Children and Young People Committee

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Neonatal Services in Wales

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NEONATAL CAPACITY REVIEW

JANUARY 2012

OVERVIEW SUMMARY

This summary should be read in conjunction with the main Neonatal Capacity Review, January 2012.

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1. INTRODUCTION

Following establishment of the Wales Neonatal Network in late summer 2010, the Network was tasked to perform an initial Network Capacity Review. A preliminary paper was presented to the Steering Group in October 2010 and a final report presented in February 2011. This report made a series of recommendations and, following meetings with Health Boards in Spring/Summer 2011, they were asked to develop action plans to start the process of addressing some of the deficits and dysfunctionalities identified across the neonatal network.

This review follows on from that presented to the Network Steering Group in February 2011. The main difference in this review is that it is founded on a substantial body of activity data collected uniformly and prospectively from all neonatal units in Wales over the whole year for 2011 and 47 consecutive weeks for North Wales. This allows much clearer, more quantitative and robust recommendations to be made on a range of steps needed to be taken by Health Boards to make available capacity match demand for neonatal services.

2. CONTEXT

The review is based on the following underlying themes and principles:

2.1 Four health communities have been defined; each should function as a mini network, as far as possible, so that families and babies can receive all their care within their Health Community and close to home.

- **North** (Ysbyty Gwynedd, Ysbyty Glan Clwyd and Wrexham Maelor Hospital)

- **South West** (Bronglais Hospital, Withybush Hospital, West Wales General Hospital, Singleton Hospital and Princess of Wales Hospital)

- **South Central** (University of Wales Hospital, Royal Glamorgan Hospital and Prince Charles Hospital)

- **South East** (Nevill Hall Hospital, and Royal Gwent Hospital).

2.2 A maximum average cot occupancy standard of 70% for critical care and 80% for low dependency care should be adhered to for effective clinical care. Poorer clinical care and poorer clinical outcomes have been demonstrated in units with mean critical care occupancy above 70%.

2.3 Cot projections are based on 2011 activity collected via the cot locator system and on neonatal population.

2.4 Nurse staffing recommendations are based on the Welsh Government All Wales Standards for Neonatal Care (2008) that reflects UK national guidance.

2.5 Recommendations are based on the existing configuration of neonatal units.

3. KEY OVERALL MESSAGES

Health community specific findings and areas for development are included in the individual chapters and should be referred to in parallel with this Executive Summary.

Many messages apply across Wales and these are summarised below:

3.1 The current compliment of 72 effective critical carecots (IC + HD,) across Wales comes close to being adequate to meet the 70% occupancy standard. Clinicians however have persistent problems in gaining timely access to these cots. This is due to the current distribution, utilisation and staffing of existing capacity, together with cot-blocking of high acuity cots by low-acuity babies.

3.2 Cot deficits exist in the North Wales Community where cot projections indicate a shortfall of 1 HD cot and in the South Central Community where cot projections indicate a shortfall of 1 IC cot and 3 HD cots.

3.3 Capacity pressures are acute across the southern part of the network, with particular pressure in the South Central Community that provides the regional surgical service.

3.4 The critical care cot deficit for Wales of 5 cots is modest in relation to the existing capacity of 72, but the clinical impact is high.

3.5 A significant part of the Intensive Care (IC) capacity problem relates to an inappropriate distribution of critical care cots leading to local under-utilisation. Occupancies of around 20% for some IC cots are evident in Abergavenny and Bridgend and the Network cannot afford to have such poorly utilised capacity.

3.6 Other problems relate to the significant amount of intensive care that is currently being provided outside of the Intensive Care Centres to meet demand that cant be met by the planned capacity, primarily in the Cwm Taf Units, without compliant staffing structures.

3.7 Poor cot utilisation is evident at High Dependency (HD) level. This adversely affects the repatriation of infants from the Intensive Care Units back to their local units and affects the Intensive Care Units' ability to receive new referrals. Occupancies of 45% and below are evident

UNIT	**% OCCUPANCY**
YG Bangor - 2 cots	5%
WH Haverfordwest – 2 cots	31.2%
WWGH Carmarthen - 2 cots	22.8%
R Glam Llantrisant - 4 cots	45.3%
PCH Merthyr - 3 cots	32.7%

The causes of this poor utilisation are twofold:

- Special Care (low acuity) babies are blocking HD cots.
- Clinical competencies are currently insufficient in some units for early repatriation of babies from the Intensive Care Units and to provide good cot utilisation.

3.8 There is wide variation between units in the provision of low dependency cots in proportion to live births. Associated with this is extremely high activity in relation to the number of local deliveries, again a two fold variance. This is demonstrated in special care occupancies of over 85.5% - 174.5% across several units.

3.9 Low acuity babies are persistently occupying high dependency cots in all units across Wales and this is a major contribution to the lack of cot capacity at critical care level.

3.10 Very limited progress has been made to improve compliance with nurse staffing against the All Wales Standards. The nurse deficits by Health Community, expressed as % of a Standard-Compliant establishment are as follows:

North Wales Community	24.2%
South West Community	20.8%
South Central Community	11.8%
South East Community	23.2%

3.11 The neonatal capacity problem in Wales and the associated clinical governance concerns will not resolve until progress is made in addressing this nursing deficit.

3.12 Developing and sustaining the appropriate nursing skill levels in the smaller local/special Units is critical to addressing the capacity problems across all Units.

3.13 The greatest current medical staffing problems for Wales relate to the Consultant (Tier 3) and Middle Grade (Tier 2) issues in Betsi Cadwaladr. Ongoing neonatal intensive care is being provided in two of the three North Wales units without a dedicated rota of expert neonatal consultants and without a dedicated rota of Tier 2 staff that have no concurrent general paediatric responsibilities.

3.14 The number of trainee slots available to fill rotas is likely to progressively and drastically decrease from 2014 and this will reduce the number of Tier 2 rotas that can be supported. This is likely to require innovative staffing models and service reconfiguration.

3.15 Paediatric junior staff recruitment has been difficult in Wales for several years and most if not all units have experienced recurrent gaps in their Tier 1 and Tier 2 rotas. This problem is likely to be particularly severe in March 2012 and there can be no certainty that this will not acutely affect capacity.

3.16 Most existing Level 2 neonatal units in Wales do not currently have complete separation of Tier 1 rotas. This separation is now part of the "standard" staffing model under the BAPM 2010 Service Standards, although there is arguably flexibility within the standard in relation to the nature and volume of neonatal care given. Staff with a nursing background may in future deliver traditional medical roles at Tier 1.

3.17 The current pattern and delivery of care indicates that there is systematic dysfunctionality and mismatch between demand for and the availability of cots with variability in clinical practice and resource utilisation. This results in diseconomies of scale, clinical governance concerns and difficulties in sustaining robust staffing

models with adequately skilled, experienced and supervised clinical teams.

3.18 It is important that the Neonatal Network and local clinical teams are engaged in the development of plans for maternity services and any other plans that involve reconfiguration of services.

3.19 The new BAPM service standards for hospitals providing neonatal care (2010) and Categories of Care (2011) should be used by Health Boards to guide future developments and support any reconfiguration plans in Wales.

4. RECOMMENDATIONS

Detailed recommendations, by Health Community, are presented in the Executive Summaries contained in the main body of the Neonatal Capacity Review. Below are high level recommendations that need to be addressed at an all Wales level by Health Boards, WHSSC and Welsh Government.

- Steps must be made to ensure High Dependency (HD) capacity across Wales is actually available for high dependency care. Local neonatal units must make HD cots available and avoid these cots being blocked by low dependency babies. Staffing competencies must be addressed to support the provision of High Dependency care; this will need support from the associated Neonatal Intensive Care Unit.

- If the availability of High Dependency cots can not be improved at local level, the associated cots should be relocated to the central Intensive Care Units, with the associated revenue/staffing resource. Clearly the former option would be preferred, as this ensures the optimum delivery of locality based care.

- The very high occupancy rates at special care level need to be addressed either by steps to reduce low dependency demand and/or investment in extra low dependency capacity. The Network has completed a

review of low dependency provision across Wales and a compendium of best practice is available to assist Units in reducing inappropriate demand.

- Unless Health Boards urgently address the Low Dependency occupancy issue, the critical care capacity problem will not be resolved.

- Stabilisation cots must be maintained in each Neonatal Unit to provide short term Intensive care.

- The current under–utilised Intensive Care (IC) cots should be urgently relocated to their associated Neonatal Intensive Care.

- Attention should be given to addressing the IC activity currently delivered by the Cwm Taf Units, as this is not sustainable in the medium or longer term.

- The shortfall in Critical Care cots in the South Central Community needs to be addressed; actions to improve the effective use of current cots across the south part of the Network need to be considered in addition.

- Urgent action is required to address the nursing shortfalls in line with the All Wales Standards to ensure that safe, effective clinical care can be provided.

- Health Boards need to consider the BAPM Service Standards for Hospitals providing Neonatal Care (2010) when planning Tier 1 provision for the standard model for staffing Local Neonatal Units.

5. CONCLUSIONS

Neonatal clinical staff, Neonatal Unit Management Teams, Health Boards and WHSSC are all urged to consider the recommendations and to think about their individual responsibilities in assisting resolution of the current mismatch between demand for and availability of neonatal capacity within the Wales Network.

As neonatal services are delivered in a complex partnership between local stabilisation and low acuity services and more centralised intensive care services (including the CHANTS transport service) it is particularly important that communities work closely together to plan the quantity and distribution of capacity within their areas, appropriate to their population needs. Agreed and documented clinical pathways and protocols that match the agreed capacity provision should support these plans.

Without such action:

- Families will continue to experience the stress and clinical risk associated with emergency transfers of sick mothers and babies over longer distances than appropriate far too frequently.

- Clinical teams will continue to spend an inordinate amount of time and be inordinately stressed managing risky over-occupancy by trying to find alternative units for mothers and babies or bringing in extra staff in emergencies.

- Sick babies will continue to be managed for too long in units that are not appropriately staffed or experienced for the level of care needed.