

Deterioration of the Newborn Escalation

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On behalf of Deterioration of the Newborn Working Group

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National Patient Safety
Improvement Programmes

Maternity
and Neonatal



BAPM



Based on the PIER framework

As adopted by the National Patient Safety Programme

Escalation

Appropriate involvement of multidisciplinary team

Timely

Standardised



Standardised pathway

To reduce current (apparent) unwarranted variation

Who?

When?

What is new?

NEWTT2 escalation record

Consensus based

Paper / EPR

Guidance

Decision support tool

Future data collection

Timeliness



National Patient Safety Improvement Programmes



Escalation process

Newborn Early Warning Track and Trigger (NEWTT 2)

Hospital sticker with patient details



NEWTT2 score	0	1	2	A score for each vital sign is required at each entry	
ANY critical (PURPLE) observation = immediate escalation. Consider 2222					
Reason for observations	Signed		Print name & GMC/NMC No.		
Frequency & duration					
Date					
Time					
Temperature °C	39.0				39.0
	38.0				38.0
	37.0				37.0
	36.0				36.0
Temperature alert: Implement thermal control measures and re-check temperature within 1 hour					
Respirations Breaths/min	80				80
	70				70
	60				60
	50				50
	40				40
Grunting present?	0				0
	1				1
	2				2
	3				3
	4				4
Heart rate Beats/min	180				180
	170				170
	160				160
	150				150
	140				140
Colour	SpO2 <95% for very pale / Blue				
	SpO2 95-94%				
	SpO2 <95% for Prek / Normal				
	Unreasonable / Floppy / Stabrous				
	Lethargic / Irritable / Poor tone				
Feeds	Responsive / Good tone				
	Not feeding				
	Feeding reluctantly				
	Feeding well				
	High parental concern				
Glucose	Some parental concern				
	No parental concern				
	< 1.0 mmol/l				
	1.0 - 2.5 mmol/l				
	> 2.6 mmol/l				
Glucose when measured - Should be considered in any baby feeding reluctantly/poorly or other observations suggest unwell					
NEWTT2 TOTAL					TOTAL
Monitoring frequency					Monitoring
Escalation of care YES/NO					Escalation
Initials					Initials
Refer to back page for thresholds and triggers					

Newborn Early Warning Trigger & Track 2 (NEWTT2)

How to use the NEWTT2 trigger and track tool to determine the level and timelines of escalation

Calculate and document the total NEWTT2 score for a set of observations by adding together the individual scores (0-2) for every individual observation entered in a single column of the chart.

Check the total against the NEWTT2 escalation tool and follow instructions in the escalation table for that set of observations.

Healthcare professional concern can initiate a neonatal review at any time regardless of the zone colour of an observation or total score.

For a score of zero continue routine care

Thresholds and Triggers

The grade of team member indicated as the primary contact for each level of clinical concern is a guide and may need to be adapted depending on the local skill mix within that care setting or organisation.

	Score 1	Score 2-3	Score 4-5	Score ≥6	Any critical observation
	Inform shift leader - Consider SpO ₂ +/- blood glucose if not done already				
Primary escalation and response (use SBAR framework)	Repeat observations in <1 hour.	Refer to paediatric/neonatal Tier 1 doctor/ANNP.	Refer to paediatric/neonatal Tier 1 doctor/ANNP.	Refer to paediatric/neonatal Tier 1 doctor/ANNP. The Tier 2 doctor/ANNP should be informed.	Refer to paediatric/neonatal Tier 1 doctor/ANNP AND Tier 2 doctor/ANNP
Review timings	Escalate as for score 2-3 if the repeat score remains 1.	Request a review within 1 hour.	Request a review within 15 minutes.	Request immediate review.	Immediate review and consider neonatal emergency call (2222).

Take steps to manage/address any obvious concerns/problems

Secondary contact	If no review within expected time frame, escalate to Tier 2 doctor/ANNP and inform shift leader.	If no review within expected time frame, escalate to consultant and inform shift leader.
	If still no response within required time frame, escalate to consultant.	

- When the primary team member(s) contacted is unable to attend or fails to attend within the expected time for the level of clinical concern, escalation to the secondary contact is required
- The secondary contact would be expected to attend within the initial review timing, calculated from the documented time of primary escalation.

SBAR Handover

S	Situation
B	Background
A	Assessment
R	Recommendation
Document all actions and discussions in patient record	

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SBAR Handover

S

B

A

R

NEWTT2 Escalation Record

Date: ___/___/___ Time: ___:___ NEWTT2 score _____

Score 1-3 (Request **Tier 1** review within **1 hour**)

Score 4-5 (request **Tier 1** review within **15 minutes**)

Score ≥ 6 (request **Tier 1** review **within 15 minutes and inform Tier 2**)

Shift Leader Informed

SBAR referral to Paediatric/Neonatal team

S:

B:

A:

R: I have already done _____

Agreed action _____ & review within _____

Referral Accepted by: Tier 1 Doctor/ANNP Tier 2 Doctor/ANNP

Referrer Name: _____ Signature: _____

Grade : _____ NMC: _____

Consider a **2222** call if there are any **critical observations for Tier 1 AND Tier 2 review**

Matthew

Matthew was born at 35+6 weeks gestation, birth weight 2.32kg (TC baby)

He had skin to skin and latched early at the breast

You note Matthew is now quiet and not waking for feeds at 2 hours

Glucose when measured – Should be considered in any baby feeding reluctantly/poorly, or other observations suggest unwell

NEWTT2 TOTAL	8						
Monitoring frequency	Imm						
Escalation of care YES/NO	Y						
Initials	AN						
Refer to back page for thresholds and triggers							

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SBAR Handover	
S	Situation
B	Background
A	Assessment
R	Recommendation
Document all actions and discussions in patient record	

SBAR Handover

S	Situation	This is midwife Jones calling about baby Matthew who is in transitional care and has triggered on his first set of observations a NEWTT2 score of 8
B	Background	Matthew was born at 35+6 week, weighing 2.32kg. He is now 2 hours old.
A	Assessment	He is quiet and not feeding, with a blood glucose of 1.6, a low temperature and fast heart rate. I have wrapped him skin to skin with mum. We are trying to get him to feed.
R	Recommendation	Please come and review him immediately. Will you inform your tier 2? Or would you like me to?
Document all actions and discussions in patient record		

SBAR Handover

S	Situ
B	Back
A	Action
R	Recommend

NEWTT2 Escalation Record

Date: ~~12/01/2023~~ Time: 10:00h NEWTT2 score 8

Score 1-3 (Request **Tier 1** review within **1 hour**)

Score 4-5 (request **Tier 1** review within **15 minutes**)

Score ≥ 6 (request **Tier 1** review **within 15 minutes and inform Tier 2**)

Shift Leader Informed SBAR referral to Paediatric/Neonatal team

S: Baby Matthew on the postnatal ward has triggered on his first set of observations a total NEWTT2 score of 7

B: He was born at 35+6 weeks, weighing 2.32kg is now 2 hours old.

A: He is quiet and not feeding, with a blood glucose of 1.6, a low temperature and fast heart rate

R: I have wrapped him up skin to skin with mum and we are trying to get him to feed. Please come and review Matthew immediately. Will you inform your tier 2, or would you like me to?

Agreed action – Review immediately and inform tier 2

Referral Accepted by: Tier 1 Doctor/ANNP Tier 2 Doctor/ANNP

Referrer Name: Janet Jones Signature: J. Jones

Grade : Midwife NMC: 12345678

Consider a **2222** call if there are any **critical observations for Tier 1 AND Tier 2 review**

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Thank you –
now over to
Kathryn for
RESPONSE

National Patient Safety
Improvement Programmes

