Staffordshire, Shropshire & Black Country
Neonatal Operational Delivery Network

Southern West Midlands
Neonatal Operational Delivery Network

West Midlands Procedure for Escalation of Operational Pressures in Neonatal Services

Managing Neonatal Capacity and Demand within the West Midlands

Background

Neonatal units across the West Midlands have individual Escalation Policies, this often means there is variation across the region when the transport service cot locator is contacting each unit to locate available neonatal cots. This can be time consuming, not only for the transport service but also for the individual units that are also trying to locate beds/cots for mothers and babies whether that be in-utero or postnatal transfers

Whilst all neonatal units require individual internal escalation polices detailing specific actions required and reporting mechanisms of escalation level within the Trust it is also evident that there needs to be less variation and more consistency in how the level of escalation is determined and communicated within the wider network and region.

Defining the levels of escalation in the West Midlands:

All neonatal units were requested to send in their current escalation policies. (7 were received across the two neonatal operational delivery networks).

These were analysed and compared for similarities. The neonatal units who submitted had either 3 or 4 levels of escalation, for similar reasons. These policies have been used to create the definitions below.

As Neonatal services are provided within a network, it is important to note if a unit is open and has cots, staff and capacity this should be available for the next baby that requires it within the agreed network care pathway. One of the difficulties cot locator has is identifying the true capacity available within a network if units are reserving available cot capacity for their local population only.

Examples :-

1. Units report no capacity but are keeping 2 cots spare on elective section days in case they are required.
2. Units report no capacity but have a spare cot for unit use only.

Aim

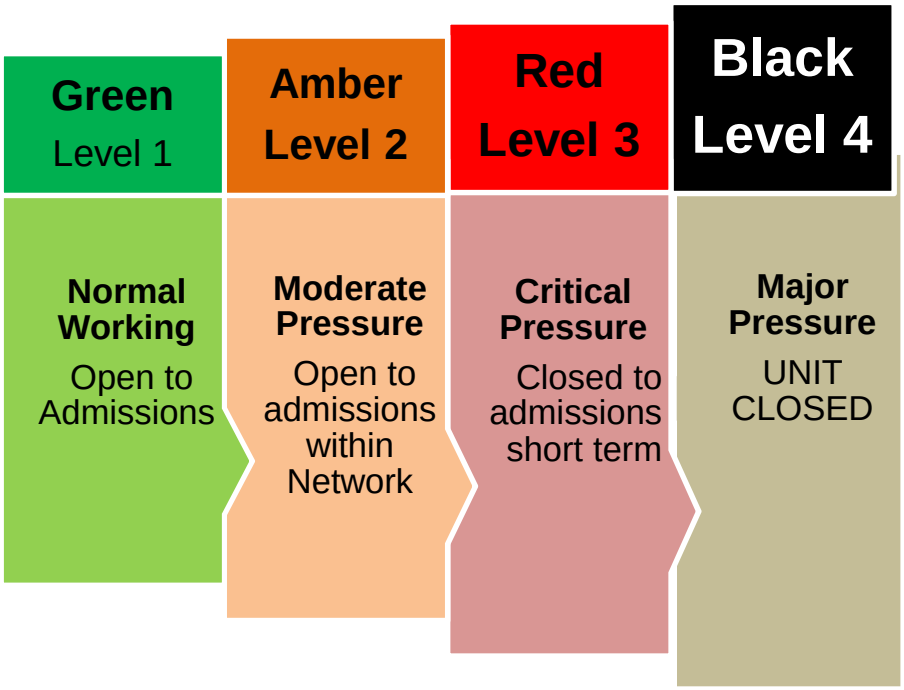
The aim of this guidance is to reduce variation, give clarity to all units, Transport, Networks and commissioners and keep more babies within agreed network care pathways receiving the correct level of care.

To standardise the reporting and management of neonatal service operational pressures escalation across the West Midlands.

Definitions

There are 4 levels of escalation Fig 1, an overview of each level with the defining triggers can be found below Fig 2

Fig 1 West Midlands Neonatal Operational Pressures Escalation Levels

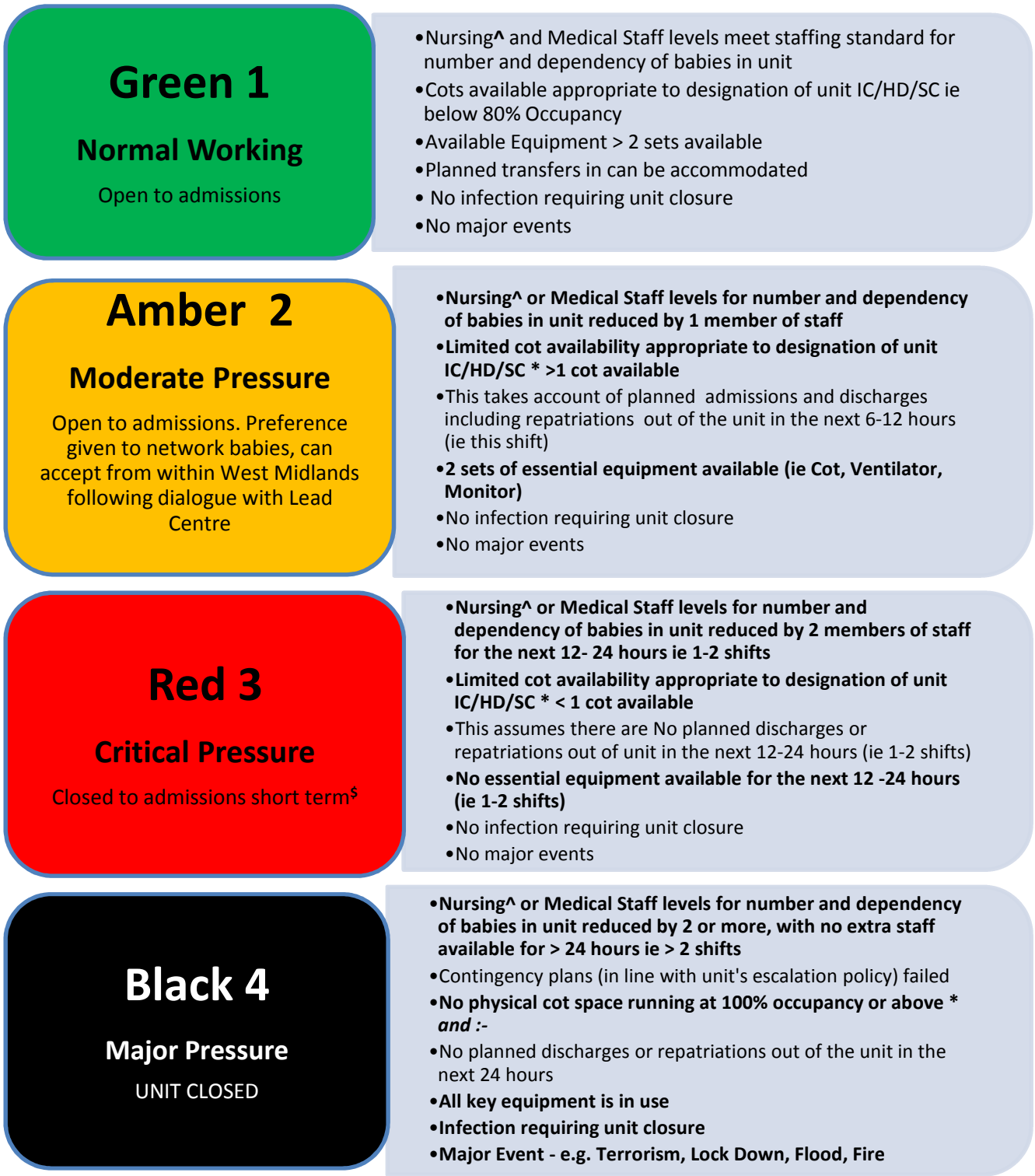


Please note even when a neonatal unit is "closed" due to being at capacity, or other identified reason defined within the escalation triggers, all neonatal services have to be prepared for unexpected deliveries or deterioration of babies on the post natal ward resulting in a baby requiring neonatal care. At such time the neonatal service will stabilise the baby and then follow local plans to create capacity necessary to safely care for the babies in the NNU, at times this may include identifying appropriate baby (ies) to transfer out of the NNU to another setting

.Operational Pressure Escalation Level (OPEL) Triggers

1. Nursing and Medical Staff Levels
2. Cot Availability at each level of care Intensive Care (IC),High Dependency (HD),Special Care (SC)
3. Equipment Availability
4. Infection
5. Major Event (e.g. Flood, Fire, Terrorism, Lock down)

Fig 2



Any one of the emboldened triggers sets the level of escalation for the neonatal unit.

Notes:

^Nurse staffing levels on each shift as per badger nurse staffing report (this should be completed twice a day by each unit)

***See scenarios in Appendix 1**

$ May be open to repatriations if appropriate level of cot available and nurse staffing level is Green or Amber

OPEL Actions required

Below are 4 tables, representing every level, during each level there are criteria to meet and actions to be delivered from a unit, cot locator, Network or commissioner.

Fig 2

GREEN 1			
Trigger	Nursing^ and Medical Staff levels meet staffing standard for number and dependency of babies in unit		
	Cots available appropriate to designation of unit IC/HD/SC ie below 80% Occupancy		
	Available Equipment > 2 sets available		
	Planned transfers in can be accommodated		
	No infection requiring unit closure		
	No major events		
Actions			
Unit	**Cot Locator/Online**	**Network**	**Commissioners**
Inform Labour ward of status Make this known to Cot Locator at routine time to update of cot status	Update Internal Systems	No Actions	No Actions

Fig 3

AMBER 2			
Trigger	**Nursing^ or Medical Staff levels for number and dependency of babies in unit reduced by 1 member of staff**		
	Limited cot availability appropriate to designation of unit IC/HD/SC * >1 cot		
	This takes account of planned admissions and discharges including repatriations out of the unit in the next 6-12 hours (ie this shift)		
	2 sets of essential equipment available (ie Cot, Ventilator, Monitor)		
	No infection requiring unit closure		
	No major events		
Actions			
Unit	**Cot Locator/Online**	**Network**	**Commissioners**
Inform Labour ward of status Make this known to Cot Locator at routine time to update of cot status Contingency plans in place in line with unit's escalation policy If infection reducing cots available inform Network (type of infection, Number of patents and how it's being managed and anticipated time frame)	Update Internal System	If infection reducing cots available inform Quality Lead NHS (type of infection, Number of patents and how it's being managed and anticipated time frame)	No Actions

Fig 4

RED 3	
Trigger	**Nursing^ or Medical Staff levels for number and dependency of babies in unit reduced by 2 members of staff for the next 12- 24 hours ie 1-2 shifts**
	Limited cot availability appropriate to designation of unit IC/HD/SC *<1 cot
	This takes account of No planned discharges or repatriations out of the unit in the next 12-24 hours (ie 1-2 shifts)
	No essential equipment available for the next 12 -24 hours (ie 1-2 shifts)
	No infection requiring unit closure
	No major events

Actions			
Unit	**Cot Locator/Online**	**Network**	**Commissioners**
Inform Labour ward of status Make this known to Cot Locator **immediately** Contingency plans in place in line with units escalation policy Inform other units if Out of Hours *(interim until online tool available)* Inform network	Daily report to Network if NICU's closed Update internal system	If Infection - Inform Quality Lead NHSE Inform commissioners and contact unit to complete network risk assessment and action template* To monitor situation and request support from surrounding units	Request informal action plan from units

Fig 5

BLACK 4	
Trigger	**Nursing^ or Medical Staff levels for number and dependency of babies in unit reduced by 2 or more, with no extra staff availability > 24 hours ie > 2 shifts**
	Contingency plans (in line with unit's escalation policy) failed
	No physical cot space running at 100% occupancy or above * *and :-*
	No planned discharges or repatriations out of the unit in the next 24 hours
	All key equipment is in use
	Infection requiring unit closure
	Major Event - e.g. Terrorism, Lock Down, Flood, Fire

Actions			
Unit	**Cot Locator/Online**	**Network**	**Commissioners**
Inform Labour ward of status Make this known to Cot Locator **immediately** Contingency plans in place in line with unit's escalation policy Inform other units if Out of Hours (interim until online tool available) Inform Network	Daily report to Network if NICU's closed Update internal system	Inform commissioners and contact unit to complete network risk assessment and action template* Co ordinate communication and monitor situation If Infection - Inform Quality Lead NHSE	Monitor impact on contracted activity levels and communicate to SCT colleagues Request from Trust remedial action plan for non-compliance

***See appendix 2**

Nurse Staffing Calculations

Nurse staffing levels should be recorded twice a day by each unit in the badger unit report "Neonatal Unit Nursing Numbers", which will then automatically work out the difference between the Nurses Required and Nurses on Shift.

Calculations should be undertaken at each change of shift and if activity levels alter during a shift.

Below is an example of how the nurse staffing calculation is worked out based on the number and dependency of each baby in the unit.

Staffing Imbalance Calculator – Neonatal Unit			
Dependency of Baby	Number of babies at each dependency	Number of staff on duty	BAPM staff required
IC			1:1 (x1) =
HD			1:2 (x0.5) =
SC			1:4 (x0.25)=
Supernumerary Shift Co-ordinator			1
Total Staff (round number)		B =	A =
Imbalance	A Staff required – B Staff on duty = C		

NB – Neonatal Units that also staff TC from within neonatal nurse staff on duty will need to reflect this in their calculations too.

Example calculation: 3 ITU babies, 2 HDU, 13 Special Care babies no shift coordinator and only 6 nurses rostered for duty:

Staffing Imbalance Calculator – Neonatal Unit			
Dependency of Baby	Number of babies at each dependency	Number of staff on duty	BAPM staff required
IC	3	**2**	1:1 (x1) = 3
HD	2	1	1:2 (x0.5) = 1
SC	13	3	1:4 (x0.25)= 3
Supernumerary Shift Co-ordinator	0	0	1
Total Staff (round number)		B = 6	A = 8
Imbalance	A Staff required – B Staff on duty = C -2		

Green - Level 1: Nursing and Medical Staffing levels meet staffing standard for number and dependency of babies
Amber - Level 2: Nursing staffing reduced by 1 member of staff
Red - Level 3: Nursing Staffing levels reduced by 2 members of staff short term 12-48 hours
Black - Level 4: Nursing Staffing levels reduced by 2 or more, with no extra staff availability >48 hours

Information Required by Cot Locator Service to be updated at least every 6 hours

		Cots	RAG
How many **available** cots do you have at each level?	IC		
	HD		
	SC		
If Amber/Red or Black – What are the reasons?	Staffing :		
	No Physical cot space:		
	Lack of Equipment:		
	Infection:		
	Major event:		
If Red/Black has network been informed?	Yes:		
	No:		
Is labour ward open?	Yes Accepting all		
	No Please call		

Networks to receive a daily email from the cot locator service when no ITU cots are available in NICU's (interim until the online tool available)

Example

Unit Name	RAG	If A/R/B please state reason
City	Green	
BWH	Black	Flooded ward
WMH	Amber	At 80-85% occupancy
RSUH	Red	At 95% occupancy and no planned discharges in next 6-12 hours

Reported escalation levels will be closely monitored by the network and escalated to commissioners. The data will also be reviewed at the quarterly transport user group meetings and fed back to the network board.

The network will use this standardised capacity information to support providers and commissioners to identify capacity issues and develop services to meet the neonatal demand in the West Midlands.

Other Supporting Documentation

The documents below need to be considered and may need updates and alterations in light of this West Midlands Procedure for Escalation of Operational Pressures in neonatal services :-

- Individual Unit's infection prevention policy
- Individual Unit's escalation policy and contingency plans
- Maternity unit's escalation policies
- Neonatal Transport Standard Operating Procedure
- Regional Neonatal Repatriation policy

Appendix 1 Examples

SCENARIO 1

COTS

LEVEL	COTS	INUSE	CAPACITY
ITU	6	6	100%
HDU	6	5	83%
SCBU	14	10	65%

STAFF

LEVEL	REQUIRED for cots	Required for capacity	AVAILABLE
ITU	6	6	6
HDU	3	2.5	3
SCBU	3.5	2.5	3
Shift Co-Ordinator	1	1	1
	13.5	12	13

Capacity Only

ITU	Black
HDU	Amber
SCBU	Green

Call comes in for ITU cot, even though ITU is full there are staff available plus cot and equipment to accommodate by flexing HDU Space. Therefore can accept.

Still need to encourage conversation

ACTION REQUIRED

Flex the cot space - just because someone is black or red conversation is encouraged to check this option

SCENARIO 2

COTS

LEVEL	COTS	INUSE	CAPACITY
ITU	6	6	100%
HDU	10	9	90%
SCBU	14	10	65%

STAFF

LEVEL	REQUIRED for cots	Required for capacity	AVAILABLE
ITU	6	6	6
HDU	5	4.5	3.5
SCBU	3.5	2.5	1.5
Shift Co-Ordinator	1	1	0
	15.5	14	11

Capacity Only

ITU	Black
HDU	Amber
SCBU	Green

ACTION REQUIRED

Mitigation to address staffing levels for immediate outcome - ensure this improves within 48 hours otherwise escalation level is black due to lack of nurses.

Can any transfers out be accommodated?

Are the right babies in the right cots?

Appendix 2

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Risk Assessment of Neonatal Cot / Unit Closures

Date:

Name of neonatal unit:

Reason for Cot / Unit closure.

Current Status of neonatal unit:

Anticipated date for resolution and reopening of neonatal cots / unit:

Status of remaining units in the network including Number and type of cots available:

Maternity or other capacity issues within the network?

Risk Assessment:
Impact on patients

-

Ensuring patient safety

-

Neonatal ODN Action Plan

- Daily monitoring of the availability of cots at each level of care within the network and the West Midlands (undertaken six hourly by the cot locator service)
- Communication with each neonatal unit in the neonatal ODN to review their neonatal unit and delivery suite status and discuss the impact of the current and pending activity locally and within the ODN
- Each Neonatal unit to ensure all neonatal and maternity colleagues are aware of the current situation and update the neonatal ODN of any changes
- Each neonatal unit should review all their patients and consider the repatriation of outborn babies / discharge of well babies to TC/PNW/Home
- Refer to the cot locator for updates in cot availability Tel: 0300 200 1100
- Nurse staffing levels should be reviewed based on cots occupied and units should consider if they may be able to loan nursing staff to neighbouring units if additional nurses are available to requirements (This may be unlikely, especially in view of HR requirements, but should be explored with each Trust)