

**HWLG(3)-07-10-p5 Welsh NHS Confederation  
25 March 2010**

Health, Wellbeing and Local Government Committee:

**Inquiry into Neonatal Care - Evidence from Welsh NHS Confederation**

**1. Purpose**

The Health, Wellbeing and Local Government Committee has announced an inquiry into Neonatal care. This paper presents evidence on behalf of all LHBs in Wales to address the terms of reference.

**2. Background**

Units that care for babies can have a variety of names (neonatal unit, special care unit, neonatal intensive care unit, etc) but currently these titles are not precise and do not describe the type of work they perform. Neonatal Activity has traditionally been described as: intensive care, high dependency care, special care and normal care. These terms have varied over time, but the most up to date definitions can be obtained from the British Association of Perinatal Medicine (BAPM) [www.bapm.org](http://www.bapm.org). Simple, broad descriptions are given in the box below.

It is important to note that any one baby may start life 'normal', become ill at 12 hours (say with an infection) be needing intensive care by 24 hours and move through high dependency and special care categories in the following few days before being 'normal' again at a week. It may be necessary to move the baby from one unit to another in order to get the appropriate level of care.

| Type of care         | <b>Intensive care</b>  | <b>High dependency care</b>   | <b>Special care</b>  | <b>Normal care</b>  |
|----------------------|--|---|--|---|
| Level of care        | <b>Level 1</b>   | <b>Level 2</b>  | <b>Level 3</b>   | <b>Level 4</b>  |
| Incidence            | About 1.5 to 2.0% of all live births. However casemix variation can result in Significant local distortion   |   | About 7 to 10% of all live births  | All live births   |
| Type of Intervention | a) Ventilation irrespective of the babies gestation;<br>b) Continuous airway pressure support in the first 5 days of life;<br>c) general supportive care to the most immature infants (e.g. those born < 29 weeks gestation);<br>d) certain specific procedures -e.g. dialysis | a) Continuous airway pressure support in babies not fulfilling intensive care criteria;<br>b) babies < 1000g not fulfilling intensive care criteria;<br>c) babies receiving intravenous nutrition;<br>d) certain special situations e.g. babies with tracheostomy | A whole range of babies meet this criteria if they have needs which can not reasonably be met at home and do not fulfil the criteria for intensive or high dependency care - e.g. babies requiring intravenous therapy or phototherapy for jaundice, | Babies in this category should not be in hospital. However special circumstances may exist - e.g. in babies admitted for a special investigation who need normal care whilst an inpatient |

### 3. Neonatal care is delivered at 13 hospital sites in Wales

Abertawe Bro Morgannwg University Health Board

- Singleton Hospital, Swansea
- Princess of Wales Hospital, Bridgend

Cardiff And Vale University Health Board

- University Hospital of Wales, Cardiff

Cwm Taf Health Board

- Royal Glamorgan Hospital, Llantrisant
- Prince Charles Hospital, Merthyr

Aneurin Bevan Health Board

- Royal Gwent Hospital, Newport
- Nevill Hall Hospital, Abergavenny

Hywel Dda Health Board

- West Wales Hospital, Carmarthen
- Withybush Hospital, Haverfordwest
- Bronglais Hospital, Aberystwyth

Betsi Cadwaladr University Health Board

- Ysbyty Gwynedd, Bangor
- Ysbyty Glan Clwyd, Bodelwyddan
- Wrexham Maelor Hospital, Wrexham

### 4. The number of neonatal cots in each hospital at each level is shown below:

|  | Intensive Care Cots | High Dependency Cots | Special Care Cots |
|--|---------------------|----------------------|-------------------|
| Singleton Hospital - Swansea             | 6                   | 6                    | 14                |
| Princess of Wales Hospital - Bridgend    | 2                   | 3                    | 5                 |
| University Hospital of Wales – Cardiff * | 10                  | 10                   | 12                |
| Royal Glamorgan Hospital - Llantrisant   | 4                   | 6                    | 6                 |
| Prince Charles Hospital - Merthyr        | 2                   | 4                    | 4                 |
| Royal Gwent Hospital - Newport           | 9                   | 7                    | 8                 |
| Nevill Hall Hospital - Abergavenny       | 2                   | 5                    | 8                 |
| West Wales Hospital - Carmarthen         | 0                   | 0                    | 6                 |
| Withybush Hospital - Haverfordwest       | 0                   | 0                    | 6                 |
| Bronglais Hospital – Aberystwyth#        | 0                   | 0                    | 2                 |
| Ysbyty Gwynedd, Bangor                   | 0                   | 0                    | 12                |
| Ysbyty Glan Clwyd, Bodelwyddan           | 6*                  | 0                    | 12*               |
| Wrexham Maelor Hospital, Wrexham         | 4                   | 6*                   | 6*                |
| Total                                    | 45                  | 47                   | 101               |

\*these cots flex between HDU and Special Care

# Staffing for neonatal cots at Bronglais are only used for stabilisation before transfer to a neonatal unit.

**5. The number of nursing staff employed to staff cots in Neonatal Care across Wales is as follows:**

|  | Total         | Vacancies    | In Post       |
|--|---------------|--------------|---------------|
| Singleton Hospital - Swansea           | 56.29         | 2            | 54.29         |
| Princess of Wales Hospital - Bridgend  | 27.22         | 2            | 25.22         |
| University Hospital of Wales - Cardiff | 77            | 4.6          | 73            |
| Royal Glamorgan Hospital - Llantrisant | 27.5          | 0.2          | 27.3          |
| Prince Charles Hospital - Merthyr      | 19.6          | 0            | 19.6          |
| Royal Gwent Hospital - Newport         | 64.87         | 8            | 56.87         |
| Nevill Hall Hospital - Abergavenny     | 16.44         | 0            | 16.44         |
| West Wales Hospital - Carmarthen       | 13.64         | 0            | 13.64         |
| Withybush Hospital - Haverfordwest     | 13.4          | 0            | 13.4          |
| Bronglais Hospital – Aberystwyth#      | 0             | 0            | 0             |
| Ysbyty Gwynedd, Bangor                 | 14.35         | 4.07         | 10.28         |
| Ysbyty Glan Clwyd, Bodelwyddan         | 38.44         | 2            | 36.44         |
| Wrexham Maelor Hospital, Wrexham       | 33.31         | 3.11         | 30.2          |
| <b>Total:</b>                          | <b>402.06</b> | <b>25.98</b> | <b>376.68</b> |

# Staffing for neonatal cots at Bronglais are only used for stabilisation before transfer to a neonatal unit. When the stabilisation cots are required staffing is provided from midwifery service.

**6. The number of days of care in each category in 2008 is as follows:**

|  | Intensive Care days | High Dependency days | Special Care days |
|--|---------------------|----------------------|-------------------|
| Singleton Hospital - Swansea           | 1499                | 1762                 | 3077              |
| Princess of Wales Hospital - Bridgend  | 232                 | 524                  | 2399              |
| University Hospital of Wales           | 2043                | 3952*                | 3664              |
| Royal Glamorgan Hospital - Llantrisant | 408                 | 841                  | 2374              |
| Prince Charles Hospital - Merthyr      | 204                 | 386                  | 1661              |
| Royal Gwent Hospital - Newport         | 1566                | 1773                 | 2559              |
| Nevill Hall Hospital - Abergavenny     | 145                 | 712                  | 1821              |
| West Wales Hospital -                  | 88                  | 135                  | 1534              |

|                                     |      |       |       |
|-------------------------------------|------|-------|-------|
| Carmarthen                          |      |       |       |
| Withbush Hospital,<br>Haverfordwest | 70   | 203   | 1229  |
| Bronglais Hospital - Aberystwyth    | 0    | 0     | 0     |
| Ysbyty Gwynedd, Bangor              | 13   | 41    | 1019  |
| Ysbyty Glan Clwyd,<br>Bodelwyddan   | 396  | 851   | 3146  |
| Wrexham Maelor Hospital,<br>Wrexham | 379  | 508   | 2457  |
| Total:                              | 7043 | 11688 | 26940 |

\* It should be noted that Cardiff HDU occupancy was 129%. Units often flex the use of cots between categories e.g. use NICU or SCBU as HDU to meet demand.

# Staffing for neonatal cots at Bronglais are only used for stabilisation before transfer to a neonatal unit.

**7. The number of Neonatal Consultants employed by each Health Board is as follows:**

|  |   |
|--|---|
| ABM University Health Board              | 6 |
| Aneurin Bevan Health Board               | 5 |
| Cardiff and Vale University Health Board | 7 |

The remaining Health Boards staff their Neonatal units with Paediatricians with an interest in Neonatology. The announcement by the Minister of an additional £2m for Neonatal Services will enable the appointment of five additional consultants across Wales and enable the establishment for the first time of a dedicated Neonatal rota in North Wales.

**8. Arrangements for monitoring the implementation of the All Wales Neonatal Standards, in line with the British Association of Perinatal Medicine's staffing standards and the Health Commission Wales review.**

The Children and Young People's Standards for Neonatal Services were published in 2008. The neonatal standards are welcomed by Health Boards and clinicians working in Neonatal Services.

Approaches to monitoring the implementation of the standards varies between Health Boards. A number have undertaken comprehensive reviews of their units against the standards while others have undertaken informal reviews. One of the key roles of the Neonatal Clinical Network will be to coordinate regular reviews of progress of compliance with the Standards.

Health Boards also welcome the allocation of £2m for the implementation of a Neonatal Transport Service, a Managed Clinical Network and procurement of an audit system for use in all Neonatal units in Wales. There is strong support for the development of the formal managed neonatal network and for the inclusion of neonatal services alongside paediatrics and maternity services in an All Wales Review. The establishment of the network will be key to maintenance and monitoring of the standards across the network, ensuring a high quality service is available to all.

Aspects such as the development of an IT system and Managed Clinical Network (MCN) and transport system will enable a number of additional standards to be met.

The standards state that units should not function above 70% occupancy. This level is often exceeded in a number of units across Wales while others operate at considerably below this level. While the implementation of the Neonatal Transport Service will help to make best use of the available capacity, there will be a need for increased cot capacity and associated additional staffing requirements. To achieve the 70% occupancy would require a regional/supra regional review of capacity.

### **9. The Welsh Government's long term strategy for improving neonatal care and whether it is seen as an integrated part of maternity services.**

The development of a neonatal Clinical Network, which will be formally developed as part of the investment into a transport system will, with the appointment of a Network Lead Clinician, support the longer term strategy to improve neonatal & maternity care.

Through the Neonatal, Maternity and Paediatric Services National Clinical Project recently instigated, led by the DHSS Director of Strategy and Planning, Local Health Boards will need to ensure that the most appropriate service model is in place that delivers safe, high quality and efficient neonatal and maternity services in Wales delivered as locally as possible.

### **10. Consideration of how the Welsh Government plans to increase the number of neonatal nurses, midwives and neonatal consultants**

In recent years HCW and a number of Health Boards have increased investment in Neonatal Care. The Minister's approval of the Neonatal Business case will also significantly increase neonatal staffing with the appointment of a further five neonatal consultants, five middle-grade doctors, three Advanced Neonatal Nurse Practitioners and nine neonatal nurses.

However the birth rate in South Wales has increased by 16% since 2002; it has generally been rising 3.1% per year. Welsh Assembly projections do not take into consideration the recent influx of European migrants, which coupled with the provision of fertility services are contributing to a greater demand on neonatal and maternity services. Therefore there is a need to base capacity and staffing requirements against the increasing population and in keeping with the BAPM and All Wales Neonatal Standards.

The neonatal services in Wales are under pressure, especially in intensive care and high dependency care. The three large centres in South Wales – UHW, Swansea and Newport are frequently unable to accept intrauterine transfers of high risk deliveries because they have no available staffed cots. These centres sometimes also have to transfer out their own local population to other units.

There are staff shortages across Wales and changes to recruitment processes at a national level have led to additional shortages of junior medical staff and ongoing recruitment problems resulting in considerable clinical risk

and cot closures on the neonatal unit. The standards indicate that there should be a separate stand-alone neonatal middle grade rota. It is recognised that these issues are for the NHS to manage however solutions need to be in place locally to ensure sustainable services in Wales.

There is a shortfall of neonatal nurses required to staff the units across Wales in line with BAPM standards i.e. 1:1 staffing in intensive care and 1:2 staffing in high dependency.

There is a tendency for every Unit to retain one empty cot at all times, in case a baby is born who unexpectedly requires intensive care. It is recognised that this does not maximise efficiency. The implementation of the database and transport system will allow the Network and Health Boards to identify vacant cots, and transfer babies to the most appropriate cot. It will also allow more effective analysis of the use of cots over time.

A recent business case for maternity services in Cardiff has seen a significant uplift in staffing resources (midwives, MCAs and support staff) consistent with the increase in birthrate. Implementation has been phased over three periods with the final phase in April 2010.

## **11. Funding arrangements for the development of round the clock access to dedicated neonatal transport services available to all units in Wales**

In November 2008, the Minister for Health & Social Services, Edwina Hart announced the allocation of £2 million for the establishment for a managed clinical network, neonatal transport service and IT database for use across all the neonatal care providers across Wales.

As part of this case, one Neonatal Clinical Network will cover all of Wales, with a national network lead clinician and local clinical leadership in each neonatal unit. The BadgerNet clinical database will be procured and rolled out by Informing Healthcare Wales. It is proposed that a 12 hour transport system will be run on a rotational basis via University Hospital of Wales, Royal Gwent Hospital and Singleton Hospital in South Wales and by Betsi Cadwaladr for North Wales.

Whilst there is a longer term proposal that it should be extended to a 24 hour service, a review of the 12 hour service needs to be made before such a decision is made. Only small numbers of transfers will be required out of hours. With sufficient stabilisation arrangements and some flexibility to enable the 'in-hours' team to commence a little earlier or later this should negate the need for further investment. With the development of a formal neonatal network with improved training, care pathways and support for all units in Wales, confidence in stabilisation prior to transfer will increase. It is essential that clear pathways for in-utero transfer are also put in place to ensure optimum management of high risk pregnancies.

## **12. Increased support for parents**

All neonatal units endeavour to offer maximum support for parents of premature and sick infants, and there is a specific standard relating to the care of the baby and family/ Patient Experience. All Units are working towards achieving this particular standard as support for parents is unquestionably a vital component of an effective neonatal service. Unfortunately given the service pressures it is a reality that clinical priorities sometimes take precedence.

The units are making improvements in areas such as breast feeding and facilities' available to mothers meet the standards. Other facilities available include, bed-rooms for parents, spiritual advisors and translators, however the availability of these facilities does vary across the Units.

## **13. The impact of NHS reforms on neonatal services in Wales**

Local Health Boards will be responsible for all neonatal services with effect from 1<sup>st</sup> April. Planning for neonatal intensive care services will be through Welsh Health Specialised Services Committee (WHSSC), a joint committee of the Health Boards,

The Neonatal Clinical Network will be accountable to the Local Health Boards though WHSSC.

## **14. Screening for hearing loss**

Newborn Hearing Screening was implemented across Wales in 2003 and has increased the identification of profound hearing loss in new born babies.

Of the 36179 babies born between 1st April 2008 and 31st March 2009, 35317 were eligible and suitable for testing. Of these 35164 were consenting and testing, giving a coverage of 99.6%. The majority of sites located in NHS health boards throughout Wales perform the initial test within 7 days of birth. 78.8% of babies are screened within this time period, exceeding the target of 75%.

454 babies (1.3%) were referred for further assessment. Of these 200 were found to have normal hearing and were discharged from assessment.

The mean age of hearing aid fitting for babies diagnosed as having permanent significant bilateral hearing loss is 12 weeks, with 76% fitted with hearing aids within 4 weeks.