracheal tug. SAO 2 above 92% in air	> 10 above normal parameters, using accessory muscles – 30 % F102 or (4 + litres / min) if high-flow face mask	> 20 above normal parameters recessing, tracheal tug. 40 + % F102 or (6+ litres / min) if high-flow face mask	5 below normal parameters with sternal recession, tracheal tug or grunting, 50% F102 or (8+litres / min) if high-flow face mask

Age	**Respiratory rate**	**Heart rate**	**Systolic BP mm/Hg**
Neonate (<4weeks)	**40-60**	**120-160**	**>60**
Infant (<1year)	**30-40**	**110-160**	**70-90**
Toddler 1-2 years	**25-35**	**100-150**	**75-95**
Preschool 2-4years	**25-30**	**95-140**	**85-100**
School 5-12years	**20-25**	**80-120**	**90-110**
Adolescent 12-16 years	**15-20**	**60-100**	**100-120**

Paediatric Early Warning Score guidelines (updated April 2011)

Score	**Action**
1	• Continue routine observations
2	• Inform nurse co-ordinator/senior nurse on ward • Increase frequency of observations • If senior nurse considers it appropriate contact SHO and agree and document plan in notes
3	• SHO to be informed and to attend within 30 minutes (SpR if SHO not available) • Document agreed management plan in nursing and medical notes • If consistently scoring 3, nursing staff to request registrar review at 4 hours or sooner if clinically indicated.
4 or more	• Inform senior nurse • SHO to attend within 15 minutes

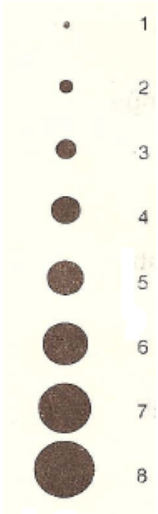
- Registrar to attend
- Consider informing consultant on hot week, on call consultant out of hours if persistently 4 or above
- Parameters and management plan to be reviewed for child's specific condition
- Repeat observations after interventions within 15 minutes
- If scoring 4 persistently after 1 hour (4x sets of observations) move into Resuscitation room for close monitoring

Children's Unit Observation Chart

Tameside Hospital NHS
NHS Foundation Trust

Name	Hospital number
Date of birth	NHS number

DATE																					
TIME																					
GCS	Eye opening																				
	Verbal/grimace																				
	Motor																				
	TOTAL																				
PUPILS + - Reacts S – Sluggish B - Brisk N - No response C – Eyes closed	RIGHT	Size																			
		Reaction																			
	LEFT	Size																			
		Reaction																			
TEMP ºC		40																			
		39																			
		38																			
		37																			
		36																			
		35																			
		210																			
		200																			
		190																			
	Pulse Rate	180																			
		170																			
		160																			
		150																			
		140																			
		130																			
		120																			
	Blood	110																			
	Pressure	100																			
		90																			
		80																			
		70																			
		60																			
		50																			
		40																			
		30																			
		20																			
	Respirations	10																			
		5																			
	O2 administered (%)																				
	SPO2																				
	CRT																				



PUPIL SCALE (mm)

Paediatric Early Warning Score (PEWS)																					
Respiratory																					
Cardiovascular																					
Behaviour																					
PEWS SCORE																					
PAIN SCORE																					
CSM satisfactory																					
BM																					
SIGNATURE																					

ENTER PAEDIATRIC EARLY WARNING SCORE ABOVE AND FOLLOW ESCALATION PATHWAY OPPOSITE

DATE	TIME	DOCTOR	BLEEP NO:	RESPONDED COMMENT

Appendix 3 NHS Equality Impact Assessment Tool

		Yes/No	Comments
1.	**Does the policy/guidance affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	Yes	This policy is specific to children.
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	Yes	Adult scoring tool different.
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the policy/guidance likely to be negative?**	No	
5.	**If so can the impact be avoided?**	N/A	
6.	**What alternatives are there to achieving the policy/guidance without the impact?**	N/A	
7.	**Can we reduce the impact by taking different action?**	N/A	