



BAPM Guidance on Cot Capacity and the use of Nurse Staffing standards

Nurse staffing guidance and the evolution of networks

Current BAPM guidance on optimal nurse staffing (1) was developed through consensus and is supported by evidence that reduced numbers of nurses and especially those with a QIS qualification are associated with a poorer outcome for babies (2)(3). The guidance states that the minimum nurse:baby ratio should be 1:1 for babies receiving intensive care and 1:2 for high dependency care (these should be QIS nurses) and 1:4 for special care.

This BAPM guidance was published early in the evolution of the networks in England and warrants some clarification with the maturation in network functioning. Clinical networks have become the model of organisation of neonatal services throughout the UK. They were set up with the realisation that the mothers and babies with the most complex care needs often require care in more than one unit. The ambition was that the formation of regional networks of units with shared governance would ensure the best clinical outcomes with the least disruption for families. There is now evidence that the development of clinical networks has been accompanied by better adherence to optimal care pathways for the highest risk babies (4).

In an ideal situation, all mothers and babies (except those with a requirement for supra-specialist care) should be able to be cared for within their own network and transfers of mothers and babies only undertaken when this is considered part of their ideal pathway of care.

Neonatal care, in common with other forms of unplanned care, varies enormously in workload on an hour by hour basis. It was always intended that nurse:baby staffing ratios for individual units should be calculated on an averaged basis; if units are not continuously staffed for the highest possible peaks of activity, or mothers and babies transferred as soon as optimal nurse staffing levels are threatened, nurse:baby ratios will not always comply with BAPM guidance on a day to day basis. This addition to the original BAPM document is intended to allay professional uncertainty as to how to use nurse staffing guidance to inform cot capacity.

Decisions about cot capacity and patient transfer

BAPM recommends that less than optimal nurse staffing levels should not be used as the sole reason for closure of a unit to further admissions. In some cases, a nurse:baby ratio that is less than the BAPM standard might be considered safer overall than transferring a mother with a complex pregnancy or a high risk baby to a distant unit. Transfer of mothers and babies poses clinical risks during transfer and may impose long travel distances from home for families.

Decisions about transfer of a mother or baby out of a unit based on cot capacity should be preceded by consideration of all the following factors (a) the number of babies receiving different levels of care (b) the staffing of the unit in comparison to BAPM guidance (c) the possibility of more staff-efficient reorganisation of babies within the neonatal unit (d) the possibility of repatriation of babies who no longer require NICU care. Networks should have mechanisms for oversight of decisions about transfer of mothers and babies for reasons of cot capacity and for exception reporting.



How nurse staffing guidance should be used

Although many neonatal units regularly struggle to attain recommended nurse:baby ratios this is not a reason to change professional guidance regarding optimal staffing. Levels of staffing should be monitored and used together with information on transfers as the basis of negotiation with the relevant commissioning body.

A unit's cot numbers and nursing staff establishment should be agreed on at network level as that appropriate for the needs of its own maternity catchment and for its function as a referral unit if it is a NICU. The unit's total nursing establishment should be calculated on the basis of an average 70-80% cot occupancy.

Neonatal units should make sure that their senior team is aware of mechanisms for accessing clinical advice, and for escalating to the network when an offer of maternal or neonatal transfer into their maternity unit has to be declined.

Networks should have a mechanism for overseeing the optimal management of cot capacity and maternal or neonatal transfer.

Commissioners and service reviewers should expect units and networks to have the above mechanisms in place and for them to be able to provide evidence of their functioning and any quality improvement related to this.

Parents should expect to be told the rationale for any transfer and to receive basic information about the receiving unit prior to the transfer.

References

1. British Association of Perinatal Medicine. Service Standards for Hospitals providing Neonatal Care (3rd edition). London: British Association of Perinatal Medicine; 2010. p. 1–22.
2. Hamilton KESC, Redshaw ME, Tarnow-Mordi W. Nurse staffing in relation to risk-adjusted mortality in neonatal care. Arch Dis Child Fetal Neonatal Ed. 2007;92(2):99–103.
3. Milligan DWA, Carruthers P, Mackley B, Ward Platt MP, Collingwood Y, Wooler L, et al. Nursing workload in UK tertiary neonatal units. Arch Dis Child. 2008;93(12):1059–64.
4. Gale C, Santhakumaran S, Nagarajan S, Statnikov Y, Modi N. Impact of managed clinical networks on NHS specialist neonatal services in England: population based study. Vol. 344, BMJ. 2012. p. e2105.