

## Children and Young People Committee

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Meeting Venue:  
**Committee Room 3 – Senedd**

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Meeting date:  
**17 May 2012**

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Meeting time:  
**09:00**

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Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



For further information please contact:

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### Agenda

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#### **1. Introductions, apologies and substitutions (09:00)**

#### **2. Inquiry into Neonatal Care (09:00 – 09:45) (Pages 1 – 65)**

##### **Powys Teaching Health Board**

Andrew Cottom – Chief Executive

Carol Shillabeer – Director of Nursing

#### **3. Inquiry into Neonatal Care (09:45 – 10:45) (Pages 66 – 87)**

##### **Cardiff and Vale University Health Board**

Paul Hollard – Interim Chief Executive

Dr Jennifer Calvert – Consultant Neonatologist

##### **Cwm Taf Local Health Board**

Allison Williams – Chief Executive

Kath McGrath – Assistant Director of Operations

**(Break 10:45 – 11:00)**

#### **4. Inquiry into Neonatal Care (11:00 – 11:45) (Pages 88 – 144)**

##### **Aneurin Bevan Health Board**

Dr Andrew Goodall – Chief Executive

Judith Paget, Director of Planning and Operations/ Deputy Chief Executive

#### **5. Papers to note**

**Inquiry into Neonatal Care: Additional information from Royal College of Nursing Wales (Pages 145 – 146)**

Mel Evans, Chairman

Cadeirydd

Andrew Cottom, Chief Executive

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Dear Ms Chapman  
Chair  
Children and Young People Committee  
National Assembly for Wales

### Children and Young People Committee – Neonatal Services Powys teaching Health Board submission

Powys teaching Health Board is pleased to provide the following information as evidence to the Committee for its work on Neonatal services.

Powys is the largest county in Wales covering approximately 25% of the land mass of Wales a distance of 130 miles from north to south, but only has 4% of the population at 130,000. Powys teaching Health Board (tHB) provides antenatal and postnatal midwifery care for approximately 1200 women and their babies a year, of which approximately 300 births are within Powys. The births within Powys are home births or births in one of six free-standing midwife led units, and Powys has one of the highest home birth rates in the UK. Powys does not have its own District General Hospital but secures services on behalf of its population from six main DGHs. Furthermore, although there are 10 community hospitals in Powys there are no inpatient services for children, of any age, with any condition, with all inpatient services for children being provided out of county. The District General Hospitals are:

Wrexham Maelor, Wrexham (Betsi Cadwaladr University Health Board)  
Bronglais, Aberystwyth (Hywel Dda Health Board)  
Singleton, Swansea (Abertawe Bro Morgannwg University Health Board)  
Nevill Hall, Abergavenny (Aneurin Bevan Health Board)  
Hereford Hospital (Wye Valley NHS Trust)  
Royal Shrewsbury Hospital (Shrewsbury and Telford NHS Trust)

In relation to maternity and neonatal services, there is no single centre to which such women and neonates from Powys could be transferred, due to the considerable distances involved in accessing services. Working collaboratively, beyond our borders, is fundamental to how Powys operates. Provision for the residents of Powys therefore has to be included in the plans for maternity and neonatal services in both England and Wales.

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The neonatal networks therefore within Wales that have a consideration for Powys, include:

- North (Ysbyty Gwynedd, Ysbyty Glan Clwyd and Wrexham Maelor Hospital)
- South West (Bronlais 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).

The neonatal networks with a consideration for Powys residents in England therefore are:

- Southern West Midlands Newborn Network – SWMNN (Hereford County Hospital, Worcestershire Royal Hospital, Birmingham Women's Hospital)
- Staffordshire, Shropshire and Black Country Newborn Network - SSBCNN (Royal Shrewsbury, University Hospital North Stafford, New Cross hospital).

Wherever possible the need for neonatal care is planned, and there are specific conditions and risk factors identified in the antenatal period that will determine the most appropriate clinical pathway for both mother and baby. In the rare event of a neonate being born in the community in Powys who requires any form of intervention, basic neonatal life support is provided whilst awaiting transfer to an identified DGH neonatal team. In the event of a neonate being born in the community that requires neonatal care they would be transported to a DGH by the ambulance service and accompanied by a Powys tHB community midwife. Such events have occurred but are exceptionally rare with the last incident occurring in 2007. In terms of specialist neonatal transport services (retrievals) there would be no retrievals from or to community based midwifery services as retrievals are inter-DGH. The ambulance service therefore has a key role to play. In order to ensure that midwives are well equipped to deal effectively with a 'neonatal emergency', the teaching Health Board ensures that all midwives undertake neonatal life support training in order to provide immediate life saving care to the neonates whilst the ambulance service responds.

*Q1. A copy of your current local neonatal action plan, including information about the mechanisms you have put in place to monitor and evaluate the implementation of the key actions within these plans and timescales.*

As outlined above, the role of Powys tHB is to secure services on behalf of its population and therefore does not directly provide specialist neonatal services. It also has a responsibility to ensure that access to services, and the quality of care received by Powys residents is good. The teaching Health Board therefore links into each service provider to ensure action plans in place to improve service provision are being implemented. As the All Wales Neonatal standards span the whole pathway, where specific standards apply

to community services provided within Powys tHB, these are monitored locally.

Within Wales, Powys tHB utilises the electronic self-assessment of the National Service Framework (NSF) by neighbouring Health Boards, including standard 3.32 in relation to Welsh Government standards for neonatal care to determine progress in implementing key standards. This provides Powys with information about the degree of compliance with agreed standards, audit processes and evidence to support scoring. This is reviewed formally annually and any areas of concern followed up with individual services.

In relation to services provided from England, the two main DGHs providing neonatal services to Powys residents are subject to a separate National Service Framework. A separate report is provided on outcomes within the relevant newborn networks, which is reviewed and discussed within Powys teaching Health Board (attached for SSCBNN and SWMNN). Issues of concern are escalated as necessary.

Powys is one of the seven Health Boards that participate in the arrangements for commissioning specialist services through the Welsh Health Specialist Services Committee. Overall responsibility for planning of services rests collectively with Health Boards and is discharged through the WHSSC functions in collaboration with Health Boards.

*Q2. A copy of the latest annual report on quality of care (as set out in Standard 6.8 of the All Wales Neonatal Standards), alongside information on the number of instances of when patient safety has been compromised.*

There are a number of ways in which quality of care is monitored and reported. Each of the host health boards receiving patients from Powys, with designated specialist centres, are responsible for ensuring and reporting overall compliance via NSF standard 3.32. The tHB is receiving some annual reports and is strengthening its approach to ensuring all reports are received and considered in a timely manner. Two annual reports are provided as examples.

The services provided in Powys are not specialist; therefore standard 6.8 does not apply to local services. Careful consideration however is given in governance and safety forums (such as the Perinatal Review Meeting) to pathways and incidents from which issues of concern regarding safety and quality may arise.

Powys tHB monitors all transfers of neonates and women from Powys community midwifery services, which are reported through the risk reporting system (Datix) and cases are reviewed by the Health Board 'Risk midwife'. Where transfers of women have resulted in an admission to neonatal care this is included in the narrative of the incident report. A clear process is in place for escalating serious incidents, with a full root cause analysis review and a resultant outcomes report and improvement plan.

Complaints in relation to the service received in a neighbouring Health Board are managed between Powys teaching Health Board and the individual Health Board or Trust who undertake an investigation/review. There have been no complaints recorded in the last financial year.

*Q3. An outline of any action taken and any plans for investing into neonatal services in the short, medium and longer term to ensure all services in your area are fully compliant with the Standards.*

With regard to commissioning specialist services Powys participates in the WHSSC arrangements as outlined above. The neonatal capacity review was presented to the Director of Planning, 3<sup>rd</sup> February 2012, which was well received. The Committee will no doubt make itself familiar with this review and note the limitation of the review in relation to capturing cot requirements involving cross border transfers. This is an important issue particularly if Wales wishes to provide for all (where geographically practicable to do so) neonates.

Another important issue relating to cross border provision is linked to service reconfiguration. Trusts such as Shrewsbury and Telford NHS Trust have been reviewing and redesigning services in order to increase sustainability. This has meant a proposal for neonatal services to be transferred from Shrewsbury to Telford (20 minutes further away from mid Wales). This has caused concern for the population in mid Wales in relation to the 'moving away' of services and Powys teaching Health Board continues to work closely to ensure any proposals safeguard the interests of the Powys population.

*Q4. The costs associated with cross border transfers, including the amount paid to English PCTs for the transfer of neonates as well as the income generated for Welsh providers.*

It is important to note that for the Powys population much of the use of the NHS in England is planned and commissioned as a matter of routine, meeting the needs of the population and the geography. Some activity, largely special care cots, are included within local contracts with providers, especially those in England, other activity for neonatal intensive care is commissioned largely through Welsh Health Specialist Services Committee.

The table below shows the neonatal *bed days* commissioned by WHSCC for the two main hospitals in England used by women and babies from Powys.

	09/10	10/11	11/12
Shrewsbury	67	80	50
Birmingham Womens	6	0	1

The table below indicates a breakdown of the *episodes* utilised within Wales.

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012*
Provider						
7A1 - Betsi Cadwaladr University Local Health Board		7	6	4	4	7
7A2 - Abertawe Bro Morgannwg University Local Health Board	15	4	8	10	4	3
7A6 - Aneurin Bevan Local Health Board	30	36	37	44	33	34
Grand Total	45	47	51	58	41	44

\* *this total may be incomplete*

*Q5. Whether you have had any discussions with WHSSC and neighbouring LHBs about the overall increase in cots needed and any joint planning as to where they are located and at what level of intensity.*

The demand from Powys residents for neonatal services is generally small (proportionately) as the above indicates. Patterns of activity are well established and discussions take place with each provider in relation to activity. There is a connection between Powys' Women and Childrens services and the neonatal network, ensuring that consideration is given to the standardised pathways into England.

As part of service sustainability across Wales, it will be essential for Powys to be represented at planning meetings. There is agreement that Powys will participate in the South Wales and the Mid Wales/Hywel Dda processes for service sustainability. A key work stream is the planning and provision of maternity and neonatal services.

The detail below outlines the capacity required for the Powys population.

Total Population 131,000 1200 births	Cot requirements per 1000 births <sup>1</sup>	Powys cot requirements
Neonatal intensive care (level 3)	0.75	0.9
High dependency care	0.84	1.08
Special Care	4.4	5.28

<sup>1</sup> British Association of Perinatal Medicine (2004) Designing a Neonatal Unit.

*Q6. Whether any work has been undertaken with neighbouring Boards, or the Welsh Government via WHSSC, on workforce planning to address what impact changes to junior doctor recruitment and the number of training places in the future will have on services in coming years*

Services within Powys are community midwifery led and therefore the changes to junior doctors are not applicable and would be considered by neighbouring Health Boards and NHS Trusts. Powys teaching Health Board recognises the challenges that the workforce issues present, particularly regarding medical staff and is committed to working with other Health Boards on service planning to ensure that services are accessible and sustainable.

Yours sincerely

*Carol Shillabeer (Nurse Director)*

(on behalf of)  
Andrew Cottom  
Chief Executive

Attachments

SSBCNN annual report 2010-11

SWMNN annual report 2010-11





# SOUTHERN WEST MIDLANDS NEWBORN NETWORK

Hereford, Worcester, Birmingham, Sandwell & Solihull

## ANNUAL REPORT 2010-2011



Winner of

“The All-Parliamentary Group on Maternity”  
Maternity Services Awards 2011

*“Most marked improvement in services to address health inequalities or improve outcomes for mothers and babies”*

As we produce this fifth Southern West Midlands Newborn Network (SWMNN) Annual Report, it is time to reflect on all that has been achieved. This report aims to demonstrate the achievements in 2010-2011 on behalf of our constituent organisations, individual clinical staff and everyone involved with maternity and newborn care.

There have been several changes within the Network throughout 2010/11, the first being Rob Bacon standing down as Chair at the Board meeting in May 2010. We would all like to thank Rob for his contribution to the Network and for his continuing support and encouragement throughout his tenure as Chair. He was an inspiration to all of us, especially in how to Chair meetings and ensure everyone has a voice.

I took over as the Chair in July 2011 and have been working with the team since then.

Vicki Bailey and Jo Bussey also stepped down as parent representatives. We would like to thank them for the support we received over many years on all aspects of neonatal care.

We welcome Kate Branchett as the newest parent representative. Katie has an amazing energy and although she has only been with us for a short time she has already supported several projects, attended Board meetings, participated in the unit visits, been part of the Palliative Care Board and spoken on most of the days, as well as surveying parents on their experience of palliative care. We thank you Kate and look forward to your continued support of the Network.

We also welcome Katy Parnell (Network Speech and Language Therapist), and Laura Johnson (Network Dietitian), who are now established in their posts and doing excellent work.

The work of the Network has continued to strive toward improving care for the babies within the Southern West Midlands. We have worked on several issues over 2010/11. We successfully secured £150,000 from the Department of Health from the National money for Improving Palliative Care for Neonates. This money has been used for education and training for all staff involved with a baby that dies and their family. The successful project saw 570 staff attend training days that covered all aspects of palliative care. This project was in collaboration with the four Newborn Networks in the Midlands and they worked together to ensure we improve palliative care for babies and families.

The Network now has two years' data and for the first time we are able to produce a Neonatal Activity Annual Report. Network staff continue to submit data into the Clevermed neonatal data collection system (Badger). This enables the production of an activity report for the Network Board and to give monthly information to the Commissioners.

The perinatal mortality rate in the SWMNN continues to improve and this report will provide you with the data that shows more babies are surviving despite the increase in the numbers of babies requiring care. We will continue to work together, forging good working partnerships with each other, maternity service providers and most importantly, our parents.

The West Midlands Neonatal Transfer Service (WMNTS) continues to provide 24 hours, 7 days a week care for infants in the West Midlands area. This year the budget was increased further to include another 1 WTE Advanced Neonatal Nurse Practitioner and a full time Consultant Post. Dr. Alex Philipott was appointed and came into post in February 2011.

After the launch of the Taskforce document in November (2009), the Network Team revisited each unit, and assessed them against the Toolkit principles.

Congratulations to Dr Andrew Gallagher, Consultant Paediatrician at Worcestershire Royal Hospital, and a team of colleagues from across the UK who recently attended the annual Medical Futures Awards exhibition and prize ceremony to collect a prestigious award. The team have designed a newborn resuscitation trolley which will allow premature and unwell babies to be assessed and resuscitated alongside their mothers whilst the umbilical cord is left intact. This will provide several proven advantages to these vulnerable infants.

The new unit at Birmingham Women's Hospital opened in September 2010. The unit offers high quality services to medical and surgical babies within the Network and the "state of the art facilities" will hopefully improve the babies and families' neonatal journey.

Good Hope is currently undergoing a refurbishment and Heart of England Heartlands site will have a re-build starting later this year, which will greatly improve the neonatal unit.

The Special Care Unit and Maternity services at Sandwell site closed in January 2011. These services were transferred to the City Hospital site and the Trust continues to provide care to the local population.

A co-located Midwifery-led Unit was opened at City and a stand-alone Midwifery-led Unit is due to open in Sandwell later this year, which will enable choice to the local Health Economy.

I realise that this is a difficult time for everyone with the financial issues impacting all of us. We need to think smarter and ensure the service we provide is value for money. We need to continue working together to improve local care, and manage babies within the Network.

To everyone who is involved, thank you for your contribution and your continued support.



Patrick Brooke  
Chair, SWMNN  
Director of Consortium Development for Birmingham and Solihull Cluster

### Communication and Stakeholder Engagement

The aim of the Network continues to be the engagement of all stakeholders to ensure we work together in the best interests of the babies. Good communication is central to achieving this, and it is a two-way process. The various Network meetings are a forum for communication, and work well, with good representation from all units across the Network. The Network covers a wide area geographically – covering Birmingham, Herefordshire and Worcestershire, and it is only by the engagement of stakeholders across the Network that we are able to achieve successful communication across such a wide area.

David Nicholson (13 April 2011) stated that Networks are the way forward in the NHS. "There is a central role for networks in the new system as the place where clinicians from different sectors come together to improve the quality of care across integrated pathways. So I want to put these networks at the heart of our efforts to renew and strengthen engagement."

Mary Passant  
Network Manager/Lead Nurse

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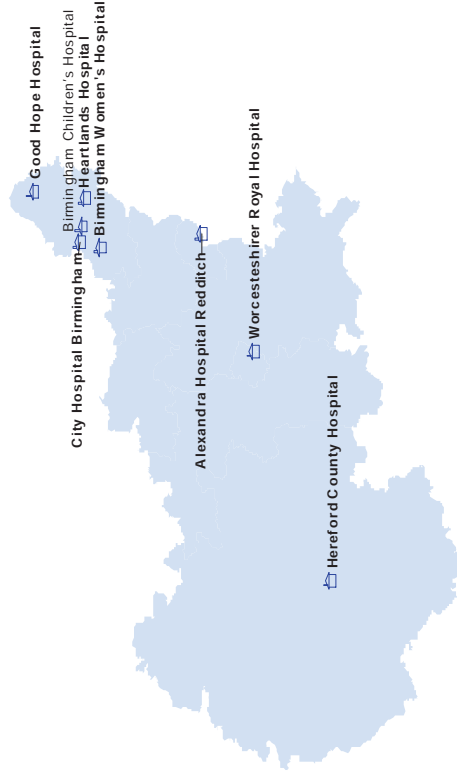
### Appendix 1: Network Activity/Data Report (separate document)

## INTRODUCTION

The Southern West Midlands Newborn Network (SWMNN) continues to work to ensure that mothers and babies are cared for as close to home as possible, and that the smallest and sickest babies are cared for in recognised specialist care centres.

The data provided by the West Midlands Neonatal Transfer Service within this report demonstrates a change in the way service is provided. We have clear flow pathways for all babies requiring medical care. The Network Care Pathways, with signed agreement to the Network designation, have had a significant impact and an increase in occupancy rate in the two Neonatal Intensive Care Units within the Network. The units in the Network are working together to provide step-down care and freeing up of level 3 cots.

The parent involvement in the Network continues to be of great benefit, and parents continue to have their say in all changes to neonatal services.



### Organisational Structure



The Network Board is chaired by Patrick Brooke, Director of Consortium Development for Birmingham and Solihull Cluster. The Network Board is responsible for leading the Network and is made up of the Network Lead Clinician; Network Manager/Lead Nurse; a Lead Clinician and Nurse/Manager from each of the Acute Trusts; Chairs of the Network Sub-Groups; parent representation; commissioning representation; a Public Health Lead; ambulance services and invited speakers.

The SWMNN continues to impact on the service provided for neonatal care and has made significant progress since it was established, achieving the goals set prior to the Launch of the Department of Health Toolkit For High Quality Neonatal Care in November 2009. We now have an opportunity to look at the way Neonatal care is provided and ensure babies receive the best quality services required to meet the Taskforce standards.

The Network website is a valuable resource providing up to date information on network activities for professionals, parents and the public. <http://www.newbornnetworks.org.uk/southern/>

## KEY MILESTONES AND ACHIEVEMENTS 2010 – 2011

The key milestones for the Network in 2010-2011 have included:

- Winning the All-Party Parliamentary Group on Maternity – Maternity Services Award 2011.
    - “For most marked improvement in services to address health inequalities or improve outcomes for mothers and babies” for the work undertaken by the West Midlands Neonatal Surgical Project and the reduction in out of region transfers.
  - Active parent involvement in all aspects of the Network
  - Palliative care project - £150,000 awarded from the Department of Health to improve Palliative care
  - West Midlands Surgical Project and production of CDH pathway.
  - Local and National Conferences, with many Network staff being invited key speakers.
  - Network staff and parents speak on network study days.
  - Continue to work closely with BLISS.
  - Organising and running the West Midlands BLISS family support day.
  - Invited to the Houses of Parliament for the launch of BLISS Annual Report .
  - Network Speech and Language Therapist in post.
  - Network Dietitian in post.
  - Working with community team to produce a care pathway for babies with Down Syndrome.
  - Regular Grand Rounds held, including Joint Maternity and Neonatal Grand Rounds.
  - Continued to build strong communication between units within the Network, strengthening working relationships and sharing good practice.
- In addition to the Network Sub-Groups, the following groups meet regularly:
- Neonatal Unit Managers
  - Neonatal Interest Group at Birmingham Children’s Hospital
  - ANNP Group

- Successful establishment of Network Cooling Centre at Heartlands Hospital, with Network Cooling Lead post.
- Network Units participated in National Parent Survey.
- One telephone number for surgical referrals.
- The successful engagement with community paediatric service providers.
- Network Manager Member of NNAP Board.
- Working with West Midlands Specialist Services Agency (WMSSA) and neighbouring Networks to produce care pathways for surgery for the West Midlands.
- Inclusion of all Units in Network processes, with strengthening cross-Network links and tri-Network study days, stakeholder's events and conferences.
- Congratulations to Andy Ewer (Consultant Neonatologist at Birmingham Women's Hospital) for his work on the PulseOx study.
- Congratulations to Andrew Gallagher (Consultant Paediatrician at Worcester Royal Hospital) on receiving a Medical Futures Award for design of a newborn resuscitation trolley which allows the baby to be assessed and resuscitated alongside their mothers whilst the umbilical cord is left intact.
- Held fourth Stakeholders day in May 2010.
- Fifth Quad Network event/Network training day held in January 2011.
- The majority of the original targets in the strategy document have been met.

## FINANCIAL REPORT 2011/12

The West Midlands Specialist Commissioning Team (WMSCCT) holds the regionally allocated neonatal funding for the Newborn Networks. In 2011/12 £219,019 was allocated to the Network via Solihull Primary Care Trust, host of the Network infrastructure. This allocation funds salaries for Network Manager/Lead Nurse, Clinical Leads, Lead Obstetrician, Development Care Lead, Practice Educator and Network Administrator, Education Lead and Audit Lead. Plus education training and conference fees.

### Southern West Midlands Newborn Network's commitments on the 2010/11 allocated funding

Previous recurrent funding	£1,090,000
2007/08 recurrent funding	£430,000
2008/09 recurrent funding	£379,500
2009/10 recurrent funding	£511,000
2010/11 recurrent funding	£0
<b>Total</b>	<b>£2,410,500</b>

### Recurrent Funding committed to date

Network Infrastructure	£222,305	paid on invoice
HOE 2 ANNPs	£80,000	paid within contract
HOE Consultant x2	£215,000	paid within contract
HOE 11.5 Nurses	£373,750	paid within contract
City Hospital Consultant	£105,000	paid within contract
Hereford 2 Band 5 Nurses	£75,000	paid on invoice
SWB Breastfeeding advisor	£14,730	paid on invoice
SWB 5.75 Nurses	£189,750	paid within contract
BWH 3 Band 6 Nurses	£98,597	paid within contract
Network Transport Consultants	£330,000	paid within contract-Hosted by BWH
Network Transport Nurse Consultants	£118,000	paid within contract-Hosted by BWH
Network Transport ANNPs	£214,000	paid within contract-Hosted by BWH
Network Transport Nurse	£32,000	paid within contract-Hosted by BWH
Network Clinical Lead	£23,412	paid on invoice
Network Respiratory Physiotherapist	£30,405	paid on invoice
Network Dietitian	£20,948	paid on invoice
Network Speech & Language Therapist	£21,420	paid on invoice

<b>Total</b>	<b>£2,164,317</b>
<b>Grand Total</b>	<b>£2,269,854</b>

### Non-Recurrent funding to date

BCH neonatal surgery development	£105,537
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<b>Total</b>	<b>£105,537</b>
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## Specialist Lead Roles – Working Together to Improve Practice

During the past year the Network Allied Health Professional team has grown and it is exciting to see how our different roles overlap, complement, and support each other in providing holistic care for these babies and their families

It is very pleasing to see that across the SWMNN a developmentally supportive approach to neonatal care is now the norm rather than the exception.

Positioning for comfort and postural development, protecting from excessive light levels, encouraging Kangaroo Care from the earliest possible moment, and observing infant cues both for feeding and when performing painful procedures, are now, in the most part, accepted as the best possible way to care for fragile neonates.

Some things remain difficult to change - in particular noise levels are still often too high, disturbing babies' sleep and having negative effects on development.

However, progress continues to be made in all the Network neonatal units, improving life for both babies and their families. None of this would be possible without the continuing support of my colleagues, especially the Developmental Care links on each Unit.



**Nicky Hawkes**  
Advanced Respiratory  
Neonatal  
Physiotherapist

The respiratory physiotherapy role has continued to be extremely rewarding and motivating, and has seen achievements in a number of areas. I belong to the acute physiotherapy team at Birmingham Children's Hospital, and offer continued education there for physiotherapy staff on the management of the surgical babies on PICU and the wards. A physiotherapy care pathway for these babies will be devised within the next 6 months. Neonatal unit visits have been ongoing; these have included assessing and treating babies with the nursing staff, as well as advice regarding ongoing respiratory physiotherapy management.

The Chest Physiotherapy guidelines will be reviewed this year, and an audit of use of physiotherapy techniques in the neonatal units against the guidelines will be carried out by the end of the year. Staff education continues through formal talks, and scenario/case studies. During the next year other formats of ongoing staff updates will be explored.

I am a committee member of the National Neonatal Physiotherapy Group. This has led to involvement in a number of national initiatives:

1. Teaching on the National Physiotherapy Neonatal Course which was hosted at Birmingham Women's Hospital in June 2011. As a result of its success, follow up days are planned in 2012.
2. As a result of the meeting of respiratory physiotherapy specialists in May 2011, it was considered vital to review and compare current evidence based practice with the aim of producing national recommendations for respiratory physiotherapy. In the longer term it was agreed to develop a competency framework for physiotherapists specialising in this field.

There has been considerable interest in the format of this unique Network role, and this has resulted in a number of speaking invitations across the country. Consequently respiratory physiotherapists have been keen to visit the neonatal units and observe current practice.

I thoroughly enjoy this post, feel very welcomed on the different units and have been hugely encouraged that practice in the units has changed significantly over the past 4 years. There is still much scope for development and I look forward to this with anticipation.

### Achievements:-

In the last year I have continued to give presentations and teaching sessions, both within the Network and further afield.

Production of a PowerPoint presentation for junior medical staff, which will be available through Bliss.

Completion of :-

- Pain Assessment and Treatment Guideline.
- Bottle Feeding part of the Nutrition Guideline.
- Kangaroo Care Guideline updated.
- Developmental Care Guideline is in the final stages of a major update.
- A series of Information leaflets for parents "Supporting Your Baby's Development."
- DVDs for teaching. of Kangaroo Care, Respiratory Physiotherapy, and Cares

### The future:-

- Possible investment by Bliss in a Family centred Care Co-ordinator to work in collaboration across the Network.
- Further DVDs of Developmentally Supportive Care practices.
- Continue to raise the profile of developmentally appropriate care both locally and nationally.



**Katie Thompson**  
Developmental  
Care Lead



## Neonatal Dietitian Laura Johnson



I have been in post as the Network Dietitian since January 2011. It has been an extremely busy and challenging 6 months meeting all the Clinical Leads, Nurse Managers and local Dietitians. The two main roles of my post are to provide specialist neonatal dietetic advice and also education and training to all members of the multidisciplinary team within the Network.

To date I have:-

- Written the draft Network enteral feeding guideline.
- Been involved in the development of surgical feeding algorithms with Tracey Johnson (Gastroenterology Dietitian at Birmingham Children's Hospital).
- Produced feed preparation guidelines and Gastro-oesophageal reflux pathways at Birmingham Women's Hospital.
- Advised on surgical patients within the Network and telephone advice to all units.
- Networking with staff in all units to ascertain the training needs.
- Lectured at surgical study day outlining Network post

My plans for the future:-

- Launch enteral feeding guideline and surgical algorithms this autumn.
- Lecture on surgical study day in October at Birmingham Children's Hospital.
- Lecture in Hereford in October at a Network study day on growth and centile charts.
- Produce teaching materials for Heartlands nursing staff course.
- Continue networking and visiting units to determine continued areas for development.
- Produce workshops on growth, centile charts and preterm nutrition for use within the network.

## Network Speech and Language Therapist Katy Parnell



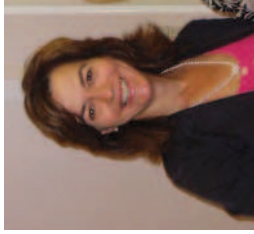
I have been in post as the Network Speech and Language Therapist since August 2010. The Speech and Language Therapist role is an exciting addition to the Network team, providing education, training, specialist assessment and recommendations for management around feeding development and feeding difficulties in the neonate population.

To date I have:-

- Provided lectures on the Network study day in September 2010
- Lectured on neonatal pathway at BCU in February 2011
- Helped to develop Network guidelines on breast and bottle feeding
- Development of care pathways with local speech and language therapists inputting within the Network.
- Networking with staff in all units to ascertain training needs.
- Developing a referral pathway for units within Network who have no funded speech and language therapy support.

My plans for the future:-

- Target a feeding cue approach to shorten the transition from tube to oral feeding.
- Set up a working group to develop a guideline for feeding infants on ventilation systems.
- Lecture in Hereford and Heartlands on feeding development and difficulties in the preterm infant.
- Set up a local clinical supervision group for local Speech and Language Therapists working with neonates.
- Develop education workshops relating to feeding development for use within the Network.
- Continue networking and visiting units to determine continued areas for development.



Alison Bedford Russell, Clinical Lead, SWMNN

The global financial tsunami has impacted on all our services, and NHS austerity measures have imposed a leaner working environment on each and every one of us. It has undoubtedly been a tough year. Nevertheless, or perhaps because we have been driven by the necessity to use our valuable resources even more carefully, the SWMNN member units have worked well together. It feels like we are more of a team, working towards the same ends, on different sites across the South West Midlands. I hope every single member of every unit, of all disciplines and grades, takes pride in their contribution to our joint successes. The increased activity, reduction in out of region and out of Network transfers, reduction in mortality, and having more babies delivered within Network care pathways is the result of great team-working. Everyone's contribution counts. There is a sense that improved communication; understanding of care pathways and warmth between units has been an important part of our success in providing more co-ordinated care for vulnerable babies and their families. Increasingly we are getting the right baby in the right place at the right time and this is an aspiration that has been adopted by the West Midlands Perinatal Network.

Winning the All-Party Parliamentary Group on Maternity Services Awards 2011, for what we have achieved together within the neonatal surgery project, is another example of an effective collaboration between member units especially Birmingham Children's Hospital, and with the commissioners. There has been a substantial reduction in inappropriate out of region transfers for neonatal surgery, as a result of this project which brought together surgery, newborn and transport providers with our commissioners. There have been significant individual contributors to the implementation of this project at "ground level" e.g. Bernadette Reda as the Outreach Surgical Nurse, but the success now and in the future is critically dependent on good team working across all sites.

**One number for all surgical referrals** i.e. for the neonatal surgical ward as well as PICU has taken a great deal of time and effort to achieve by a number of individuals at Birmingham Children's hospital. We give special thanks to Girish Jawaheer (Paediatric surgeon who chaired the group), and Mary Montgomery (Lead consultant for WMPRS) and Phil Wilson (Lead Nurse, West Midlands Paediatric Retrieval Service), for persevering with a number of meetings and initiatives which have made this happen.

During our appraisal visits, it was apparent that all units are using the Toolkit for High Quality Neonatal Services as a framework for service development. Increasingly Principles are being met, and the variance between member units is reducing. Each unit has been appraised against the Principles, and as intended the appraisals have been mostly well received and been viewed as opportunities to drive developments within Trusts. The SWMNN management group will continue to support units as much as possible to implement the Principles.

**Other notable achievements have included:**

**The Palliative Care Project.**

This project was funded by monies secured as a result of a successful bid to the Department of Health by Mary Passant, and has led to Regional study days, with very good attendance and feedback, and the development of a palliative care learning package.

More importantly, the days brought together healthcare workers, religious advisors and parents from across the country to exchange information and values as well as be educated. The bid has also funded Memory Boxes for all units in the West Midlands.

**Data collection** within each member unit, and the generation of annual reports from the data. The efforts made by a number of individuals across the Network have resulted in significant improvements in the quality of data collected. Every person who enters "Badger" data is to be congratulated on their efforts and attention to detail.

Vish Rasiah has continued to drive the use and development of this system, including the SWMNN Dashboard and putting together perinatal mortality reports, and is to be congratulated on his achievements. City Hospital hosted the first of our **Annual Perinatal Mortality Meetings** in October 2010, and have kindly agreed to host the 2011 meeting. While awaiting outcomes of discussions regarding which body will take over from CMACE, this "local" data is invaluable.

#### **Unacceptable Perinatal Transfers Pilot – a BAPM initiative**

Since the development of Newborn Networks whereby intensive care provision is concentrated in specialist units, it is recognised that there is a need for antenatal and postnatal transfers so that pregnant mothers and babies may access the appropriate level of care they require. The transfers may not always be "appropriate" e.g. failed transfer such that the baby remains at a unit providing a lower level of care than baby is expected to require; outside the region for non-clinical reasons (e.g. lack of staffed cots); outside the normal Network pathway (unless geographically appropriate); baby travels past the nearest within-region unit able to provide the required level of care for the infant when an appropriate cot is vacant and staffed at that unit; transfer results in twins or higher order births being located in different units; transfer is out of the mother's 'home' unit to accommodate another infant who requires a higher level of care.

In addition, antenatal transfers are not routinely and systematically documented in the way that postnatal ex-utero transfers are on the neonatal.net system. This may result in out of region transfer of a mother, between maternity units, unknown to the neonatal service providers. Alex Philpott (NTS clinical lead) and Judith Forbes at Cot Locator have been collecting data for a BAPM pilot of how such data can be collected. Judith has been available (9-5, Monday to Friday), to inform you of where cots are available, and has been collecting information about in-utero and ex-utero transfers. She phones around on a twice daily basis to delivery suites as well as neonatal units, and relies on accurate information being given about both in-utero and ex-utero transfers.

Alex has been collating this data so we begin to have a reliable idea of how many mothers are going out of Network, how many out of region (very costly to us all and not good for mothers, babies and families), and how many are cared for appropriately within Network care pathways.

**The Network has also been developing Strategies which are not explicit (though are implied) within the Toolkit. We strive not just to achieve the standards that have been set, but practice beyond those standards:**

#### **Development of Community Links**

There has been much discussion on who will assess children for the 2-year follow-up, and who will input data appropriately. This led to the commencement of discussions with Community Paediatricians locally. It was also acknowledged that care for babies with neurological problems, and specifically of babies with newly diagnosed Down syndrome, was patchy. As a result there have been a number of meetings with our community paediatric colleagues, and a Network Care Pathway for babies with Down Syndrome is in an advanced stage of development. It is intended that this will form a foundation for the development of care pathways for a seamless transition for care of babies with all types of neurodisability, from neonatal units to the community.

### **Strategies to Improve Vitamin D Uptake – Healthy Start Vitamin D Supplementation**

Hazards relating to the increase in vitamin D deficiency including rickets, have been highlighted in the popular press as well as in the medical journals over the past year. Vitamin D deficiency is a major health issue for mothers and babies within the Birmingham population, particularly in the North of the city and amongst certain ethnicity groups. As uptake of vitamin supplements has been poor, Heart of Birmingham PCT have recently agreed to provide Healthy Start vitamins to all mums and babies in Birmingham, irrespective of income and without prescription. The uptake is still only reaching between 10-25% of the most vulnerable.

At a Strategy Meeting attended by Eleanor McGee (Public Health Nutrition Lead, Birmingham Community Nutrition and Dietetic Department) and Maria Kidd (Public Health Nurse Specialist, NHS South Birmingham), suggestions on how newborn service providers could help to reach more mothers and babies were discussed and included: Vitamin D and information leaflets in Bounty Bags on discharge; issuing maternal vitamins at ante-natal clinics; increasing role of Community Midwives in this area; include information about vitamin D in Red Book; awareness campaign for staff at BWH; Pan Birmingham Commissioning Group to engage with midwifery leads to campaign for education and supply of leaflets; to replace Abidec with healthy start vitamins, which are free. We are still working on the ideal solutions.

### **Support of BCG vaccination**

Likewise as TB notifications have been increasing, we have opened discussions with Dr Andrew Rowse, Consultant in Public Health, Heart of Birmingham Teaching PCT, to develop ways of working together to improve newborn BCG vaccination rates in the most vulnerable population.

### **Our main "new" strategy for 2011: The Development of the West Midlands Perinatal Network (WM PNN)**

This is our BIGGEST future challenge.

In October 2009, the top regional priority that emerged was the creation of a regional Perinatal Network. The development of WM PNN is now well under way. Maternity and newborn services in the West Midlands face some specific challenges, in terms of increased activity levels, increased complexity and vulnerability of the population and consistently poor maternal and perinatal outcomes. The West Midlands is one of the most deprived regions in the country with one of the highest perinatal and infant mortality rates in England and Wales. Despite this, there remain inequalities and variations in service provision, practice, activity and outcomes across the region. There has been a historical disconnection between newborn and maternity service providers which has limited progress. This will be a "thing of the past".

There are numerous policies, guidelines, standards and evidence available that shape and drive the delivery of maternity and newborn services. "High Quality Women's Care" was published in July 2011 by the RCOG and emphasises the importance of working within managed clinical Networks.

The WM PNN will assist the development of the future strategic direction of maternity and newborn care. It will focus on ensuring that safe, effective, quality services are provided throughout the region whilst engaging parents and aiming for positive user experience.

The Network will lead the development of a region wide service specification for the commissioning of maternity services in order to ensure that all providers are delivering a minimal level of care to all populations within the West Midlands. The specification will provide core standards for providers to deliver and for commissioners to performance monitor and manage. The specification will be evidence based utilising national guidance and standards, where available. It will also take account of regional priorities around reducing inequalities and adverse outcomes for both mother and babies; whilst allowing flexibility for local priorities to be included. Initially the Network will act as a bridge to maintain service stability until such time as the GP commissioning consortia take charge of these arrangements and link to the existing Neonatal Specialist commissioning service. Ultimately the Network will continue to act as a forum to maintain a regional perspective and drive clinical quality and safety.

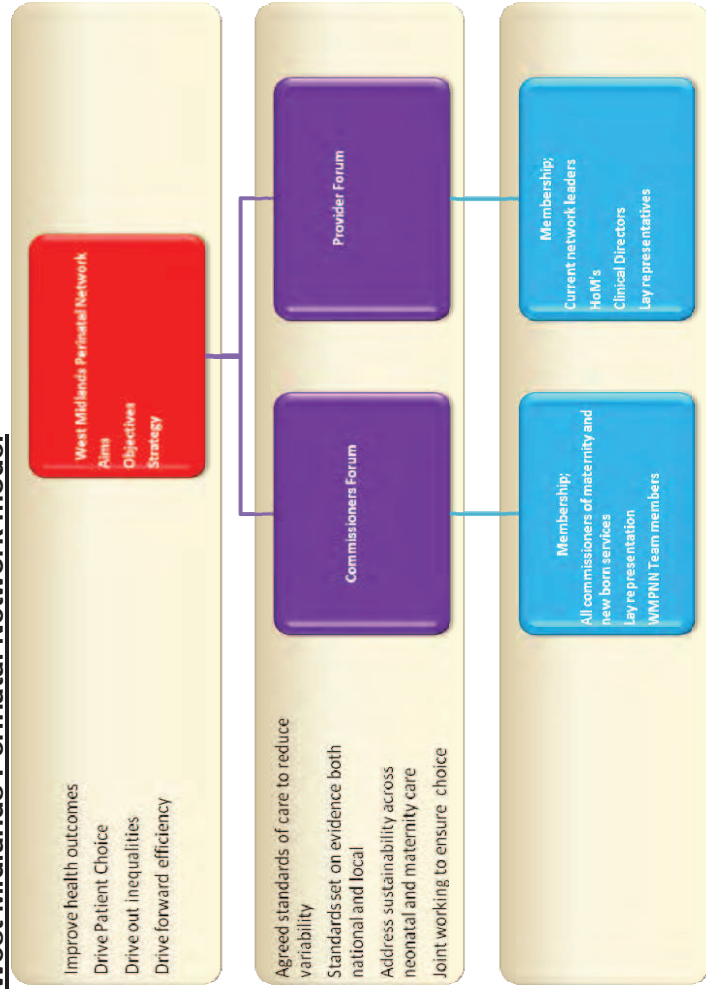
One of the key priorities is: "Right gestation, right place", in line with our own Newborn Toolkit principles. The Newborn Network vision is to be able to collaborate with care pathway and guideline development; training eg for resuscitation and breastfeeding support; to address issues relating to the workforce, and support the development of appropriate roles eg midwives who in the future will be undertaking baby-checks for the normal newborn.

One of our biggest aims is to develop "One number" for ALL referrals, both in-utero and ex-utero, with a remit to locate a maternity bed and newborn cot as appropriate, and a supporting designated transfer service. Clinicians and midwives spending hours on the phone searching for an appropriate unit to transfer a mother and baby represents a huge and ineffective waste of resource. A strong collaboration puts this sort of initiative within our grasp.

The WMPNN is composed of the **WM PNN Board**; a **Commissioner Forum** and a **Provider Forum** (see WMPNN model below). The Network has been updating care pathways to comply with the Toolkit definitions of Special Care Units (SCUs), Local Neonatal Units (LNUs), Neonatal Intensive Care Units (NICUs), and will continue to do so in a greater partnership with maternity service providers and their commissioners. Our NHS Medical Director, Professor Sir Bruce Keogh, has warned us that mis-spending in one area of our services, places other areas at risk. Resources are seriously limited.

I urge everyone to look at their service developments within the West Midlands Perinatal Network joint strategy, rather than as individual service providers. Personal agendas have no place if collaborations are to succeed. Indeed in this climate we all need each other to thrive, and more than ever before we need to keep working together, in order to harmonise the activities of existing Maternity and Neonatal units, and assist the regional objective of improving outcomes from maternity and newborn care.

**West Midlands Perinatal Network model**



**West Midlands Perinatal Network - "Ensuring safe, effective and efficient maternity and newborn care"**

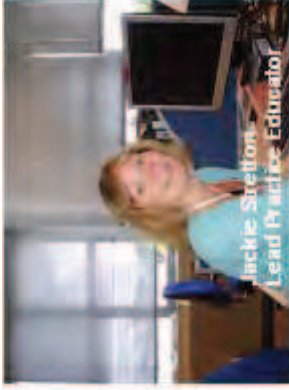
## EDUCATION AND TRAINING GROUP

The education team have focused on several distinct aspects:

- expanding the Network portfolio of study days and education events
- continuing the SHA Neonatal Pathway Pilot Project
- supporting and contributing to Advanced Neonatal Nurse Practitioner education.

A new development has been the successful running of the Neonatal Surgical Module.

Over the next year we will continue to work with our partners and introduce and design new education events according to need. Our philosophy is to encourage multi-professional, collaborative principles in the delivery of education and training for all staff who care for neonates in our Network and in line with the Neonatal Toolkit principles.



### Achievements

- Established a regional education group to support implementation of the West Midlands Neonatal Nurse Career Pathway and Skills Escalator
- Invested in the education and development of staff with speciality roles within their units
- 3 students commenced the new ANNP programme September 2010 and are progressing through the pathway
- 4 students completed the ANNP programme in August 2011
- Change in Practice Award – Sonia Saxon and Kirsty Dixon attended a neonatal transport course
- Delivered a 'skills training week' for current ANNP students
- Delivered 1 x Neonatal staff nurse induction / Update (4 day programmes)
- Education and Training quarterly Bulletins
- 'Grand Round' events around the network
- Members of core Network team: presented at national and European conferences, published in international journals
- 7 Palliative care study days
- Development of neonatal palliative care e-module (in conjunction with Coventry University)

### Other courses:

- Surgical Neonatal Nutrition study day
- Surgical Neonatal Nursing Module
- Parent representative study day
- Transport team training day

### Main Activities

- Delivering network programme of multiprofessional study days / conference days
- Working with regional education providers to foster and facilitate education and training for staff involved in the care of the newborn in the SWMNN
- Working in collaboration with neighbouring networks & HEIs to assess the workforce development and training needs to meet the demands of the neonatal service
- Network regionally and nationally with education colleagues to share and develop good practice initiatives
- Provide academic and tutorial support to clinical staff

### Research

Research activity continues across the network. The Pulse-ox study (BWH and collaborating centers) has finished recruiting, recruitment into BOOST-2 continues and a study of PCR in the diagnosis of early onset infection is ongoing (BHH research fellow supported by SWMNN). The IS2 study is awaiting initiation at many units.

### Future Plans

- To work in partnership with the Neonatal units, Perinatal partners, Trust Education and Learning Departments, the SHA/Workforce Deanery and HEIs to develop and deliver new education pathways for neonatal nurses.
- Continue to contribute to neonatal training programmes delivered by Trusts, Network & Universities
- To work with Trusts to review mandatory neonatal training
- Support multi- professional education and training events
- Develop the portfolio of Network Study days
- Introduce simulation training events
- Offer career pathway development advice and academic support to neonatal staff within SWMNN
- Support / sponsor education and training activity in line with Network objectives and work programme working towards the implementation of Principles 2 and 5 (DoH Toolkit 2009)
- Use interactive network resources to support education delivery



TRAINING UNDERTAKEN/ SUPPORTED BY SWMNN IFROM 1 April 2010 to 31 March 2011

Course Title / Award	Cohort (commencement)	Provider	No of Delegates
Postgraduate Diploma MSc in Advanced Practice – Neonatal	Sept 2010 Sept 2011	Birmingham City University	7 3
SWMNN Neonatal Surgical Module	Sept 2010	SWMNN	5

MSc Advanced Neonatal Nursing Practice (ANNP Preparation)
Sarah Cormack
Armida Dela Cruz
Sheeba Binoy
Nicola Greco



**Birmingham City University**  
(Including Dimensions in Health Care Neonatal Pathway and Stand alone Modules)

STUDENT	AWARD	STUDENT	AWARD
Anita Gill	Advanced Diploma	Rachel Richards	Graduate Certificate
Beverley Bowler	BSc	Anita Patel	BSc with Commendation
Patricia Clayton	Advanced Diploma	Kerr Owen	Graduate Certificate
Amanda Calcutt	Advanced Diploma	Elizabeth Mann	Graduate Certificate
Jennifer Luke	BSc	Amarpreet Kaur	BSc
Stacey Shaw	Graduate Certificate	Lisa Rachel Holt	Graduate Certificate
Helena Spencer	BSc with Commendation	Clair Finnegan	Graduate Certificate
Sara Wheatley	Graduate Certificate	Claire Butcher	Graduate Certificate
Lisa Desjarlais	BSc	Sonia Alcock	Graduate Certificate
Andrea Genner	BSc with Distinction	Lara Alamad	BSc with Commendation
Rosemarie McIntosh	BSc		
Emma Raybould	BSc		
Emma McEvoy	30 credits		
Michelle Howes	30 credits		
Jennifer Bradford	15 credits		
Deborah Underhill	Advanced Diploma		





## Guidelines Sub-Group

The Guidelines Sub-Group, comprised of staff from each unit and chaired by Phil Simmons a Consultant based at Birmingham City Hospital, has spent another year busily working on Guidelines.



The group aim to produce clinical guidelines for use across the Network, based upon the best available evidence and expert opinion.

Our guidelines are designed to be internet based and incorporate links to the evidence and related information sources for staff and also parents.

Phil would like to thank all group members for their hard work this year.

This year we have continued our work, producing several new guidelines and renewing some of our existing guides.

We have worked closely with the new Nutritional Interest Group to create guidelines in this area. Topics include the initiation of Breastfeeding, Tube feeding and Bottle feeding. Our work with the Network Dieticians on an 'Enteral feeding in the preterm infant' guideline is almost complete and should be ready for final approval later this year.

We have continued to work with the Surgeons at Birmingham Children's Hospital this year, with four guidelines completed and 6 more underway.

### Future Directions

The Network recently decided upon a new direction for our group. From January, we will be joining our colleagues in the neighbouring SSBC Newborn Network in work to produce joint guidelines for both Networks.

We look forward to contributing to this exciting initiative!

Phil Simmons  
Chair, Guidelines Sub-Group

## Clinical Audit and Data Sub-Group

It's been a productive year of unified Badger data collection from all the units in SWMNN. We all started Badger data collection on the 1<sup>st</sup> April 2009. As a result we have managed to produce our second financial year activity. Everyone, including junior members of staff, is getting more confident and competent in Badger data entry. Nevertheless, we need to standardise practices across the network in order to compare our practices. We have also managed to present the benefits of a unified Badger data collection for our network at our Quad Network Meeting and at the Perinatal Meeting in Harrogate this year.

This calendar year we have been able to publish our monthly SWMNN Dashboard. This was agreed at the Board level to monitor the trends of our activity, major outcomes, and out of region transfers. This would allow everyone to see where the activities were taking place and how best to support them. This has replaced the quarterly reports which I produced for the Board last year. With everyone's consent we are going to publish this dashboard on our website. We have managed to produce our own annual report for the SWMNN from the information provided by the respective units. We hope to have a more comprehensive report in the future especially focusing on the outcomes of the babies.

We were given 2 CQUINs last year; a) Parent consultation in the first 24 hrs and b) Breast milk during the admission for babies < 33 weeks. This was collected through Badger and reported by NNAP quarterly. The CQUINs for this year are a) ROP screening and b) Transfer back to local neonatal unit. We work with the commissioners to ensure that the CQUINs data can be extracted from Badger.

I have also supervised the audits for the Newborn Transport Team (NTS) looking at their cardiac transfers and babies needing PDA ligations. The cardiac transfers are safely carried out by ANNPs and it is clear that PDA ligations are increasing in numbers over the years and are rather time consuming for NTS. We are in discussion with Birmingham Children's Hospital to see if we can make the drive through PDA ligations more time efficient.

We are currently focusing our audits on the early hour care of babies less than 28 weeks gestation and the use of sucrose in our units. This is compared against our standards which are set out in our respective guidelines. We believe that these are two important areas of care for newborn babies where we need to comply with the standards.

With an established Badger data collection system, we are planning to review in more detail the major outcome of our babies in our network. In the coming year we are auditing the outcomes of babies with CLD, NEC and ROP. Furthermore, next year we aim to look at our three year running activity and trends in our outcomes.

Finally, we would like to encourage interested medical and nursing staff from all the units to join our SWMNN audit team. We look forward to working in partnership to successfully audit our practices in the SWMNN. To get involved or for more information, please contact Teresa ([teresa.meredith@solihull-pct.nhs.uk](mailto:teresa.meredith@solihull-pct.nhs.uk)) or myself ([vishna.rasiah@bwhct.nhs.uk](mailto:vishna.rasiah@bwhct.nhs.uk)).



**Vishna Rasiah**  
Clinical Audit Lead

## Poster Presentations

- 1. Perinatal Medicine 2011 Harrogate June 15th to 17<sup>th</sup> 2011**  
Analysing the major outcomes for babies born less than 31 weeks gestation within a neonatal network - The benefits of a unified neonatal data system.  
S Thomas, M Passant and SV Rasiah
- 2. Perinatal Medicine 2011 Harrogate June 15th to 17<sup>th</sup> 2011**  
Impact of acute cardiac transfers conducted by the West Midlands Neonatal Transfer Service  
A Shenvi, J Harrison, A Skinner, A Dhillon and SV Rasiah
- 3. Perinatal Medicine 2011 Harrogate June 15th to 17<sup>th</sup> 2011**  
Increasing demand for drive through PDA ligation conducted by the West Midlands Neonatal Transfer Service (WMNTS)  
R Rehman, A Shenvi, J Harrison, A Skinner, A Dhillon and SV Rasiah
- 4. 45th Annual Meeting of the Association for European Paediatric Cardiology, May 18 - 21 2011 in Granada**  
Impact of acute cardiac transfers conducted by the West Midlands Neonatal Transfer Service  
A Shenvi, J Harrison, A Skinner, A Dhillon and SV Rasiah
- 5. Midlands Matters – Quad Network Meeting 27<sup>th</sup> Jan 2011**  
Review of transfers for PDA ligation conducted by the West Midlands Newborn Transfer Service.  
R Rehman, A Shenvi, J Harrison, A Skinner, A Dhillon and SV Rasiah
- 6. Midlands Matters – Quad Network Meeting 27<sup>th</sup> Jan 2011**  
Impact of cardiac transfers conducted by the West Midlands Newborn Transfer Service.  
A Shenvi, J Harrison, A Skinner, A Dhillon and SV Rasiah
- 7. Midlands Matters – Quad Network Meeting 27<sup>th</sup> Jan 2011**  
Analysing outcomes of babies born less than 31 weeks gestation: The benefits of a unified neonatal data collection system.  
S Thomas, M Passant and SV Rasiah

## Maternity Sub-Group

The maternity subgroup has met on 2 occasions over the last year. Representation from all Trusts within SWMNN remains a problem, often due to internal clinical commitments but nonetheless turnout was encouraging. Efforts continue to provide a higher profile for the sub-group within the hospitals involved in the SWMNN, in particular to engage with obstetric and midwifery staff to produce a more balanced approach to our deliberations.

Guideline development continues to be part of our remit. For example the rewrite of the preterm guideline is in final draft form.

From an educational standpoint, Grand Rounds in Neonatology have been established since the beginning of the Neonatal Network. In the last year we carried out the launch of maternity rounds as guests of the City Hospital – thanks to Dr Neil Shah for the success of that event. Subsequently these two have been amalgamated to generate a more perinatal feel to the discussions.

Whilst we are able to monitor accurately *ex utero* transfers of neonates, it is more difficult to determine the scale of maternity transfers and whether these are appropriate or not. We are carrying out work to audit this aspect of care to attempt to parallel the success seen in limiting neonatal transfers out of region.

We continue to work towards a more perinatal network. As mentioned in the previous report, this may involve further guideline development such as preeclampsia and growth restriction. As with the preterm guideline these may be introduced regionally ensuring consistency in care wherever a patient is admitted.

The underlying ethos of managed clinical networks is to ensure appropriate care at the appropriate place. Whilst this may be a reality for neonatal care there is some way to go before the same can be said for the whole of maternity care. It is encouraging that changes regionally make the prospect of true perinatal networks more likely and this can only be to the benefit of mothers and their babies.



Bill Martin  
Obstetric Lead, SWMNN

## SWMNN 2010-2011 Financial Year Activity Report for Therapeutic Hypothermia (Cooling)

### Introduction

In May 2010, the UK National Institute for Clinical Excellence and the British Association of Perinatal Medicine published new guidance supporting the use of cooling as a routine treatment option for babies born with perinatal asphyxia. The following is the report for the last financial year since the treatment was officially commenced at Birmingham Heartlands Hospital (15/05/2010 to 31/03/2011) as a SWMNN centre for therapeutic hypothermia.

### 1. Number of babies who received treatment

A total of (19) nineteen babies received therapeutic hypothermia. This included both in born(4+ 1home) as well as referrals(14). The following are the units from where the babies were admitted

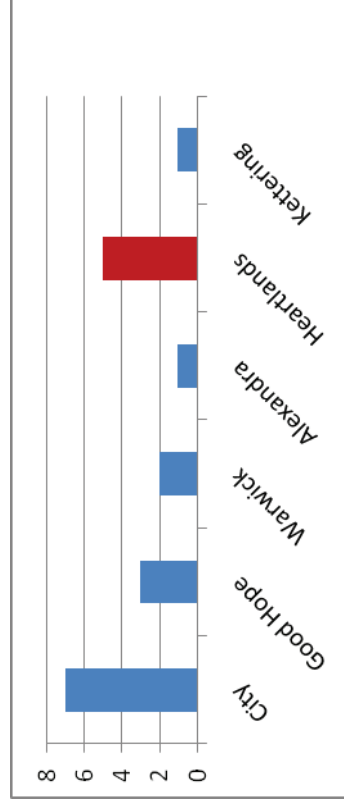


Figure 1. Number of admissions from units within and outside SWMNN network (15/05/10 to 31/03/2011).

**2. Age when cooling commenced.**

The recommended age for starting of cooling is by 6 hours. All the babies were commenced for cooling within six hours.

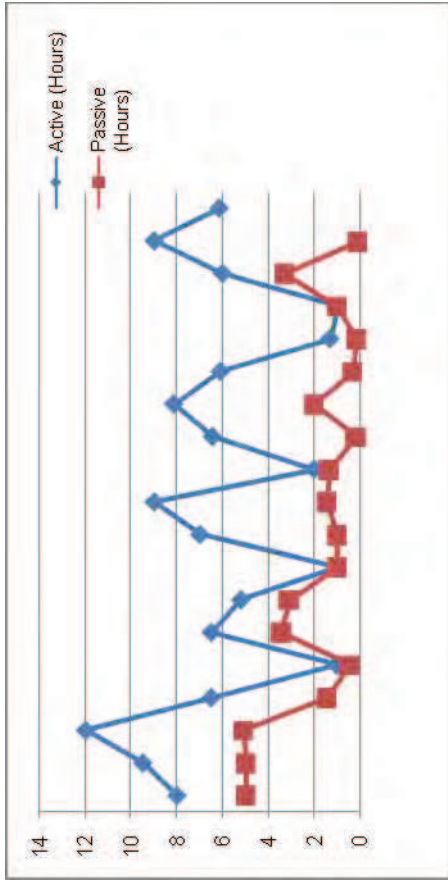


Figure 2 .Baby's age in hours when cooling commenced.

**3. Distribution as per the severity of the HIE**

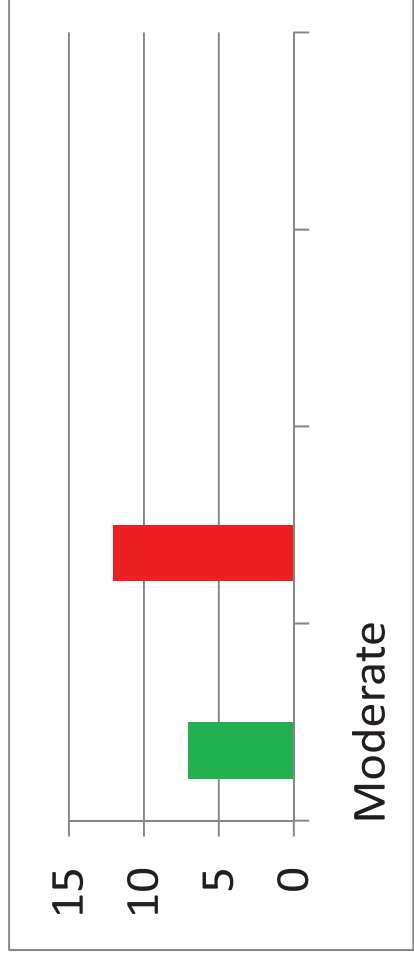


Figure 3. Severity of Hypoxic Ischaemic Encephalopathy.

#### 4. Admission temperatures

The temperatures of the fourteen babies on arrival to the unit from the referring hospitals. The target range for cooling is 33° – 34° C.

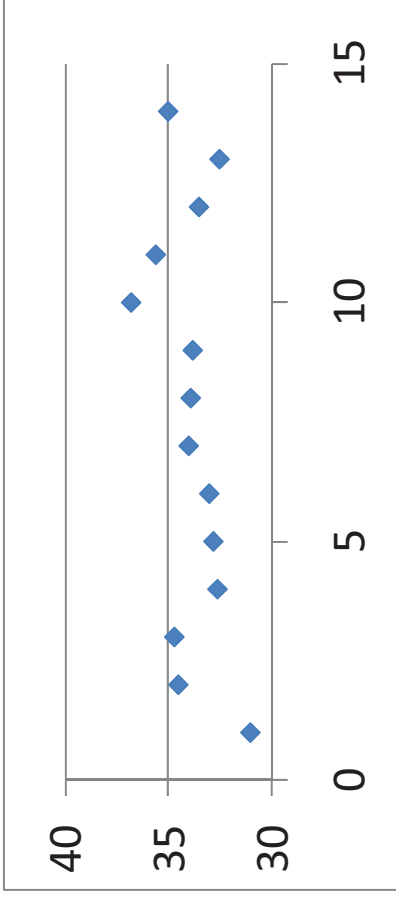


Figure 4. Admission temperatures.

#### 5. Initial outcome after cooling treatment

All the babies who died were from the withdrawal of intensive care treatment.

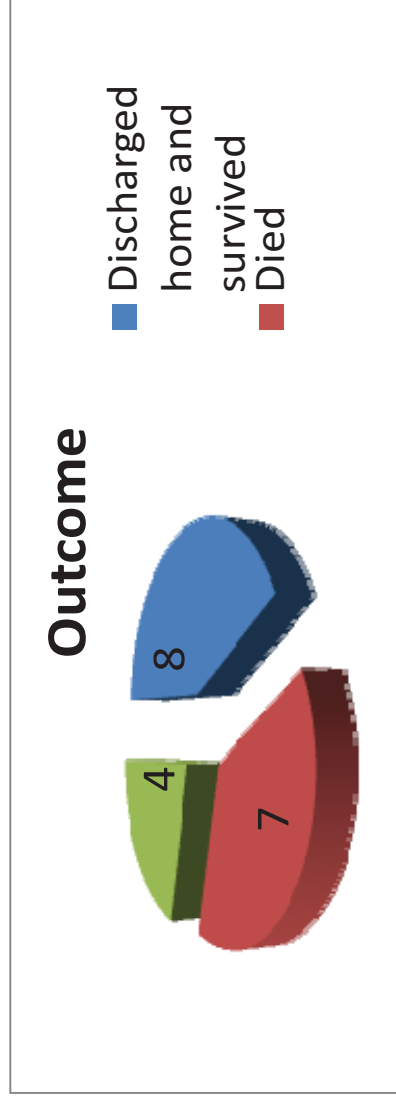


Figure 5. Outcome of cooling treatment.

**6. Mortality based on the severity of HIE.**

All the babies who died were from the severe group of HIE.

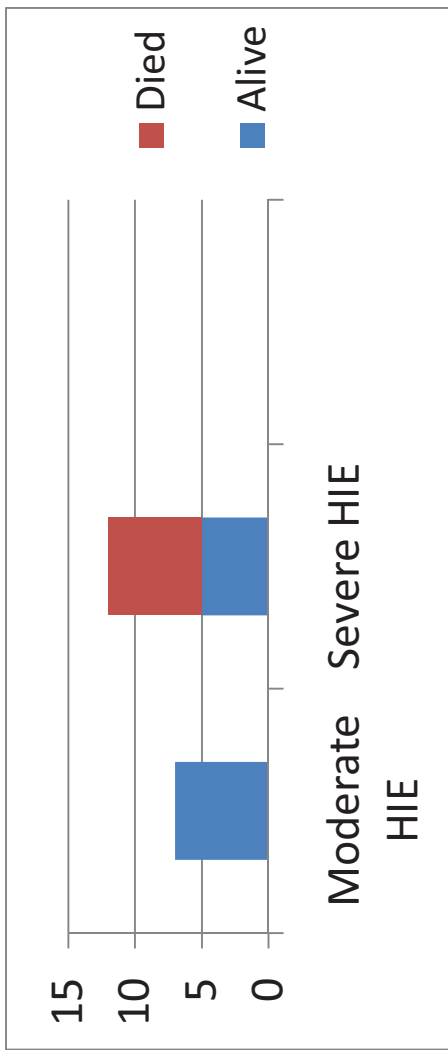


Figure 6. Mortality according to severity.



Vidya Garikapati  
 Cooling Lead, SWMNN  
 Consultant in Neonatology  
 Birmingham Heartlands Hospital



## Neonatal Surgery 2011

The purpose of the Neonatal Surgery Project was to support services for newborn babies requiring surgery. In 2005/06, 106 babies were inappropriately treated outside the West Midlands; 52 of these were for neonatal surgery. In September 2007, an audit showed that only 66% of patients were admitted to Birmingham Children's Hospital (BCH) on the same day as a referral was made. Nine per cent of referrals were sent to other Trusts because they could not be admitted to BCH.

The Neonatal Surgery Service Specification is a commissioning document that laid out the requirements of the neonatal surgical service development between BCH and the Women's Hospitals. This service arrangement was commissioned by the West Midlands Specialist Commissioning Group to support the care of newborn requiring surgery across the region. The service continues to be supported and monitored by the **Neonatal Project Board**.

**Key performance indicators:** The key performance indicator relates to **out of region transfers**. These have decreased from 23 neonates in 2009/10 (14 required a cot on the Neonatal Surgical Ward (NSW) and 9 required Intensive Care Unit (ITU), to 9 neonates in 2010/11, (of which 5 required a cot on the NSW and 4 required ITU). More recently NSW and Paediatric Intensive Care Unit (PICU) have declined no baby and have imported babies for neonatal surgery from other regions.

Other performance indicators are: **Refused and delayed admissions, Number of admissions and bed days at Birmingham Children's Hospital, Lead Nurse activity and Transfers of surgical neonates between BCH and BWH.**

**Outreach Nurse (Bernadette Reda) activity:**

Nurse Outreach Episodes	Phone Contacts	Site visits	Total episodes of contact	Number of patients seen across all episodes of care
Quarter 1	35	137	172	27
Quarter 2	29	136	165	26
Quarter 3	25	74	99	22
Quarter 4	14	177	191	16
<b>Annual Total</b>	<b>103</b>	<b>524</b>	<b>627</b>	<b>91</b>

The 91 patients supported by Bernadette include babies actively discharged early from BCH, babies within BCH and pre-op babies before they arrive at BCH. The overall trend is for sicker, post-op babies, to be sent mainly to level 3 NNUs (the Women's, Heartlands and New Cross). The majority are patients transferred back from PICU, freeing up ventilated cots. The absolute number of less dependent patients transferred back from the Neonatal Surgical Ward has remained fairly static, but the number of surgical patients transferred out of BCH using the outreach service has increased over the year, reflecting increased activity overall as babies remain within region. The support needed by staff caring for surgical babies is mainly with stoma care, nutrition and fluid balance.

**Training and Education.** An extensive programme of education has been provided throughout the year for Network staff in general and in particular for BWH and PICU staff. In 2011 the focus will be to extend this to Heartlands staff.

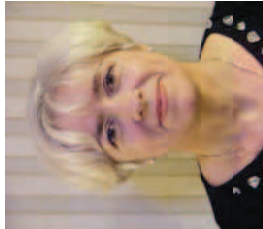
5 Neonatal Nurses have completed the Neonatal Surgical Module and this is now being evaluated.

Bernadette also attends Outpatient consultations between Surgeons and parents for ante natal counselling. Written information about the NSW, and a visit to the ward are important parts of these sessions. Increasingly parents have already been given a leaflet about their baby's surgical condition by the Fetal Medicine teams (hooray!).

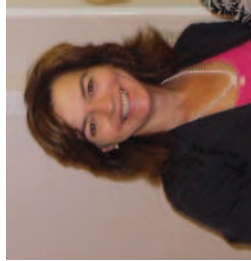
Guidelines for practice continue to be developed by the **Neonatal Standards & Practices Group (NSPG)** chaired by Mr Girish Jawaheer. A number of guidelines are available on the SWMNI website, along with parent information leaflets. The **antenatal care pathways** were also developed by this group. Mr Jawaheer also chaired the group who worked with Philip Wilson and Mary Montgomery at West Midlands Paediatric Retrieval Service (WMPRS) to develop a "one number for all neonatal surgery referrals" system. A number of guidelines are in advanced stages of development including for the management of congenital diaphragmatic hernia and for the nutritional management of, and care pathways for, surgical babies.

In addition to Bernadette Reda (Lead Neonatal Surgery Outreach Nurse) and Alison Bedford Russell (Neonatal Surgery Liaison Lead), to support the service, Mr Oliver Gee, Consultant Paediatric Surgeon was appointed and took up his post on 29<sup>th</sup> May 2011. Since June 1<sup>st</sup>, surgical review of babies on the neonatal unit at Birmingham Women's Hospital has occurred on a daily basis, Monday to Friday, following an 08.15hrs capacity meeting at BCH involving the Outreach Nurse and Surgeon, BWH Neonatologist, On-call Surgeon and Nurse in Charge of the Neonatal Surgical Ward.

The service is not perfect yet but efforts are ongoing and it is anticipated that the service will strengthen and improve in quality, including communication (which at times is still sub-optimal), as well as achieve zero out of region transfers. It has been a great boost to have won the **All-Party Parliamentary Group on Maternity Services Awards 2011**, for what we have achieved together, so far. This is the result of a highly effective collaboration between all member units especially Birmingham Children's Hospital, and with our commissioners.



Bernadette Reda  
Lead Neonatal Surgical Outreach Nurse



Alison Bedford Russell  
Neonatal Surgery Liaison Lead

## West Midlands Neonatal Transfer Service (WMNTS) 2010 - 2011

WMNTS continues to provide 24 hours, 7 days a week care for infants in the West Midlands area. This year the budget was increased further to include another 1 WTE Advanced Neonatal Nurse Practitioner and a full time Consultant Post. Dr. A. Philpott was appointed and came into post in February 2011.

### Activities

Overall, the activity for the year has reduced by 9% due to the launch of neighbouring transfer services (transfer requests/month 129 compared to 141 in the previous year).

WMNTS performed 81% of the transfers requested during this period. 12% of transfers were cancelled by referring units (e.g. change in baby's condition, availability of cots, parental consent or inappropriate referral). 7% were refused by WMNTS (staffing issues or already on transfer and unit could not wait).

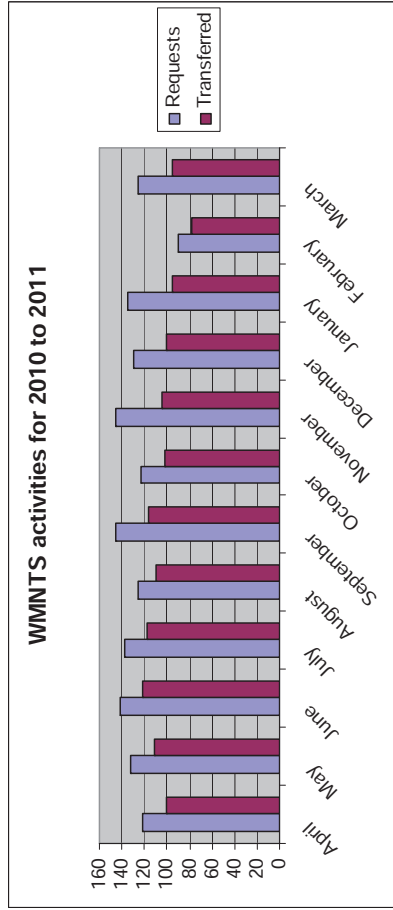


Figure 1

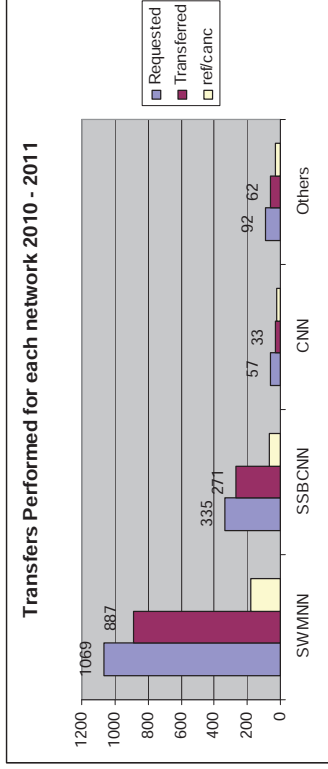


Figure 2

Transfers performed were for SWMMNN (71%), SSBCNN (22%) and CMN and other networks (8%).

Only 9 babies were transferred out of region due to lack of capacity compared to 22 in the previous year.

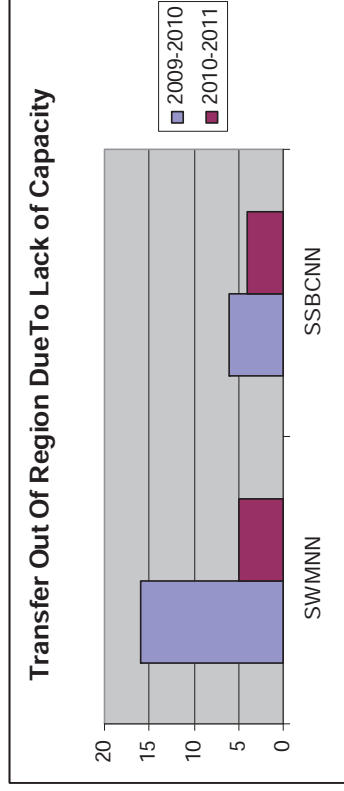


Figure 3

21 babies were transferred for cooling therapy and all reached the target temperature.

## Funding

Pay budget for the year £1,080,723 (expenditure was £990,560 due to consultant post not filled until February 2011). Non pay budget was £401,653 and expenditure was £401,653.

## Staffing

- The team consists of:
- 1 Consultant Lead (from February 2011)
- 3 PAs SWMNN & 2PAs SSBCNN Consultant Lead (to be appointed)
- 1 Nurse Consultant
- 4 Advanced Neonatal Nurse Practitioners
- 3 Trainee Advanced Neonatal Nurse Practitioner
- 1 Transport Fellow
- 8 Nurses (7.5 WTE)
- 1 Cot Locator Clerk
- 1 Administrator

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## Education

The WMNTS training day that took place on 4<sup>th</sup> May 2011 proved a great success with representation from all levels of nursing and medical staff across the networks. This enabled attendees to have insight into how the team work and various situations that arise during transfer. A further day is planned for December 2011.

All staff have attended the Therapeutic Hypothermia for Hypoxic-Ischaemic Encephalopathy Study day  
 2 staff have completed PanStar training  
 NTS staff continue to support local NLS courses

## Audits

- 3 audits were presented:
1. Acute cardiac transfers provided by West Midlands Neonatal Transfer Service – Quad Network Conference
  2. Review of transfers for PDA ligation conducted by the West Midlands Neonatal Transfer Service– Quad Network Conference
  3. Gatrochisis transferred by the WMNTS – an oral presentation at Neonatal Society Spring Meeting

## Clinical Governance

A total of 119 incidents were reported during 2010/2011, this equates to 9% of total transfers undertaken. Incidents were broken down as follows:

Type of Incident	No.	% of Total
Clinical	12	10
Temperature	7	6
Staff shortages	29	24
Clinical		
Other		
NTS incidents	4	3
Communication	23	19
Ambulance	8	7
Equipment	19	16
Escalation	1	1
External	3	3
CNN Transfers	12	10
Personal		
Accident	1	1
Total incidents	119	



Jackie Harrison  
Nurse Consultant



Alex Philpott  
Neonatal Transport Consultant

## Kate Branchett, Parent Representative, SWMNN



It is almost exactly a year since I became involved with the SWMNN and I have enjoyed it immensely. Initially, I thought my involvement would be limited to quarterly board meetings and I was unsure how much input I would actually be able to have. However, without exception, everyone has been extremely welcoming and I really feel part of the team. I have learned so much this year, but I have also realised how much knowledge I already had, simply by spending so much time on the neonatal unit and asking questions whilst my daughter Molly was small. It is so easy to forget what a difficult, unnatural and indeed terrifying experience having a baby on a neonatal unit can be, especially when you are there every day. I am extremely thankful for the opportunity to be able to illustrate the experiences of real families and to try to help make improvements. I have taken every opportunity to become involved with Network events and I have been humbled by some of the lovely feedback I have received.

At my first Board meeting back in September last year, I was asked to become involved in the Newborn Palliative Care Project Team. I was happy to help, but I was concerned that my personal experiences weren't actually relevant, as I didn't really understand what palliative care actually was! However, as I became involved in the planning of the study days, I soon realised that we had indeed received palliative care, albeit for a very short time. These study days were difficult emotionally, particularly at first, but have really helped me on my own journey. I put together a presentation of parents' views and experiences, which I presented at each of the 'day 1' study days and I facilitated a round table discussion at both of the second days. As a direct result of these presentations, I have spoken at BLISS Palliative Care QuIP days in both Manchester and London and this has been a great opportunity to find out about and share best practice and ideas from other areas of the country. I was also filmed talking about our experiences for one of the online training aspects of the Newborn Palliative Care CPD module. I hope that the great work that is happening around the Network to help babies and families who need to receive palliative care can be continued, shared and consolidated to ensure all parents get the best possible experience at this devastating time in their lives.

I am involved in the Developmental Care Sub Group and I spoke about our family's experiences (both good and bad!) at the Developmental Care study day at BWH last year. I hope to do the same again later this year. It is disappointing that some study days have had to be cancelled due to lack of attendance, as from speaking to the staff that attended, the days are extremely useful. I helped to review the Parent Information Leaflets, along with some other parents from the C.A.L.M. support group and these have now been distributed across the Network.

I was also asked to speak about our experiences for the National Society of Physiotherapists at their study day that was held at BWH back in June. I was extremely pleased to be asked to do this, as I am passionate about ensuring that knowledge and expertise is shared across different organisations.

I was involved in the unit designation visits in November and December and I found it invaluable to be able to visit most of the units within the Network, as they are all so different. It helps to give me some insight, as we only experienced 2 units with Molly.

As part of these visits, we spoke to other parents and launched the BLISS parent questionnaire. Most units seemed receptive to our suggestions, but I would like to work to ensure that family centred care is key to the care of babies in all units within the Network.

I have attended some of the Grand Rounds and the Quad Network Day this year, mainly to ensure I have a good grasp of what is happening clinically and the issues that are being raised, as I feel my input is most valuable when I am well-informed. These have been fascinating and I hope to attend more in future.

I continue to help to run C.A.L.M. (Calling All Little Miracles) the support group we set up in Worcestershire back in early 2010. We meet at a local Children's Centre and these sessions are successful. We invite local companies to come along and do taster sessions of baby friendly activities and we always welcome health professionals to come along and speak to parents. It has become increasingly difficult to engage with and recruit new parents, but we are increasing publicity this autumn and hope to integrate the group more into the unit so that it is easy for parents to reach support right from the start of their journey. As a group, in January we managed to secure £6000 of funding for new breastfeeding chairs for the unit at WRH.

As part of my Network role, I am trying to help connect the various support groups around the region and this is something I hope to focus on in the coming months. I would like to help units to share information and support for parents across the Network, as I feel this will help in particular with when babies are transferred, as this is an extremely stressful time for parents. I have just been involved with reviewing the new parent information leaflets for the Transport Team and I feel these will be extremely beneficial in helping the transition from one unit to another.

I have also become more involved with BLISS. In February, I attended the Parents Information Day held at BWH. It was useful to meet other parents from around the country who were already or were considering becoming Parent Reps and to receive some training. I had input into the revised BLISS Parent Information Guide and I am on the advisory panel for Little Bliss magazine, with several articles in this magazine. I have been part of a joint project with BLISS and the University of Manchester to put together a questionnaire to gather parents' opinions about data gathering during the neonatal period. I have been invited to the House of Commons with BLISS and I am looking forward to this. I am excited about BLISS's new strategy and the development of new regional centres. Hopefully this will see the strengthening of BLISS's relationship with Newborn Networks and units both nationally and locally.

We have also been fundraising, as a family. My father ran the London Marathon on behalf of BLISS, raising over £4,500 and my mother and father in law held a concert also in aid of BLISS that raised almost £1,500. I organised a concert last October that raised over £1000 and my husband's school raised over £750 through a non-uniform day, both in aid of the Tiny Babies Big Appeal at BWH.

I have also been working with the National Childbirth Trust (nct) and I am a volunteer for their Shared Experiences Helpline, supporting parents who may have a baby in a neonatal unit and signposting to relevant support and information. Molly's story was also featured in nct matters magazine, partly to highlight that not all pregnancies go to plan!

## West Midlands Neonatal Palliative Care Project

In August 2010 a bid was put forward to the Department of Health by the Networks for £150k for neonatal palliative care. The aim of the project was to ensure that the care of babies requiring palliative care needs was addressed and improved by implementing the pathway produced by "ACT" (Association for Children's Palliative Care 2009) and the recently published BAPM and BLISS documents.

This bid was successful and has enabled us to provide education and training for all nursing, medical staff and allied health professionals, as well as the voluntary sector on the needs of the baby and family requiring palliative care in the neonatal period.

The 4 Midlands Networks worked together using their existing management structure to support the project. The funding was used to invest in medical and nursing staff who provided workshops and road shows to inform and education staff around care of the dying baby and their family, and also ensure that staff had the knowledge relating to what happens after the death of a baby. Also as part of this project, we allocated funding to provide Memory/Journey Boxes to maternity and neonatal units in the Midlands.



*Memory/Journey Box*



Initially, the project appointed 4 Consultants/Champions who had an interest in palliative care, and set up a Palliative Care Project group which included the appointed Lead Clinicians, Network Mangers, Networks Practice Educators, parent representatives and religious and spiritual advisers. A series of 7 workshops and road shows took place between January and June 2011, with 570 attendees from all areas of care across the Midlands, including medical/ nursing staff, midwives, health visitors, community staff and hospice staff, parents and religious and spiritual advisers. The aim is to implement an ongoing education programme on palliative care for the neonate and their family.

The first of these study days covered 'palliative care – where does it begin?', 'an obstetric perspective', followed by information on the national guidance from ACT, BAPM and BLISS. We then had some sessions on what palliative care is available for neonates and the ethical considerations at the end of life. On each of these days we were fortunate to have two parents speak about their experience and what they required from professionals during this stressful life event. This included feedback from a survey undertaken by one of the parents, when 25 parents who had lost their baby were asked for their comments. The afternoon sessions concentrated on faith, cultural and spiritual needs, followed by a panel discussion on meeting the religious and spiritual needs of families.

We then had a second day covering the role of the Coroner and the Pathologist, a talk from a Funeral Director, a Registrar of Births and Deaths who discussed the legal requirements regarding a dead baby, and a Psychotherapist's view on what happens when a baby dies from a parent's perspective. The afternoon was dedicated to a Pathway Planning Workshop.

**All of the study days evaluated well** with very positive feedback on the contents of the day. Some comments received from participants included:

- *"A thought-provoking and informative day, thank you. Especially the morning."*
- *"Ethical discussions very thought provoking. Parent views very useful."*
- *"Hearing comments from parents and being told what they need and want for their dying baby."*
- *"Excellent!..."*
- *"Parents experiences and what was helpful. We need to know what we need to do more of..."*
- *"Finding out what was available within the region for palliative care – also the parents perspective"*
- *"Erica Brown's session was fantastic. Very thought provoking and will make me consider my practice much more closely..."*

### **Reflection on some of the successes of the project**

- The recommendations of the policy documents around neonatal palliative care have been disseminated to staff across the Midlands;
- Staff have a greater understanding of services available for babies and families to support them during palliative care;
- Staff have a greater understanding of the needs of parents during this very difficult time;
- An integrated care pathway for palliative care has been produced for the Midlands;
- The neonatal transport service is working with the local hospices to produce a document to transfer the dying or the dead baby to local hospital services or home;
- Valuable networking – staff within neonatal services have forged links with professionals in other areas of palliative care – e.g. Hospices, fetal medicine, Registrar for Births and Deaths, Funeral Directors, the Coroner's and Pathologist officers;
- An increased understanding of the diversity of ethical and spiritual needs of families.

**So was this project successful?** On the last day the Lead Obstetrician gave the talk on the Obstetricians perspective. During her talk she mentioned that for the first time a baby and their family had been transferred from her unit to the local Hospice for palliative care. Prior to the project, her team would not have even considered this as an option. As a Project Team we see this as a huge mark of our success.

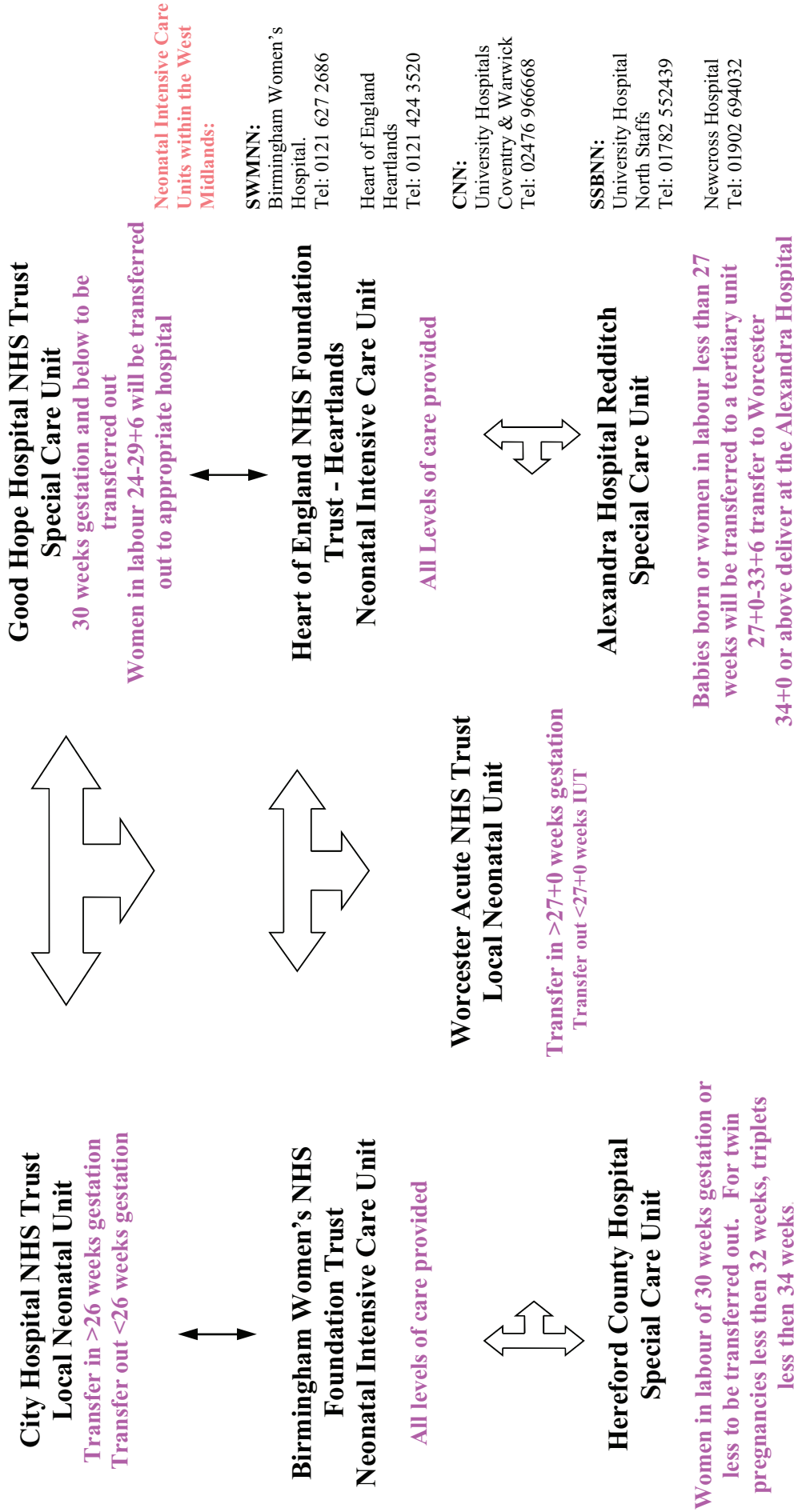


Mary Passant  
Network Manager/Lead Nurse, SWMNN





## LEVELS OF CARE FLOW CHART



\*ALL BABIES LESS THAN 26 WEEKS MUST BE TRANSFERRED TO A DESIGNATED INTENSIVE CARE UNIT

## Concluding Comments

David Nicholson (13 April 2011) stated that "Networks are the way forward in the NHS. There is a central role for networks in the new system as the place where clinicians from different sectors come together to improve the quality of care across integrated pathways. So I want to put these networks at the heart of our efforts to renew and strengthen engagement."

This clear message means we have to continue to work together and ensure babies and families in the West Midlands receive the right care in the right place at the right time, and to agreed national standards.

This Annual Report demonstrates that following the publication of the Toolkit for Neonatal Services (2009) the Network Strategy is working towards meeting the Principles. It is very heartening to realise that many of the Principles (or what others may term "standards"), within this document are already met within our neonatal units, and where they are not there are intentions to work towards doing so.

It was with great pride that we accepted the award from "The All-Party Parliamentary Group on Maternity" from Anne Milton MP (Parliamentary Under Secretary of State for Public Health) on the 11<sup>th</sup> July 2011 at the Houses of Parliament. This award demonstrates the importance of partnership working. The surgical project was started in 2005 as a response to the units who felt babies needing Surgery in the West Midlands could not get a cot locally and babies and families were having to travel all over the UK to receive the required care. In fact in 2007/08 110 babies went out of the West Midlands for neonatal surgery in 2010/11 only 11 babies when out for surgery. Hopefully next year's report will show all babies remaining within Network for care.

As Alison has mentioned, the NHS tsunami is upon us, but I feel strongly that this should not deter us from our ultimate aims, and we should continue to work together in the best interests of our mums and babies.

The success of this Network is down to each and every one of us, and I would personally like to thank you for your continuing support, contributions, and time.

Mary Passant  
 Southern West Midland Newborn Network  
 Manager/Lead Nurse



## Contacting the Network Office

The Network office provides a central base for receipt and distribution of information, and is always happy to help with any queries.

### Address and contact numbers:

The Network is hosted by Solihull Primary Care Trust, and is currently based at the following address:

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0121 746 4457 (Teresa Meredith, Executive Assistant)

Email: [teresa.meredith@solihull-pct.nhs.uk](mailto:teresa.meredith@solihull-pct.nhs.uk)  
[mary.passant@nhs.net](mailto:mary.passant@nhs.net)

Website: [www.newbornnetworks.org/southern](http://www.newbornnetworks.org/southern)



Mary Passant, Network Manager/Lead Nurse  
Teresa Meredith, Executive Assistant

**SOUTHERN WEST MIDLANDS NEWBORN NETWORK**

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c/o Solihull Primary Care Trust  
Friars Gate  
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0121 746 4457/4463  
<http://www.newbornnetworks.org/southern>



**SWMNN comprises:**

<b>Birmingham Women's Neonatal Unit</b>	Neonatal Intensive Care Unit (NITU)	<b>Worcester Neonatal Unit</b>	Local Neonatal Unit (LNU)
<b>City Hospital Neonatal Unit</b>	Local Neonatal Unit (LNU)	<b>Good Hope Neonatal Unit</b>	Special Care Unit (SCU)
<b>Heartlands Neonatal Unit</b>	Neonatal Intensive Care Unit (NITU)	<b>Redditch Mother and Baby Unit</b>	Special Care Unit (SCU)
<b>Hereford Special Care Baby Unit</b>	Special Care Unit (SCU)		

**Birmingham Children's Hospital Surgical Unit**

Southern West Midlands, and Staffordshire, Shropshire and Black Country Newborn Networks were named the winner of the "Most marked improvement in services to address health inequalities or improve outcomes for mothers and babies" category at the awards, which acknowledged inspiring or innovative work in improving local maternity services. This award was sponsored by Pregnacare prenatal supplements.

The team was presented with their award at the All-Party Parliamentary Group on Maternity (APPGM) summer reception on Monday 11 July, at the Terrace Pavilion, Houses of Parliament, by Parliamentary Under Secretary of State for Public Health Anne Milton MP.

Mary Passant and Ruth Moore stated: "We are delighted that our work has been recognised by the APPGM. This award recognises the work of the West Midlands Neonatal Surgical Project team, which addressed quality and capacity issues. The project has resulted in a tenfold reduction in the number of babies transferred out of region. A neonatal surgical outreach nurse and visiting neonatologist have improved quality of care and co-ordination of neonatal surgical services, resulting in better care for babies and mothers, and approximately £4 million cost savings. We have also developed joint policies, procedures and care pathways which all aim to streamline and improve services for mothers and babies."

**Staffordshire, Shropshire & Black Country  
Newborn Network  
Incorporating the Maternity Network**



# **Annual Report**

**APRIL 2010 – MARCH 2011**







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## FOREWORD

It has been my great pleasure and privilege to Chair the Newborn Network for eight years and as this is my last Annual Report as Chairman, I wish to reflect on the Network throughout that period and not just the last year.

The Network's aim is 'Better Services for Mothers and Babies' and I am happy for our achievements as a network over the years to be judged against that aspiration.

The Network does not deliver front line services; its role is to help and support those who do, to deliver high quality services to our mothers and babies. We have consistently done this by developing a systematic and sustainable framework of quality and standards. Whether through the initial designation of units, our Neonatal Guidelines or the Standards Assessment Toolkit we have produced useable quality frameworks which help our units achieve the highest quality standards and the best outcomes.

Alongside the quality framework, we have worked using the unique nature of the Network to bring together Clinicians and Managers from across our Network to learn, to develop and to support each other in the pursuit of our aims. The education and training we have sponsored and provided has enabled both individuals and teams to raise their standards and achieve their personal and professional ambitions.

I was particularly pleased that in 2007 the Network was instrumental in establishing the West Midlands Neonatal Transfer Service, an essential part of an efficient and effective newborn service that had been missing.

I am also particularly proud of the role that the Parent Representatives have played in shaping and developing both the Network and services. Their drive, enthusiasm and challenge have been a major contributor to our success as a network.

Throughout the Network's life, it has had to change and adapt as circumstances and policy have shifted and it is only right and proper that we do. Whether it's responding to BAPM standards, the "Toolkit for High Quality Neonatal Services" or the QIPP challenge, the Network has constantly adapted to ensure we remained relevant and effective.

The future looks different for us all as the NHS is once again reformed. What is increasingly clear however is that clinical leadership, the integration of care along pathways not organisational boundaries, the systematic and sustainable framework of quality and standards, and real meaningful patient involvement are at the heart of the Government's policy for the future.

The way we have worked and delivered our aims as a Network is a clear example of how the NHS must work in the future. I look forward to the Network's way of working being developed further across the NHS.

I could not finish without thanking everyone who participated in the Network Board or its Sub Groups or made a contribution to our work. I have enjoyed Chairing the Network because we have made a real difference to mothers and babies, but I could not have done that without your help, support and enthusiasm.

I would in particular like to thank Ruth Moore and the Network Team, and Andy Spencer our Lead Clinician for your help, support and hard work.

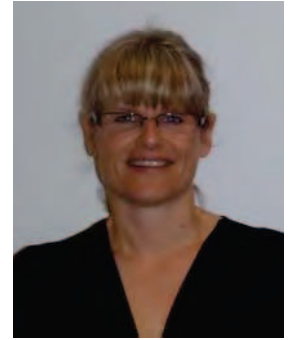
I shall continue to follow your progress with interest and wish you all the best for the future.



**Jon Crockett**  
**Chair, Staffordshire, Shropshire and Black Country Newborn Network**

# INTRODUCTION

During the first half of 2010/11 the Network Manager/Lead Nurse role was undertaken jointly between Ruth Moore and Chris Thomas. Chris concluded her secondment as Network Manager/Lead Nurse at the end of Oct 2010 when Ruth returned following completion of her year long part time secondment with the East Midlands Specialised Commissioning Group.



**Ruth Moore**  
Network Manager/Lead Nurse

Individual Trust visits were conducted in the second half of 2010/11 in order to;

- Review the Trust's gap analysis with the Neonatal Toolkit for High – Quality Neonatal Services<sup>1</sup> and identify areas that require network support
- Discuss the Network standards assessment tool and demonstrate the new functions available
- Discuss the development of appropriate care pathways for women and babies within the Network with consideration of each hospital's position. Further information about the development of the care pathways can be found later in the Annual Report on page 7.

No.	Quality statements
1	In-utero and postnatal transfers for neonatal special, high-dependency, intensive and surgical care follow perinatal network guidelines and care pathways that are integrated with other maternity and newborn network guidelines and pathways.
2	Networks, commissioners and providers of specialist neonatal care undertake an annual needs assessment and ensure each network has adequate capacity.
3	Specialist neonatal services have a sufficient, skilled and competent multidisciplinary workforce.
4	Neonatal transfer services provide babies with safe and efficient transfers to and from specialist neonatal care.
5	Parents of babies receiving specialist neonatal care are encouraged and supported to be involved in planning and providing care for their baby, and regular communication with clinical staff occurs throughout the care pathway.
6	Mothers of babies receiving specialist neonatal care are supported to start and continue breastfeeding, including being supported to express milk.
7	Babies receiving specialist neonatal care have their health and social care plans coordinated to help ensure a safe and effective transition from hospital to community care.
8	Providers of specialist neonatal services maintain accurate and complete data, and actively participate in national clinical audits and applicable research programmes.
9	Babies receiving specialist neonatal care have their health outcomes monitored.

The National Institute for Health and Clinical Excellence (NICE) Specialist Neonatal Care Quality Standards<sup>2</sup> were published at the end of October 2010.

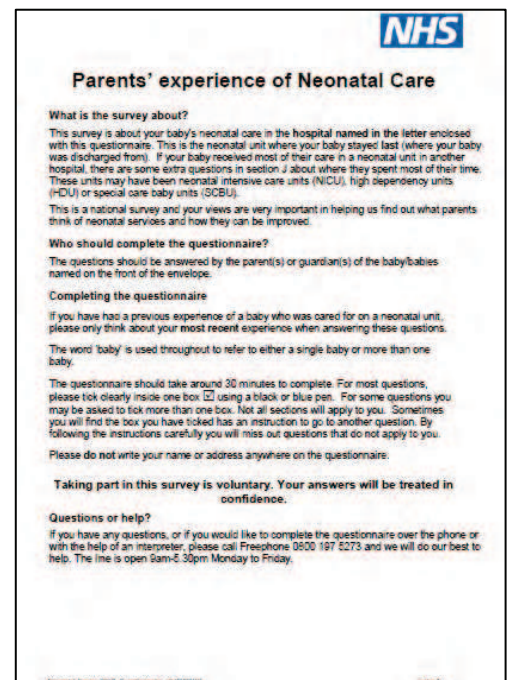
Nine quality statements were devised by the Topic Expert Group which drew on the Toolkit for High Quality Neonatal Services<sup>1</sup>, Standards for Hospitals Providing Neonatal Intensive and High Dependency Care<sup>3</sup> and Standards for Maternity Care: Report of a Working Party<sup>4</sup>. Each quality statement is accompanied by quality measures which aim to improve the structure, process and health outcomes of specialist neonatal care. The quality standard requires that the physical, psychological and social needs of babies and their families are at the heart of all care given.

The Network's Standards Assessment Tool is currently being updated to ensure that it reflects all newly published national standards and principles relating to neonatal care which will facilitate the Network and the individual Trusts to assess themselves against the standards and formulate action plans where any gaps against the standards exist.

In 2010/11 the Network supported all the units to take part in the first national parent survey of neonatal care. The development of the survey followed the launch of the Toolkit for High Quality Neonatal Services in November 2009 and was taken forward by BLISS, the special care baby charity with support from the Newborn Networks.

Researchers at Picker Institute have coordinated the survey. Using Picker methodology the survey was conducted in 3 waves during 2010/11, all data has now been collected and reports from the survey are due to be published in Autumn 2011.

The Network parent experience survey stopped whilst the national survey was undertaken. The Network will work with all units to decide the future approach to take with regards to collecting, understanding and using parents experiences of neonatal care in the Network to improve services for babies and their families.



1 Department of Health (DH) (2009) Toolkit for high quality neonatal services. Available from [www.dh.gov.uk](http://www.dh.gov.uk)  
 2 National Institute for Health and Clinical Excellence (NICE) Specialist Neonatal Care Quality Standards. Available from <http://www.nice.org.uk/guidance/qualitystandards/specialistneonatalcare/specialistneonatalcarequalitystandard.jsp>  
 3 British Association of Perinatal Medicine (BAPM) (2010) Standards for hospitals providing neonatal intensive and high dependency care. Available from [www.bapm.org](http://www.bapm.org)  
 4. Royal College of Obstetricians and Gynaecologists (RCOG) (2008) Standards for maternity care: report of a working party. Available from [www.rcog.org.uk](http://www.rcog.org.uk)



Table 4  
Number of admissions by referral type for a single network SSBCNN between 1 Apr 2010 and 31 Mar 2011

Admissions from Within the network							
Referral Type	RWH	UHNS	S&TH	DGOH	WMH	MidStaffs	Total
Inborn Booked	451	372	686	384	373	182	2448
Inborn Booked Elsewhere	42	13	23	9	14	2	103
Inborn- unbooked	0	0	0	0	0	0	0
Readmission	5	2	2	7	24	5	45
Postnatal Transfer In	27	14	3	4	6	7	61
Home Admission	3	0	3	0	0	0	6
Cannot Derive	2	0	3	1	3	4	13
<b>Total</b>	<b>530</b>	<b>401</b>	<b>720</b>	<b>405</b>	<b>420</b>	<b>200</b>	<b>2676</b>
Admissions from Outside the network							
Referral Type	RWH	UHNS	S&TH	DGOH	WMH	MidStaffs	Total
Inborn Booked	0	0	0	0	0	0	0
Inborn Booked Elsewhere	0	0	0	0	0	0	0
Inborn- unbooked	0	0	0	0	0	0	0
Readmission	22	15	14	7	6	4	68
Postnatal Transfer In	24	25	14	20	9	9	101
Home Admission	2	3	7	1	2	3	18
Cannot Derive	0	1	0	1	1	0	3
<b>Total</b>	<b>48</b>	<b>44</b>	<b>35</b>	<b>29</b>	<b>18</b>	<b>16</b>	<b>190</b>
Total Number of Admissions							
Referral Type	RWH	UHNS	S&TH	DGOH	WMH	MidStaffs	Total
Inborn Booked	451	372	686	384	373	182	2448
Inborn Booked Elsewhere	42	13	23	9	14	2	103
Inborn- unbooked	0	0	0	0	0	0	0
Readmission	27	17	16	14	30	9	113
Postnatal Transfer In	51	39	17	24	15	16	162
Home Admission	5	3	10	1	2	3	24
Cannot Derive	2	1	3	2	4	4	16
<b>Total</b>	<b>578</b>	<b>445</b>	<b>755</b>	<b>434</b>	<b>438</b>	<b>216</b>	<b>2866</b>

The inclusion of the breakdown of admissions by referral type in the Annual Report helps the unit and network to review where the demand for neonatal services is coming from and the impact on capacity management. This will also be useful to review the impact of implementing the care pathways on where babies are born.

Table 5.  
Number of distinct babies admitted for a single network and those that died SSBCNN Babies admitted from 1 Apr 2010 to 31 Mar 2011 Gestation and Birthweight

Network Admissions and Deaths		
Gestation	Admissions	Deaths
Less than 22	0	0
22	1	1
23	20	11
24	27	11
25	29	4
26	41	8
27	56	3
28	62	4
29	78	4
30	71	1
31	93	4
32	129	3
33-36	930	3
37-42	1329	8
43	0	0
Greater than 43	0	0
<b>Total</b>	<b>2866</b>	<b>65</b>

Network Admissions and Deaths		
Birthweight	Admissions	Deaths
Less than 500	4	2
500-749	61	19
750-999	109	15
1000-1249	133	7
1250-1499	136	4
1500-1749	184	4
1750-1999	232	2
2000-2499	676	4
2500-2999	431	3
3000-3499	390	2
Greater than 3500	510	3
<b>Total</b>	<b>2866</b>	<b>65</b>

Overall number of deaths in the network by gestation and birth weight are included for the first time in this Annual Report.

A more detailed process to review neonatal deaths is currently being piloted in the network by the QIPP Group to identify if any avoidable factors can be learnt and shared across the network in order to improve outcomes for mothers and babies.

### Transfers

In 2010/11 WMNTS undertook 271 transfers for the units in our Network. There were 57 transfers out of the region, 44 of these were appropriate (35 appropriate surgical transfers to Liverpool, 4 appropriate transfers for surgical/specialist care not available in our Network, 5 appropriate back transfers of babies to units closer to home). 13 transfers outside of the Network were inappropriate, that is outside of the normal care pathway for babies in that unit, 7 due to cot capacity, 4 for surgery [4 less than in 2009/10] and 2 for cardiac reasons [2 less than in 2009/10]. There were a further 6 inappropriate transfers (3 less than in 2009/10) between units in our Network for cot management reasons. WMNTS also performed 25 back transfers of babies into the network. It is likely that these babies were born outside of the network as a result of an in-utero transfer possibly due to a lack of capacity. This is being monitored more closely in 2011/12 to understand where the pressures are; maternity and/or neonatal, through the exception reporting linked to the care pathways.

The number of inappropriate transfers to neonatal units outside of our Network is not significant with the Network meeting its target of keeping over 95% of babies within the normal care pathway for our Network.



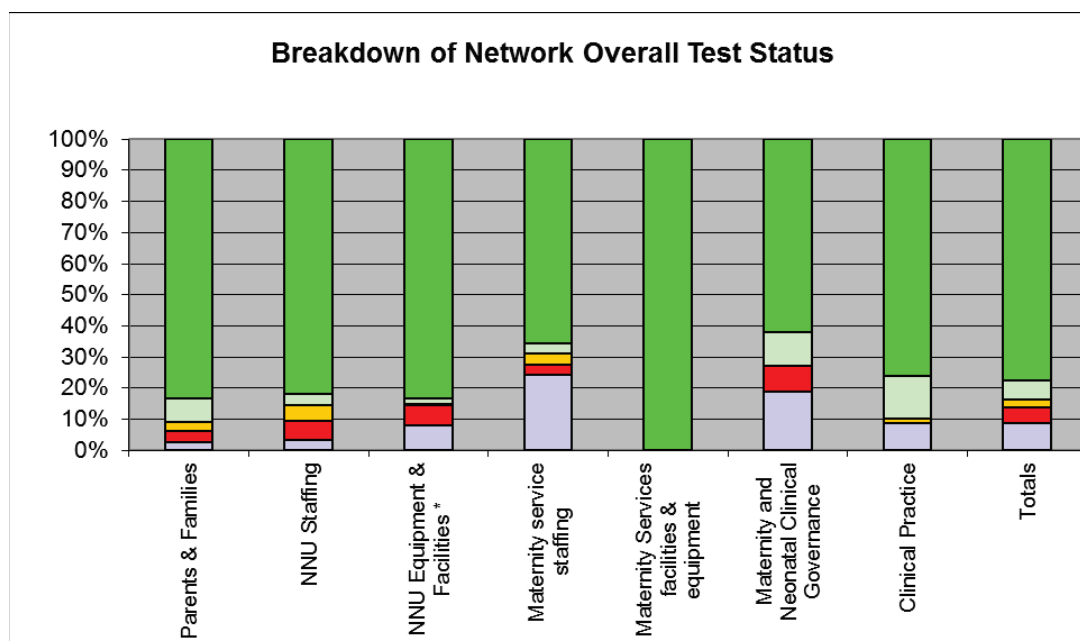
## NETWORK STANDARDS ASSESSMENT

The quarterly Network Standard Assessment Snapshot Reports at the Board meetings identify the progress units have made in meeting the standards during 2010/11. By March 2011 78% of all tests were fully met in the Network, compared with 73% in February 2010, with a further 8% partially or almost met. Only 5% of tests were not met. 9% of tests were unanswered, these were mostly relating to the few maternity service tests within the tool.

Below is the table and graphs from the March 2011 snapshot discussed at the Network Board meeting.

### Network Status

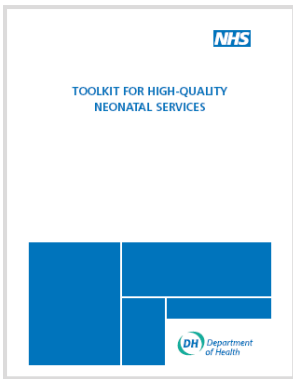
	Test Un Answered	Test Not Met	Test Partially Met	Test Almost met	Test Fully Met
Parents & Families	4	6	4	12	130
NNU Staffing	8	14	12	8	189
NNU Equipment & Facilities *	16	13	1	3	166
Maternity Service Staffing	14	2	2	2	38
Maternity Services Facilities & Equipment	0	0	0	0	6
Maternity and Neonatal Clinical Governance	30	13	0	17	98
Clinical Practice	12	0	2	19	104
<b>Totals</b>	<b>84</b>	<b>48</b>	<b>21</b>	<b>61</b>	<b>731</b>



During 2010/11 work was completed to develop the tool to include a facility for Trusts to export their data from the tool which can then be used as evidence of progress and to develop business cases as required for unmet areas. Visits to each Trust were completed towards the end of 2010/11 to demonstrate the new features to both neonatal and maternity colleagues.

Work was commenced to update the tool to reflect the Principles in the Toolkit for High Quality Neonatal Services and the NICE Standards for Neonatal Care which were published in October 2010. This work will be completed in 2011/12.

# NETWORK CARE PATHWAYS DEVELOPMENT



“Neonatal Networks should lead the provision of neonatal care throughout the population they serve.” (Toolkit for High-Quality Neonatal Services, 2009). Key objectives include:

- ensure babies and their families receive the highest quality of care, as close to home as possible;
- help hospitals providing maternity and neonatal care to work together effectively to plan patient care and optimise resources;
- create new clinically-effective pathways of care, covering all aspects of care and treatment including prevention;

The Staffordshire, Shropshire & Black Country Newborn Network has undertaken work to develop care pathways appropriate to the individual designation level of each Neonatal Unit in the Network.



Care Pathways Consultation Event

Stakeholders (Neonatal and Maternity services Doctors, Nurses & Midwives, Managers and Commissioners) were invited to participate in a consultation event in September 2010 in order to influence the development of appropriate care pathways in our Network.

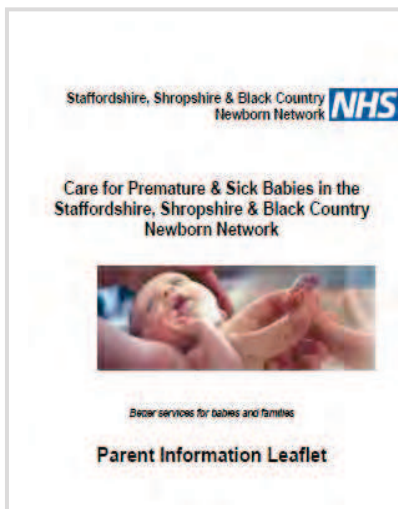
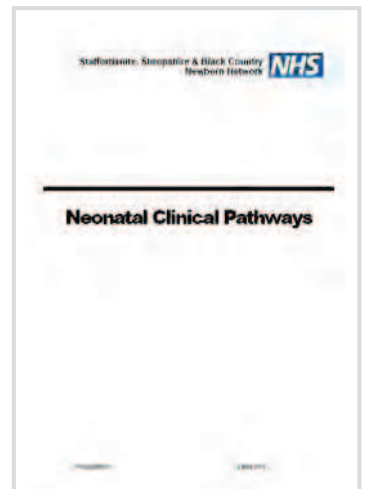
At the event there were short presentations about developing care pathways from the Network Management Team as well as the use of care pathways from the Commissioners' perspective.

The majority of the event was group work to gain stakeholder input into the development of appropriate care pathways within Network which also identified future work to be done.

During the afternoon of the event each area completed a draft care pathway template for their neonatal unit.

Following the event unit visits were held with the Network Management Team to discuss the content of the draft care pathways, the majority of which was agreed by the Network Management Team with a few exceptions relating to the gestational cut off for the Local Neonatal Units and also the location of the cooling services in the Network.

Progress has been reported through the bimonthly Network QIPP Group and at the quarterly Network Board. The process and care pathways have been collated into a Network Care Pathway document which includes an exception reporting process and a Parent Information Leaflet. The Specialised Commissioners have been involved throughout the process.



DRAFT TEMPLATE		Staffordshire, Shropshire & Black Country Newborn Network	NHS
Care Pathway Exception Report			
Referring Unit:			
Baby:			
Name:			
DOB:			
Hospital Number/NHS Number:			
(Complete pathway details on Alpha Patient Identification (API) on lobby for patient notes)			
Name of Consultant at Referring Hospital:			
Date:			
Time:			
Brief Details of the exception(s) to care pathway:			
Network Lead Centre: (Tick box as appropriate)			
Name of Consultant at Network Lead Centre:			
Outcome of Consultant to Consultant discussion: (Tick box as appropriate)			
Baby to be transferred to:			
Baby to remain at referring unit with the following agreed management plan:			
Agreed Date for review with Network Lead Centre:			
Additional Comments:			

## NETWORK SUB GROUPS

The Network Sub Groups undertake the main work of the Network. Each Group reports to the Network Board

### Existing Groups in 2010/11

Group	Chair
Parent Representatives Group	Julie Ebrey
QIPP Group (Formerly the R,D & A Group)	Sanjeev Deshpande
Workforce Development Group	Chris Thomas
Guidelines Group	Kate Palmer
Equipment Group	Babu Kumararatne
Feeding & Nutrition Group (Formerly the Breastfeeding Group)	Gina Hartwell
Long Term Follow Up Group	Chrisantha Halahakoon
Resuscitation Group	Dave Roden
Transfer User Group (Formerly the Joint Transport Group)	Alyson Skinner

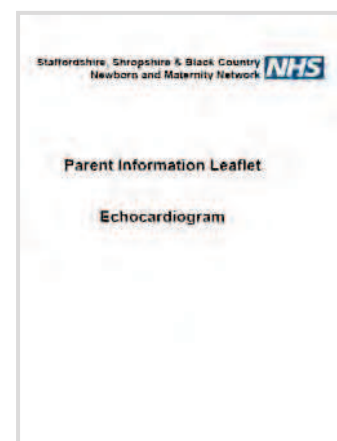
### Network Groups Summary of Key Achievements in 2010/11:

- Monthly Parent Support Groups were commenced in Dudley and Wolverhampton and the Parent Support Group in Stafford was re-launched
- Network Parent Information Leaflets on Cranial ultrasound and Echocardiogram were agreed and a Parent Information Leaflet on how care is organised in our Network was drafted
- Feedback on the use of the third edition of the guidelines was collected and presented
- Work was commenced to develop agreed West Midlands neonatal clinical indicators
- GCP training requirements in the Network were collated
- Approval was gained to monitor mortality and serious incidents across the Network and work commenced to agree the process for this
- Training for Network staff observing and learning from Betty Hutcheon undertaking Bayley Assessments was completed
- All units were able to enter Bayley assessment data directly into the Badgernet system
- Annual Neonatal Breastfeeding Study Day attended by 21 delegates
- Network Neonatal Nursing Foundation Programme accredited by Wolverhampton University



### Network Groups Summary of Key Objectives for Next 12 Months:

- Assist the neonatal units in the setting up of Helping Hands Groups in Walsall and Shropshire
- Provide an advisory role to discharge planning teams in the Network
- Agree and implement a process with the WMQI to monitor and report on agreed neonatal clinical indicators
- Collate and review neonatal safety incidents (NSIs), recommend and disseminate the lessons learned to the stakeholders
- Monitor and share learning of neonatal mortality within the Network
- Undertake a Network Education Survey to identify topics for Network Study Days
- Publish a fourth edition of the guidelines in Autumn/Winter 2011
- Widen participation in the neonatal guidelines to include South West Midlands Newborn Network
- Produce a report of network 2 year outcomes
- Hold an ultra sound scan machine equipment evaluation event in the network
- Update Network Resuscitation Guideline in line with updated Resuscitation Council NLS guidance
- Audit breastfeeding practice in neonatal units to ensure uniformity of practice across the Network



# WEST MIDLANDS NEONATAL TRANSFER SERVICE (WMNTS)



**Jackie Harrison**  
Transport Nurse  
Consultant

WMNTS continues to provide 24 hours, 7 days a week care for infants in the West Midlands area. This year the budget was increased further to include another 1 WTE Advanced Neonatal Nurse Practitioner and a full time Consultant Post. Dr. A. Philpott was appointed and came into post in February 2011.

### Activities

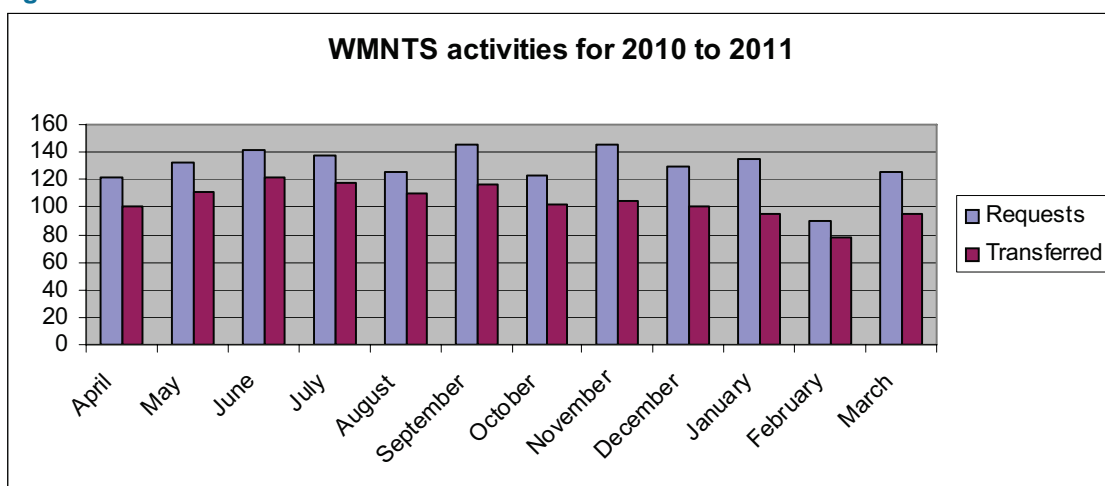
Overall, the activity for the year has reduced by 9% due to the launch of neighbouring transfer services (average transfer requests per month 129 compared to 141 in the previous year).

WMNTS performed 81% of the transfers requested during this period. 12% of transfers were cancelled by referring units (e.g. change in baby's condition, availability of cots, parental consent or inappropriate referral). 7% were refused by WMNTS (staffing issues or already on transfer and unit could not wait). See Figure 1.



**Alex Philpott**  
Neonatal Transport  
Consultant

**Figure 1**

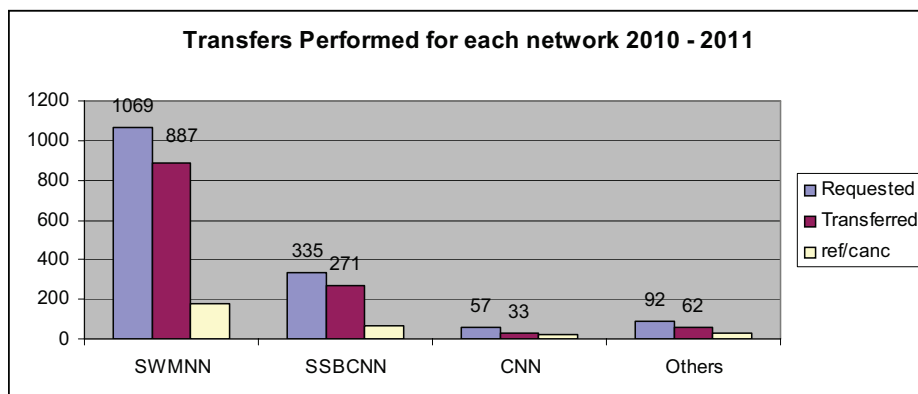


**Figure 2**

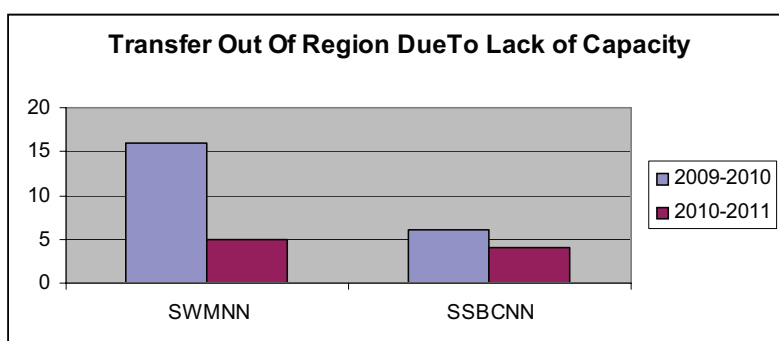
Breakdown of the transfers performed for each network were; Southern West Midlands Newborn Network (71%), Staffordshire, Shropshire and Black Country Newborn Network (22%) and Central Newborn Network and other networks (8%). See Figure 2.

Only 9 babies were transferred out of region due to lack of capacity compared to 22 in the previous year. See Figure 3.

21 babies were transferred for cooling therapy and all reached the target temperature.



**Figure 3**



### Funding

Pay budget for the year £1,080,723 (expenditure was £990,560 due to consultant post not filled until February 2011). Non pay budget was £401,653 and expenditure was £401,653.



## WEST MIDLANDS NEONATAL TRANSFER SERVICE (WMNTS) CONTINUED...

### Staffing

The team consists of:

- 1 Consultant Lead (from February 2011)
- 3 PAs Southern West Midlands Newborn Network Consultant Lead
- 2 PAs Staffordshire, Shropshire and Black Country Newborn Network Consultant Lead (to be appointed)
- 1 Nurse Consultant
- 4 Advanced Neonatal Nurse Practitioners
- 3 Trainee Advanced Neonatal Nurse Practitioner
- 1 Transport Fellow
- 8 Nurses (7.5 WTE)
- 1 Cot Locator Clerk
- 1 Administrator

### Education

The WMNTS training day that took place on 4th May 2011 proved a great success with representation from all levels of nursing and medical staff across the networks. This enabled attendees to have insight into how the team work and various situations that arise during transfer. A further day is planned for December 2011.

All staff have attended the Therapeutic Hypothermia for Hypoxic-Ischaemic Encephalopathy Study Day.

Two staff have completed PanStar training.

NTS staff continue to support local NLS courses.

### Audits

Three audits were presented during the year:

1. Acute cardiac transfers provided by West Midlands Neonatal Transfer Service – Quad Network Conference
2. Review of transfers for PDA ligation conducted by the West Midlands Neonatal Transfer Service – Quad Network Conference
3. Gatoschisis transferred by the WMNTS – an oral presentation at Neonatal Society Spring Meeting



### Clinical Governance

A total of 119 incidents were reported during 2010/2011, this equates to 9% of total transfers undertaken. Incidents were broken down as follows:

Type of Incident		No.	% of Total
Clinical	Temperature	12	10
	Staff shortages	7	6
	Clinical	29	24
Other	NTS incidents	4	3
	Communication	23	19
	Ambulance	8	7
	Equipment	19	16
	Escalation	1	1
	External	3	3
	CNN Transfers	12	10
	Personal Accident	1	1
<b>Total incidents</b>		<b>119</b>	

## NEONATAL SURGICAL OUTREACH NURSE POST 2010



### Quarterly Comparisons (Calendar year)

Period	Bed Days Saved on NSW & ITU	Out of Region Transfers
Quarter 1 (Jan – March 2010)	164 (9 pts.)	5
Quarter 2 (April – June 2010)	181 (8 pts.)	4
Quarter 3 (July – Sept 2010)	243 (9 pts.)	2
Quarter 4 (Oct – Nov 2010)	420 (12 pts.)	0
Annual	1008 (38 pts.)	11

**Bernadette Reda**  
Neonatal Surgical Liaison/ Outreach Nurse

### Financial Year

Out of region transfers have decreased from 23 neonates in 2009/10 to 8 neonates in 2010/11. Of the 23 neonates, 14 required a cot on the Neonatal Surgical Ward (NSW) and 9 required ITU. For period 2010/11, 8 neonates of which 4 required a cot on the NSW and 4 required ITU.

### 1.2 Point of Discharge

Comparing the number of general surgical (171) patients discharged home to those transferred to another hospital from the NSW.

2010	Quarterly Total Discharges	Home		Transferred	
1st Quarter	68	47	69.1%	21	30.9%
2nd Quarter	73	55	75.3%	18	24.7%
3rd Quarter	93	60	64.5%	33	35.5%
4th Quarter	67	53	79.1%	14	20.9%

The ratio of discharges to transfers has remained roughly the same over the year.

The majority of patients transferred out of Birmingham Children's Hospital (BCH) seen by the Outreach Nurse are from ITU.

Figures for 2009		Figures for 2010	
Total discharges for Specialty 171	290	Total discharges for Specialty 171	301
Total Discharged Home from NSW	212	Total Discharged Home from NSW	215
% Discharged Home	73%	% Discharged Home	71%
Total transferred to other hospital /ward from NSW	78	Total transferred to other hospital /ward from NSW	86
% Transferred to other hospital / ward	27%	% Transferred to other hospital / ward	29%

### 1.3 Delayed Discharges/ Bed Days Lost on the Neonatal Surgical Ward (NSW)

This is the annual cot capacity occupied by patients who would be more appropriately cared for elsewhere rather than in a surgical cot on the NSW.

Quarter 1	151 Days	11%
Quarter 2	195 Days	14%
Quarter 3	54 Days	4%
Quarter 4	208 Days	15%
Total	608 Days	11%

### 1.4 Nurse Outreach Episodes

	Phone Contacts	Site visits	Total episodes of contact	Number of patients seen across all episodes of care
Quarter 1	35	137	172	27
Quarter 2	29	136	165	26
Quarter 3	25	74	99	22
Quarter 4	14	177	191	16
Annual Total	103	524	627	91

The 91 patients include babies actively discharged early from BCH, babies within BCH and pre-op babies before they arrive at BCH.

## NEONATAL SURGICAL OUTREACH NURSE POST 2010 CONTINUED...

### 1.5 Number of patients transferred out of BCH with outreach support

	Arul	Jawaheer	Jester	Lander	Parashar	Parikh	Singh
Quarter 1	1		3	2		1	2
Quarter 2	1	1	1	3			1
Quarter 3	1		3	1	1	1	2
Quarter 4	1	4	1	5			
Total	4	5	8	11	1	2	5

Quarter 3 –There was a decrease in outreach activity due to annual leave. Education and training continued but was also slightly less.

The overall picture is one of decreasing phone contact with more distant Trusts and increasing number of visits to fewer, level 2 and 3 Trusts, closer to BCH. The trend is for sicker babies being sent to mainly level 3 NNU's (BWH, Heartlands, New Cross and North Staffs). The majority are patients transferred back from PICU, freeing up ventilated cots. As seen from the data above, the number of less dependent patients transferred back from the NSW has not really changed. The number of surgical patients transferred out of BCH using the outreach service has increased over the year.

### 1.6 Support Provided

The kind of support needed by staff caring for these surgical babies has remained constant and is mainly with stoma care, nutrition and fluid balance.

### 1.7 Training and Education

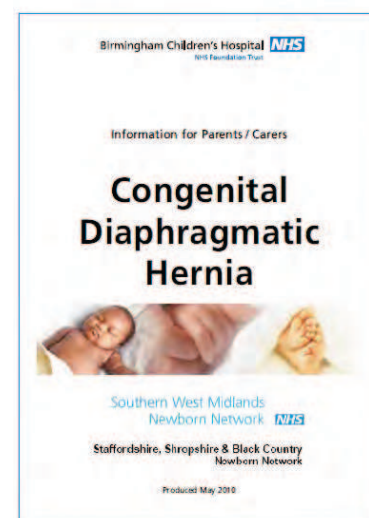
An extensive programme of education has been provided throughout the year for Network staff in general and in particular for BWH and PICU staff. In 2011 the focus will be to extend this to Heartlands staff.

5 Neonatal Nurses have completed the Neonatal Surgical Module and this is now being evaluated.

### 1.8 Parent and Family Support

The Outreach Nurse has attended several outpatient consultations between surgeons and parents for ante natal counselling. Written information about the NSW was provided and all the parents took up the opportunity to visit the ward. All the parents had previously been given the leaflet about the surgical condition by the Fetal Medicine Team.

Outreach Hospital	No. of contact episodes
•B'ham Women's	243
•Heartlands	61
•BCH	39
•New Cross	27
•City	17
•Russell's Hall	15
•Walsall Manor	15
•Sandwell	12
•Good Hope	6
•Coventry	5
•Warwick	5
•Hereford	5
•North Staffs	1





## IUT Audit and Research Study

A poster of the Network IUT Audit was presented at the 2011 Quad Network Conference: 'QUALITY MATTERS' in Loughborough in January 2011. Over 100 IUT's have been recorded, mostly from Royal Wolverhampton Hospital with some from University Hospital of North Staffordshire.

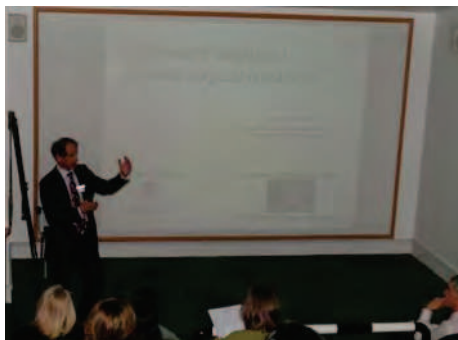
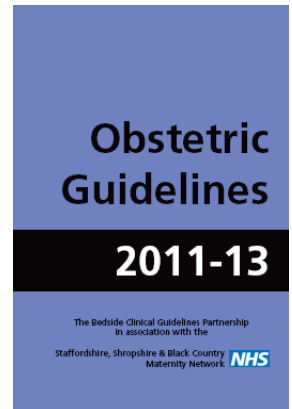
The IUT Research Project is looking at the psychological effect of transfers on parents. It is anticipated the study will be completed by the end of 2011 and the findings will be presented at the Stakeholder event in February 2012.

## Network Obstetric Guidelines

The first edition of the Obstetric Guidelines book has been published and copies of the books distributed to all units in the Network. The book has been compiled as an aide-memoire for all staff concerned with obstetric management, towards a more uniform standard of care across the Network.

The book includes 50 guidelines that have been drafted with reference to published medical literature and amended after extensive consultation. The book is available to purchase by individuals outside of the Network at a cost of £10.00 ISBN 978-0-9557058-2-3. Order forms are available on the maternity website:

<http://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country/guidelines>



**Laurence Wood speaking at the Stakeholder Event**

## Maternity Network Stakeholder & Perinatal Education Day

The Maternity Network Stakeholder event was held at Dudley Clinical Education Centre on the morning of the 11 February 2011, and focused on working together towards choice and quality of maternity services. 70 delegates attended the event and commented on the good mix of presentations that provided an excellent update.

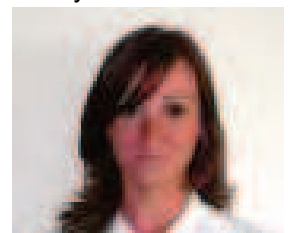
The Perinatal Education event was held in the afternoon and had a surgical theme. 35 delegates attended the event, commenting on the excellent and interesting presentation by Mr Lander and the very good presentations relevant to daily practice.

details will be available in Autumn 2011 on the Maternity Network website:

<http://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country>

## Coordination of the Maternity Network

Sarah Blackburn, Maternity Network Administrative Secretary left the Maternity Network at the end of February 2011. Administration and management support to the Maternity Network is now provided through the Newborn Network.



**Sarah Blackburn**

A Maternity Network Planning Meeting was held on the 1 April and the objectives below were agreed for the Maternity Network for 2011/12:

- Objective 1: To receive feedback on the format and usefulness of the Network Obstetric Clinical Guidelines 2011
- Objective 2: To explore the potential for introducing a common maternity data system
- Objective 3: To develop and share good practice in maternity services
- Objective 4: To obtain robust data on the clinical outcomes and service user experiences of IUT
- Objective 5: To influence maternity service issues being taken forward within the new NHS organisational structures



**Simon Jenkinson, Lead Obstetrician**

Quarterly Maternity Network Planning Meetings with obstetric and midwifery representation from each of the maternity services in the Network are planned in 2011/12 to take forward and monitor progress of the work streams necessary to achieve the objectives.

## NETWORK EDUCATION & TRAINING



### Network Practice Educator Role

In the year of 2010/2011 the role of the Practice Educator continues to be seen as an important aspect of the Network to encourage retention of staff and maintain valuable training across the Network, especially in light of the financial constraints. In view of this Julie Crabtree was seconded into the role of Practice Educator for Staffordshire and Shropshire from Aug 2010 for 11 months part time to keep the role active and provide clinical support to staff, whilst Jo Cookson was on maternity leave. Despite the reduction in the Educator resource, education and training in the Network continued to be developed and taken forward.

**Julie Crabtree**  
Acting Practice Educator (Staffordshire and Shropshire)



**2010 Foundation Training Programme Nurses**

### Neonatal Nurse Foundation Training Programme

Another very successful Foundation Programme was completed. The newly accredited Programme by the University of Wolverhampton was undertaken by eleven nurses from across the Network.



**Lynsey Clarke**  
Practice Educator (Black Country)

Education and training of neonatal staff remains a high priority within the Network and this is verified by the amount of network funding provided for this, as demonstrated in the table below showing details of the education, training and development programme funded by the Network during 2010/11.

Title	No. of Places Used	Cost
Surgical Skills Study Day	12	£78
Ventilation Study Day x 2	52	Nil to Network
Care Pathways Consultation Event	38	£2910
Neonatal Breastfeeding Study Day	21	£170
Bayley III Observational Training and DVD	8	£1061
Quad Network Event - Midlands Matters	13	£360
Developmental Care Study Day	16	£36
Neonatal Care - The Bigger Picture Study Day	2	£90
Neonatal Nurse Foundation Training Programme Study Days x 13	137	Nil
Neonatal Nurse Foundation Training Programme Accreditation	11	£766
Newborn Palliative Care Study Days	61	Funded by the DoH
<b>Total Training Funded by Network</b>	<b>371</b>	<b>£5,471</b>

### Newborn Palliative Care Study Days

The Newborn Networks in the Midlands, successfully secured DOH funding to disseminate and educate on the newly published care pathways around newborn and neonatal palliative care, with a view to improving practice in this area. Lynsey Clarke, Practice Educator, was seconded part time to this project. Lynsey's main role in the project was developing the programmes for and the running of the Palliative Care Study Days that were held in various locations across the Midlands.



**Andy Spencer, Network Lead Clinician, Introducing the Palliative Care Study Day in Walsall**

## NEONATAL PALLIATIVE CARE PROJECT

The three Newborn Networks in the West Midlands successfully applied for a proportion of the Department of Health's £30 million funding to support new children and young people's palliative care projects in 2010. Applications were submitted at the end of July 2010 and the funding released was to be used by the end of the financial year, March 2011.

The scope of the project was widened to include all four Newborn Networks in the Midlands; Southern West Midlands, Staffordshire, Shropshire and Black Country, Central and Trent Perinatal Networks.

### Aims of the Project

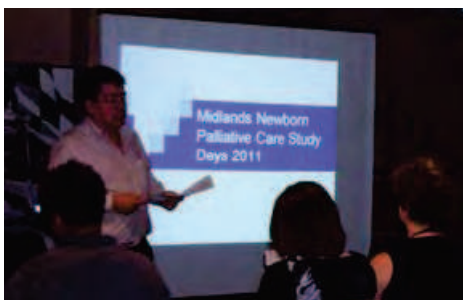
- To establish a co-ordinated approach to neonatal palliative care across all the Neonatal Units within the Midlands.
- To ensure that all staff have the knowledge and skills to care for neonates in need of palliative care, and their families.
- Make sure that the babies and families in the Midlands receive care in line with ACT, BLISS, GMC, and BAPM publications.
- To improve the experience of babies and families.
- To ensure that the needs of all faiths are addressed and understood.
- To ensure equity of care within the Midlands.
- To provide multidisciplinary Study Days ensuring that all neonatal/maternity staff caring for babies do so to the highest standards.
- Understand what parents really want from professionals
- Produce an Integrated Comfort Care Pathway (ICCP) for newborns in the Midlands.

### Development of the Project

- First meeting of Network Leads was held on 14<sup>th</sup> October 2010.
- Sign-up of Network Boards obtained, the Project Board formed, Project Lead & regular meeting arranged.
- The 4 Networks' existing management structures were used to support the project.

### Outcomes of the Project

- Seven Palliative care study days were delivered with 540 people attending in total from across the four newborn networks (2 different programmes, 5 X 1st Study Day and 2 X 2nd Study Day programmes held)
- An Integrated Comfort Care Pathway for Newborns was developed for use in the Midlands
- Memory boxes were provided, to all neonatal units, and a process to replenish these supplies established, so that all bereaved families in the Midlands had access to these to keep mementoes of their babies in
- A neonatal e-learning module was developed in conjunction with the University of Coventry Palliative Care Project



Palliative Care Study Day



Memory Box

### Neonatal Palliative Care in Staffordshire, Shropshire and Black Country Newborn Network Plans for 2011/12

Following the work commenced in the West Midlands on Neonatal Palliative Care in 2010/11, it is proposed in 2011/12 to develop a Palliative Care Lead/Champion in each neonatal unit in the Network who would work together to form a Network Special Interest Group to support each other and take forward palliative care initiatives in their unit and across the Network.

To support this, the Network will fund one member of staff from each unit to complete the new Neonatal Palliative Care E-learning Programme available through Coventry University in Autumn 2011.

# FINANCIAL REPORT 2010/11

## Resource Allocation 2010/11

### Recurrent Funding

The Newborn Network infrastructure is funded recurrently by the West Midlands Specialised Commissioning Team (WMSCT). The in year total funding in 2010/11 to support pay and non pay was £273,360 which has remained at the 2009/10 level.

WMSCT provide the funding for neonatal services directly to the Acute Trusts in the Staffordshire, Shropshire & Black Country Newborn Network, the total funding for neonatal services in Acute Trust contracts for 2010/11 was £19,371,603.

There was a total increase of £1,843,720 funding in neonatal services in the Acute Trust Contracts values in 2010/11 in the Staffordshire, Shropshire & Black Country Newborn Network.

### Non Recurrent Funding

There was a total £44,473 underspend carried forward from both the 2009/10 Maternity Network (£12,973) and training budget (£31,500) to provide non recurrent budgets for these in 2010/11.

### Expenditure in 2010/11

Expenditure in 2010/11 is summarised in Table 1.

**Table 1**

<b>Network Infrastructure</b>	<b>Annual</b>	<b>Year End Date</b>	<b>Year End</b>
<b>Recurring</b>	<b>Budget</b>	<b>Expenditure</b>	<b>Variance</b>
Pay	278,525	255,021	-23,504
Non Pay	22,024	21,270	-754
<b>Income</b>			
Guidelines	-355	-355	-25
Non NHS Training	0	0	-900
PCT Staff Recharge	-26,579	-32,096	-5,517
	<b>273,615</b>	<b>243,840</b>	<b>-30,700</b>
<b>Maternity Network</b>	<b>Annual</b>		
<b>Non Recurring</b>	<b>Budget</b>		
Pay	6,473	5,890	-583
Non Pay	6,500	5,284	-1,216
	<b>12,973</b>	<b>11,174</b>	<b>-1,799</b>
<b>Training Budget</b>	<b>Annual</b>		
<b>Non Recurring</b>	<b>Budget</b>		
Training	32,210	5,499	-26,711
Income (Sponsorship/fees)	-2,369	-3,387	-1,018
	<b>29,841</b>	<b>2,112</b>	<b>-27,729</b>

The underspend in the Network Infrastructure was due to the reduction in hours of the Practice Educators following maternity leave in 2010/11. In addition the Network received payment for additional hours the Practice Educator worked on the Neonatal Palliative Care Project (see page 15) between November 2010 and March 2011, the funding came from Solihull Primary Care Trust, host of the Southern West Midlands Newborn Network who received and coordinated the funding from the Department of Health for the Midlands Palliative Care Project. The underspend will be carried forward to fund the Practice Educator secondment post covering maternity leave until the 4 July 2011.

### Maternity Network Budget

The Maternity Network budget was almost fully utilised in 2010/11, the invoice for the stakeholder event had not been processed by year end. As this was non recurrent funding there will not be a Maternity Network budget in 2011/12.

### Training Budget

£5,499 was spent on education and training in the Network. Although less funding was spent on education and training in 2010/11 compared with 2009/10 (£15,736), more staff benefitted, 371 places in 2010/11 compared with 227 places in 2009/10, this was in part due to the Department of Health funding for the palliative care project. Underspend in this budget will be carried forward to provide a budget for Network training and education in 2011/12.

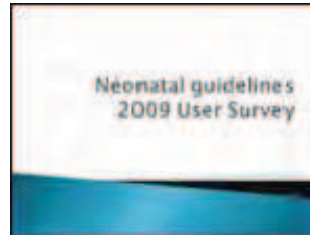
**SPRING 2010**

- Nursing Time Spent Audit presented at the Spring RCPCH meeting
- Participated with BLSS, Picker Institute and other Newborn Networks in the work commenced on the First National Parent Survey of Neonatal Services
- All units in Network commenced collecting data using the Clevermed BadgerNet data system
- A Neonatal Surgical Skills Study Day was held for staff in Network
- Cooling meeting held to consider issues relating to therapeutic hypothermia in the Network and transport



**SUMMER 2010**

- First sampling wave undertaken for national parents survey
- 2009 Neonatal Guidelines user survey completed
- Andy Spencer, reappointed for a final term of office as Lead Clinician
- NHS White Paper, Equity and excellence: Liberating the NHS published
- Network office move (again!)
- Neonatal Surgical Project: Surgical Care Pathways for Antenatal Babies. Meeting held in the Network with Fetal Medicine Specialists and Neonatologists.

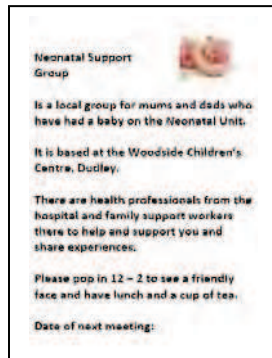


**AUTUMN 2010**

- Network "Influencing the shape of the Network Care Pathways: a Consultation Event" was held
- An export data function was added to the Standards Assessment Tool
- Fifth Network Foundation Programme commenced, newly accredited by Wolverhampton University
- Parent Support Group commenced in Dudley
- Successful bid for DoH funding for Palliative Care Project
- The National Institute for Health and Clinical Excellence (NICE) Specialist Neonatal Care Quality Standards were published
- Second sampling wave undertaken for national parents survey
- Individual Trust visits were conducted with the Network Management Team



Export Data Function SA Tool

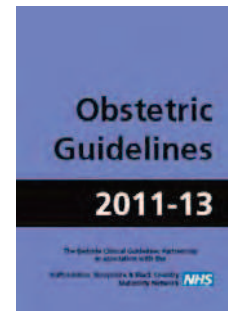


**WINTER 2010**

- Parent Representative (PR) training facilitated by BLISS was held with SWMNN for potential new network PRs.
- Bayley assessment observational training was provided for Network staff
- Quad Network Event 2011: 'QUALITY MATTERS' was attended by 18 staff in our Network
- Maternity Stakeholder & Perinatal Education Events were held
- Network Obstetric Guidelines book published
- Programme of Neonatal Palliative Care Study Days held
- Third sampling wave undertaken for national parents survey
- Helping Hands Parent Support Group commenced in Wolverhampton
- Nursing Time Spent Audit submitted for publication in Archives of Disease in Childhood



Parent Rep Training Feb 2011





## PLANS FOR THE NEXT 12 MONTHS APRIL 2011 – MARCH 2012

### Network Objectives 2011 – 2014:

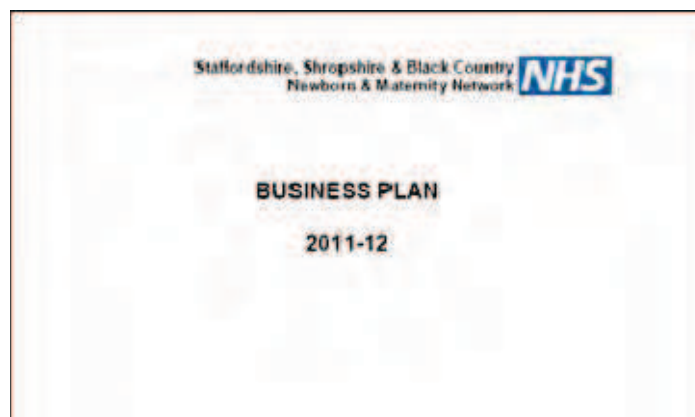
- Objective 1 High Quality data and information to support high quality care
- Objective 2 Best Care For babies and families
- Objective 3 The Network is fit for purpose and able to demonstrate added value

Specific objectives, work programmes, leads responsible and timescales for the forthcoming year will be developed and agreed in a Network Business Plan for 2011/2012. The objectives will include some of the commitments and priorities for the Network identified below:

- To monitor and report activity within each unit in the Network and investigate exceptions to care pathways.
- To update the Network Standards Assessment Tool in line with NICE Quality Standards Specialist Neonatal Care and the Toolkit for High Quality Neonatal Services.
- To develop and implement a monitoring and reporting process of agreed neonatal quality clinical indicators and quality matrixes for use within neonatal services and newborn networks in the West Midlands.
- Finalise and distribute Parent Information Leaflets on how care is organised in the Network.
- Support Network Parent Representatives (PRs) and NICU Teams to set up Helping Hands Support Groups in their area.
- Work with WM cot location, NTS, SWMNN and Commissioners to develop and agree how to implement a single point of telephone contact for clinical advice, cot/maternal bed availability and the Newborn Transfer Service available 24/7.
- The QIPP Group to review the findings of the National Parent Survey and feedback key messages to the Network Board.
- To develop the Network workforce required to deliver the Network work programme.
- PRs to work with the NICU Teams within the Network, to encourage attendance at Helping Hands Support Group and improve the discharge planning process.

The Network Business Plan is available to download from the Network website at:

[www.newbornnetworks.org.uk/](http://www.newbornnetworks.org.uk/)



## CONCLUDING COMMENTS

This will be the last year that I will be writing concluding comments as Clinical Lead. The process for appointing my replacement is well underway. Consequently this gives me the opportunity to reflect on the achievements of the Network since its inception over seven years ago. At the time I wrote a paper with Ruth entitled "Newborn Networks: The Golden Age For Neonatology or Just Another Expensive Re-Organisation?" Although there is still much to be done before the golden age dawns, the achievements of the past year demonstrate that the Network has a clear value and purpose.

The coalition government is determined to collect evidence of quality; quality of care and quality outcomes. To this end unified neonatal data collection is starting to serve us well, regionally we are using the data to develop quality indicators with the West Midlands Quality Institute and nationally we are for the first time participating fully in the National Neonatal Audit. Good outcomes are predicated on quality care from well before birth and so I am absolutely delighted that the Maternity Network has published their first set of clinical guidelines. Ensuring high quality consistent practice is a key role of the Network and so the continued success of the neonatal guidelines is extremely important and we are delighted that South West Midlands Network are joining us in this ongoing venture. Parents are rightly high on the political agenda and so we are proud to be able to report participation in the National Parents Survey.

In reflecting about the past, it is clear that many of the current achievements have resulted from sustained effort to improve across a broad range of initiatives. In addition to the outcomes I have mentioned above we have been party to the development of a comprehensive transport service, we have worked to standardise equipment and reduce costs, we have appointed six network consultants and improved senior cover as a result. We have improved cot capacity and nursing ratios, we have designated units and implemented care pathways, we have undertaken publishable research and network wide audit. We have developed the role of Nurse Educators and shared good practice, we have developed a nursing foundation course and improved recruitment, we have increased preterm breast feeding rates and we have standardised long term follow up across the Network. We have set up Parent Support Groups and we have worked closely with our Commissioners to ensure that the QIPP initiatives achieve real benefits. All of these initiatives and others have been designed to improve the quality of neonatal care and the parent experience. As the NHS is re-organised the challenge for us is to keep working together to make sure that all these initiatives continue to deliver benefits for patients and parents.



**Andy Spencer, Lead Clinician**  
**Staffordshire, Shropshire & Black Country Newborn Network**

# Staffordshire, Shropshire & Black Country Newborn Network



University Hospital of North Staffordshire  
1<sup>st</sup> Floor Admin Area  
Maternity Centre  
Newcastle Road  
Stoke on Trent  
ST4 6QG

Tel: 01782 672381

Website: [www.newbornnetworks.org.uk/](http://www.newbornnetworks.org.uk/)

The Network consists of six neonatal units within the following acute hospitals:

University Hospital of North Staffordshire NHS Trust

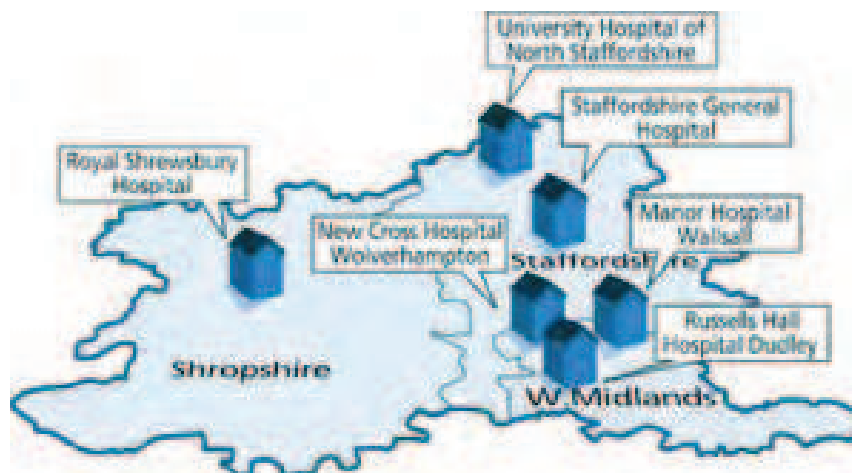
Royal Shrewsbury and Telford Hospitals NHS Trust

Mid Staffordshire NHS Foundation Trust

Royal Wolverhampton Hospitals NHS Trust

Walsall Hospitals NHS Trust

Dudley Group of Hospitals NHS Foundation Trust



Designed and produced by Sarah Carnwell and Ruth Moore

# Agenda Item 3



GIG  
CYMRU  
NHS  
WALES

Bwrdd Iechyd Prifysgol  
Caerdydd a'r Fro  
Cardiff and Vale  
University Health Board

**Ysbyty'r Eglwys Newydd**  
**Whitchurch Hospital**

Park Road, Whitchurch.  
Cardiff, CF14 7XB  
Phone 029 2069 3191

Heol Parc, Yr Eglwys Newydd  
Caerdydd, CF14 7XB  
Ffôn 029 2069 3191

Eich cyf/Your ref:  
Ein cyf/Our ref: PH-jb-03-1794  
Welsh Health Telephone Network:  
Direct Line/Llinell uniongychol: 02920 745682

**Jan Williams OBE**  
**Chief Executive**

20 March 2012

Christine Chapman AM  
Chair  
Children and Young People Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

Dear Ms Chapman

## **Children and Young People Committee – Neonatal Services**

Thank you for your letter dated 21<sup>st</sup> February 2012 in relation to Neonatal services. Cardiff and Vale UHB welcomes the opportunity of contributing to the evidence sought by the Committee.

I will address the issues raised in your letter as follows:-

### Neonatal Action Plan

Attached is the Neonatal Action plan as at the end of December 2011 and details the areas of compliance and those where continued work is ongoing. The action plan is monitored at both a Directorate and Divisional level within Cardiff and Vale and also informs the overall action plan being implemented across the Neonatal Network. The action plans draws on the support of other departments within the UHB eg Capital and Estates and cross divisional/departmental working is required to secure improvement in key areas such as the environment and staffing. Compliance with the standards are RAG rated as shown in the attached plan.

### Annual Report

The latest Annual Report for the Unit is attached. This covers the period 2010/11 (January – December 2010) and the annual report is produced mid-year to ensure all data is captured appropriately to inform the development of the report. In common with the action plan, this report is monitored at the Divisional level and considered at the UHB Quality and Safety Committee. Action plans are put in place to address any issues relating to compliance with standards, staffing or environment and these are regularly monitored by the Divisional Team and any necessary remedial action is taken if there are changes to the plan required. Attached for further information is the categorisation of clinical incidents by type and severity that have arisen within the Unit during the period October 2010 to October 2011.



## Investment Plans

The UHB is currently addressing two key areas for improvement where progress is required to meet the All Wales neonatal standards – adequacy of commissioned capacity and the need for an increased staffing complement.

Work is underway to restructure the physical environment on the Neonatal Unit to increase cot capacity and provide two additional spaces. The Unit is poorly designed and whilst it is fully occupied, a complete redesign is not possible. However, an incremental plan for decanting services within the Unit has been developed that will deliver this increased capacity within the first quarter of 2012. This will support the capacity requirements within the Network arrangements and specifically mitigate the shortfall within the central region.

Further consideration of the future siting of the Unit will be possible following the completion of the Children's Hospital for Wales scheduled for 2014/15.

In relation to staffing levels and skills, the Division is working in conjunction with the Nurse Director, to develop a plan to move towards full compliance with national staffing ratios for Level 1 and Level 2 care. This plan will be completed by end of May 2012 and will be considered alongside the other UHB priorities for investment by the Executive Team. The development of the South Wales Plan for future service provision across a number of specialties may have an influence over this local plan and the UHB will ensure this is factored in to the plan as necessary.

## Costs associated with Cross Border transfers

The UHB does not hold this information as the Welsh Health Specialised Services Committee (WHSSC) commissions this service on behalf of all LHBs. This includes the need for cross-border flows when they become necessary and agreements with English providers of this service. WHSSC should be able to provide the data relating to this but caution must be exercised in its interpretation as each year a number of mothers have, for clinical reasons, to deliver outside of Wales particularly if a service that the mother or baby requires is not available in NHS Wales eg cardiac surgery for the newborn. WHSSC should also be able to advise whether the nature of the flow is related to clinical need or when there are occasions this is due to capacity within the Neonatal network.

Local information demonstrates that during 2010/11 there were twenty-four (24) occasions when the Cardiff and Vale Unit was unable to accommodate the total demand for services and this would have resulted in transfer both within and outside of Wales. Whilst additional cot capacity may help reduce this, it is unlikely that this can be eliminated in full due to the peaks in activity that occurs throughout the year unless excess capacity is created at significant additional cost.

The UHB experiences a small inflow of English residents which is primarily driven by two sources: English visitors to Wales who unexpectedly give birth and whose babies require neonatal care and secondly through reduced capacity within NHS England but this is an infrequent occurrence. Where this arises, the UHB makes every effort to repatriate mothers and babies as soon as clinically appropriate to release capacity for local residents.

## Discussions with WHSSC and neighbouring LHBs

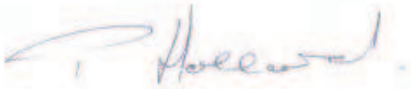
The Committee is aware that the Neonatal Services within NHS Wales operates as a clinical network and that cross organisational planning and collaboration is key to the success of the network. The UHB is fully engaged with the development and delivery of the Neonatal Network Plan and the day to day management of neonatal capacity across South Wales. The needs of the South Central Health Community are being addressed in conjunction with Cwm Taf LHB with particular emphasis on cot capacity across the two major sites. This will feature strongly in the discussions with the Network and WHSSC as commissioners of the service.

## Medical workforce

The numbers of junior doctors in training in Neonatology and Paediatrics in general is a significant issue. The impact of the reduction in numbers and the effect of the European Working Time Directive (EWTD) is having a significant impact on the ability of all units to maintain services that meet national standards. This features highly in the discussions around the development of a South Wales Plan in response to "Together for Health".

I trust that this provides the Committee with the information it requires and I look forward to attending the Committee on 17<sup>th</sup> May 2012.

Yours sincerely



**Paul Hollard**  
**Deputy Chief Executive**

Enc

Standard Number	Standard	Compliance December 2011	Issues to be addressed.	Action Planned	Lead	Timescale for Action
	<b>OBJECTIVE 1: ACCESS TO NEONATAL CARE</b>					
1.1	Neonatal care is commissioned to meet the local and national population need.		A formal needs analysis has not been undertaken in respect to meeting both Local and National need given growth in birth rate and regional centre status for neonatal surgery and complex paediatric conditions. There is a need for more HDU level capacity as identified in the recent all Wales Neonatal Network capacity evaluation.	Work commenced with the new South central neonatal network to determine full extent of local and national needs. Engage with WHSSC to understand its strategic intents for commissioning in the South Central region of the network	Divisional, Directorate and NICU leads.	Jun-12
1.3	There is a clear referral pathway to and from all levels of care. These pathways include: feto-maternal assessment transfer of the mother antenatally (including from home to specialist centre for high risk management) neonatal transfer access for step up from level I to II and subsequent step down access for step up from level II to III and subsequent step down access to other specialist services i.e. surgery, cardiology, neurology and ECMO.		A number of pathways are underway with Obstetric colleagues. Access to levels of care is outlined by all Wales standards. Discussions ongoing with south central NICU community with regard to working together to ensure pathways are in place across different health boards.	Neonatal pathways to be developed as part of network and Transport Service development. Informal processes in place.	Obstetric and Neonatal colleagues in south central community Transport lead for Network	May-12
	<b>OBJECTIVE 2: STAFFING OF NEONATAL SERVICES</b>					
	<b>LEVEL 1 Care in Level III Unit</b>					
2.7	A nursing ratio of 1:1 is provided for babies requiring Neonatal Intensive Care. The named nurse has post registration qualification in Neonatal Intensive Care.		Current core establishments fall short of All Wales standards by 7.7mte for funded ITU and HDU capacity. There is always a named nurse on duty who holds a post registration qualification in NICU.	Senior nurse and Head of Childrens Nursing undertaking a complete review of staffing levels.	Head of Children's nursing/Divisional nurse	May-12
2.8	The unit can provide evidence that the establishment is correct for the number of Neonatal Intensive Care cots commissioned.		As above	As above 2.7	As above	May-12

2.13	Clerical and support staff are in place in all units to provide discharge support, e.g. specialist nurse, liaison health visitor. This is in addition to the clinical establishment.		supporting infrastructures need to be reviewed to determine sufficiency	As above 2.7	Critical Care Lead Nurse and Director Nurse	May-12
<b>LEVEL II Care in Level III Unit</b>						
2.16	A nursing ratio of 1:2 is provided for babies requiring High Dependency care. The named nurse has training in neonatal care.		As 2.7	See above 2.7	Critical Care Lead Nurse and Director Nurse	May-12
2.17	The unit can provide evidence that the establishment is correct for the number of High Dependency cots commissioned.		As 2.7	See above 2.7	Critical Care Lead Nurse and Director Nurse	May-12
2.22	A nursing ratio of 1:4 is provided for babies requiring Special Care.		as 2.7 although staffing for special care cots is made up of 75% band 4 nursery nurses and 25% registered.	See above 2.7	Critical Care Lead Nurse and Director Nurse	May-12
2.23	The unit can provide evidence that the establishment is correct for the number of Special Care cots commissioned.		As 2.7	See above 2.7	Critical Care Lead Nurse and Director Nurse	May-12
<b>OBJECTIVE 3: FACILITIES FOR NEONATAL SERVICES.</b>						
3.1	Neonatal facilities are commissioned based on population need, taking into account local differences.		Work needs to be undertaken with WHSSC with respect to appropriate commissioning of capacity to take account of the specific reasons for high risk maternal deliveries occurring in Cardiff due to the extended paediatric expertise available in the CHfW	Engage with WHSSC to understand its strategic intents for commissioning in the South Central region of the network	Divisional & Directorate Management Teams	May-12
3.5	Support services are readily available. These include: Pharmacy, Dietetics, Therapy, Screening Genetics, Physiotherapy, Social Work, Speech and Language Therapy These include staff with expertise in the care of neonates.		Support services are available within the UHB but access to therapy and social care is limited due to the paediatric demands.	This work can be picked up a part for the overall staffing review	Divisional lead for therapies with the Head of Childrens nursing	May-12
3.6	An agreed appropriate budget is available to purchase and maintain equipment for neonatal care to meet these standards.		All NICU equipment is part of an asset register which has a replacement programme and bids against capital funding is made when necessary.	Equipment is dependent on regular applications for replacement equipment via equipment bids and reliant on endowment fund supplements.	Directorate management team	Sep-12
<b>OBJECTIVE 4: CARE OF THE BABY AND</b>						
<b>OBJECTIVE 5: TRANSPORTATION</b>						
5.2	Arrangements are in place in partnership between maternity and neonatal units for the timely transfer of the mother (in-utero transfer) when a high-risk situation is anticipated. Written arrangements are in place for the transfer of the neonate who requires care at a level not available at the place of birth.		In-utero transfer policy under development.	Conclude policy development	NICU Lead Clinician/Lead Obstetrician and Head of Midwifery	Sep-12



5.3	Written arrangements are in place for: the transfer of a mother with a high risk pregnancy across the network. the transfer of mother and baby together when moving back to a unit near home.		In-utero transfer policy under development.	NICU Lead Clinician/Lead Obstetrician and Head of Midwifery	Sep-12
5.4	Staff responsible for transfers are in addition to those of the clinical inpatient team.		For the NICU transfers, the service is provided on a 12hour day basis, 7 days per week. For maternal transportation, there is no service and escorts for transferring women out is part of the midwifery staffing levels and does result in reduced staffing levels.	Conclude policy development Is required to be reviewed as part of the midwifery workforce.	Head of Midwifery  May-12
<b>OBJECTIVE 6: CLINICAL PATHWAYS, PROTOCOLS AND</b> 6.3	Protocols are in place to ensure babies are transferred between units within the network according to clinical need. Arrangements are in place with neighbouring networks to ensure a seamless service when babies need to be transferred across in Wales or across the border to England.		Partial	Protocols are being developed by the network .  Discussion are in place with south central NICU community.	ongoing

APPENDIX INCIDENTS BY SEVERITY AND CLASSIFICATION

**Incidents by Category and Severity**

Incidents opened 24/10/10-24/10/11 in SCBU/NNU

	E	D	C	B	A	A+	A++	F	Total
Patient - Access, admissions, transfer, discharge (incl. missing patient)	1	1	0	0	0	0	0	0	2
Patient - Clinical Assessment (incl. diagnosis, scans, tests, assessments)	9	10	0	0	0	0	0	0	19
Patient - Consent, communication, confidentiality	4	0	0	0	0	0	0	0	4
Patient - Documentation (incl. records, identification)	7	0	0	0	0	0	0	0	7
Other - Infection Control Incident eg isolation of patients	2	1	0	0	0	0	0	0	3
Patient - Implementation of care and ongoing monitoring/review	2	1	0	0	0	0	0	0	3
Other - Problems with infrastructure (incl staffing, facilities)	5	1	1	0	0	0	0	0	7
Patient - Device/equipment (Medical)	8	6	0	0	0	0	0	0	14
Patient - Medication	9	0	0	0	0	0	0	0	9
Patient - Treatment, procedure	6	11	0	0	0	0	0	0	17
<b>Totals:</b>	53	31	1	0	0	0	0	0	85

Category A++ to E denotes the level of risk severity ranging from A+++ being severe, to E being little/no impact.

AJW/KAD  
13<sup>th</sup> March 2012  
01443 744803  
01443 744888  
Allison.Williams4@wales.nhs.uk

Mrs Christine Chapman AM  
Chair  
Children & Young People Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

Dear Mrs Chapman

**Re: Children and Young People Committee – Neonatal Services**

Please find below a briefing in response to the areas highlighted in your letter dated the 21st February 2012, in relation to the above services within Cwm Taf Health Board.

1. A copy of current local neonatal action plan, including information about the mechanisms in place to monitor and evaluate the implementation of the key actions within these plans and timescales.

**The current local neonatal action plan is attached with relevant timescales for action. Monthly meetings at Directorate level ensure ongoing action is undertaken and the action plan is monitored via the Chief Operating Officer at monthly operational team meetings, this enables review of progress and escalation of issues or timescale challenges.**

2. A copy of the latest annual report on quality of care (as set out in standard 6.8 of the All Wales neonatal standards), alongside information on the number of instances when patient safety has been compromised.

**The expectation was that this would be available via the badgernet system held by the network, this has not been forthcoming to date. In order to address this the Health Board are in the process of linking into the National neonatal Audit programme which will in future assist in producing an annual report.**

3. An outline of any action taken and any plans for investing into neonatal services in the short, medium and longer term to ensure all services in your area are fully compliant with the Standards.

**As identified within the enclosed action plan a full review of neonatal and children's nursing services is being undertaken and a workforce plan is under development. This will require some re-investment into neonatal nursing in the future to achieve compliance with BAPM Standards. Medium and longer term investment plans are being explored within the network programme.**

4. The costs associated with cross border transfers, including the amount paid to English PCTs for the transfer of neonates as well as the income generated for Welsh providers.

**There have been no costs related to cross border transfers.**

5. Whether you have had any discussions with WHSSC and neighbouring LHB about the overall increase in cots needed and any joint planning as to where they are located and at what level of intensity.

**Monthly meetings are held between Cardiff and Vale UHB and Cwm Taf HB to review all areas of the Neonatal Standards, these meetings have proved beneficial and have assisted in the following areas:**

**Improved communication**

**Improved transfer arrangements (reducing delays)**

**Development of a rotational programme for staff**

**Alignment of clinical practice**

6. Whether any work has been undertaken with neighbouring Boards or the Welsh Government via WHSSC, on workforce planning to address what impact changes to junior doctor recruitment and the number of training places in the future will have on services in the coming years.

**The Health Board has plans in place to meet the shortfall in junior doctor's recruitment in the short term and is fully engaged in the ongoing regional work which is being undertaken.**

Yours sincerely

		Compliance Dec 2011	comments	Action Planned	Timescale for Action
<p><b>OBJECTIVE 1: ACCESS TO NEONATAL CARE</b>  Rationale: All newborn babies who require over and above the normal birth pathway have equitable access to the appropriate level of care in a timely manner.</p>					
1.1	Neonatal care is commissioned to meet the local and national population need.		Local services in the main are able to provide care to level 2 babies, however accessing IC support is often problematic and may result in IC babies remaining within the unit for longer periods than would be expected. This may also result in high risk maternity cases being delivered locally when they require IC services as transfer of mother is deemed to be unsafe	To continue to work with the network to increase IC availability by enabling transfer of HDU and SC babies back to level 2 units	Ongoing
1.2	Neonatal care is available at all levels as close to home as possible as part of a MCN. Each MCN has defined Level III unit(s).		Although all levels of care are provided locally (within network) these services are not always available when required		

1.3	<p>There is a clear referral pathway to and from all levels of care.</p> <p>These pathways include:  feto-maternal assessment  transfer of the mother antenatally (including from home to specialist centre for high risk management)  neonatal transfer  access for step up from level I to II and subsequent step down  access for step up from level II to III and subsequent step down  access to other specialist services i.e. surgery, cardiology, neurology and ECMO.</p>		<p>Relevant pathways are clear and there are local guidelines and risk assessments in place to ensure transfers are both safe and timely and are led by Consultant staff.</p>	<p>There is a need to develop monitoring systems within Cwm Taf to identify when IC care is being provided and when the network are contacted for support to monitor occasions when IC support is not available</p>	End February
1.4	<p>Effective communication mechanisms are in place for access to and discharge from level I, II and III services.</p>			<p>Develop Monitoring systems to identify delays in discharge/transfer between hospitals and home</p>	End Feb
<p><b>OBJECTIVE 2: STAFFING OF NEONATAL SERVICES</b>  Rationale: Neonatal Services are staffed with appropriately trained, multi-disciplinary professional teams, according to the level of service they provide.</p>					
2.1	<p>All units involved in the care of babies have established arrangements for the prompt, safe and effective resuscitation and stabilisation of babies.</p>			<p>Monitor any clinical incidents</p>	In place
2.2	<p>Staff trained in neonatal resuscitation are available at every birth. When delivery of a baby at &lt;30 weeks gestational age is anticipated, a consultant or career grade/training grade doctor with neonatal training and experience should also be present.</p>			<p>Monitor training records</p>	In place

2.3	All staff involved in the delivery of high- risk pregnancies are trained to recognise and manage neonatal and obstetric emergencies.							In place
2.4	When a delivery is planned at <28 completed weeks, arrangements are in place for the baby to be delivered at a level III centre.							In place
2.5	All neonatal units have a designated neonatal nurse with protected time dedicated to providing teaching and education of the neonatal team.							End Feb 2012
2.6	All MCNs should have in place a MCN with a clinical Chair who has time dedicated to the role.							
<b>LEVEL I Care in Level III Unit Neonatal Intensive Care</b>								
2.7	A nursing ratio of 1:1 is provided for babies requiring Neonatal Intensive Care. The named nurse has post registration qualification in Neonatal Intensive Care.							
2.8	The unit can provide evidence that the establishment is correct for the number of Neonatal Intensive Care cots commissioned.							
2.9	Level III unit consultants have their principal duties to the Neonatal Intensive Care Unit. There is a neonatal consultant on-call rota.							
2.10	All consultants appointed to Trusts with Level III units have CCST in Paediatrics, Neonatal Medicine or equivalent training.							
2.11	A Level III unit has a separate middle grade staff rota.							

Transfer documentation and risk assessments are in place for safe transfer. Issue arise when there are lengthy transfers required due to lack of IC capacity within the region  
Cwm Taf are not entirely compliant and this is being reviewed.

Network

N/A

Monitor training

Monitor transfer destinations

Establishment review to be undertaken


2.12	A Level III unit has SHO/SHO equivalent dedicated to the neonatal service.				
2.13	Clerical and support staff are in place in all units to provide discharge support, e.g. specialist nurse, liaison health visitor. This is in addition to the clinical establishment.				Feb 2012
2.14	Follow up support near the baby's home is provided by the local community children's nursing team in liaison with a specialist neonatal nurse.		There is no dedicated neonatal liaison nurse however neonatal staff support discharges		Feb 2012
2.15	Every level III unit should have a designated senior nurse manager who is supernumerary to the staff establishment. An element of this role will be to manage the Level III unit and its relationship with Level I and II units in its network.				
<b>LEVEL II Care in Level II Unit Neonatal High Dependency Care</b>					
2.16	A nursing ratio of 1:2 is provided for babies requiring High Dependency care. The named nurse has training in neonatal care.		Substantive staffing levels are below BAPM standards at present, however bank staff (that are neonatal trained and known to the unit) are utilised and maintain staffing levels at BAPM standards on a day to day basis.		Feb 2012



2.17	The unit can provide evidence that the establishment is correct for the number of High Dependency cots commissioned.		Substantive staffing levels are below BAPM standards at present, however bank staff (that are neonatal trained and known to the unit) are utilised and maintain staffing levels at BAPM standards on a day to day basis.	Feb 2012
2.18	A Level II unit has one consultant who is responsible for the direction and management of the unit including the monitoring of clinical policies, practice and standards.		In place	Will form part of establishment review
2.19	A Level II unit has 24-hour availability of a consultant or non consultant career grade doctor with neonatal training. This consultant can evidence up to date CME in neonatology and new developments.		In place	
2.20	A Level II unit has trained and experienced middle grade staff readily available to resuscitate and stabilise babies unexpectedly requiring short term intensive care.		In place	
2.21	A Level II unit has SHOs/ANNPs dedicated to the neonatal service.		In place in RGH not dedicated SHO in PCH	
<b>LEVEL III Care in Level I Unit Neonatal Special Care</b>				
2.22	A nursing ratio of 1:4 is provided for babies requiring Special Care.		Substantive staffing levels are below BAPM standards at present, however bank staff (that are neonatal trained and known to the unit) are utilised and maintain staffing levels at BAPM standards on a day to day basis.	Feb 2012

2.23	The unit can provide evidence that the establishment is correct for the number of Special Care cots commissioned.		Substantive staffing levels are below BAPM standards at present, however bank staff (that are neonatal trained and known to the unit) are utilised and maintain staffing levels at BAPM standards on a day to day basis.	Will form part of establishment review	Feb 2012
2.24	A Level 1 unit has a designated consultant paediatrician responsible for the clinical standards of care of the newborn babies.			In place	
<b>OBJECTIVE 3: FACILITIES FOR NEONATAL SERVICES, INCLUDING EQUIPMENT</b> Rationale: Appropriate, up to date and safe equipment and facilities are available to care for babies with neonatal care needs and their families.					
3.1	Neonatal facilities are commissioned based on population need, taking into account local differences.		Neonatal Capacity review undertaken in December 2012 identifies that there are a lack of SC cots within RGH which affects our ability to maintain HDU capacity	Action plan to reduce SC admissions and expedite SC discharges/ transitional care is under development	Action plan to be completed by March 2012
3.2	Neonatal facilities are adjacent to labour suites.			In place	
3.3	All units within a MCN have in place an IT infrastructure that allows consistent information to be collected and collated across the network.			In place	
3.4	All neonatal units are able to transfer clinical details of a baby electronically when a baby is transferred.			In place	

3.5	<p>Support services are readily available. These include:  Pharmacy  Dietetics  Therapy  Screening  Genetics  Physiotherapy  Social Work  Speech and Language Therapy  These include staff with expertise in the care of neonates.</p>		In place
3.6	<p>An agreed appropriate budget is available to purchase and maintain equipment for neonatal care to meet these standards.</p>		In place
3.7	<p>Joint working arrangements are in place with the local Medical Technical Department responsible for equipment safety and maintenance including the blood-gas analyser.</p>		In place
3.8	<p>24-hour laboratory services are available which are orientated to neonatal needs.</p>		In place
3.9	<p>Each cot on a Neonatal Intensive Care Unit or High Dependency Unit has the following equipment:  a. Incubator or unit with radiant heating  b. Ventilator* and NCPAP driver with humidifier  c. Syringe/infusion Pumps  d. Facilities for monitoring the following variables:  i. Respiration  ii. Heart rate  iii. Intra-vascular blood pressure  iv. Transcutaneous or intra-arterial oxygen tension  v. Oxygen saturation  vi. Ambient Oxygen. * Intensive Care Cot only</p>		In place

<p>3.10 Each Neonatal Intensive Care or High Dependency Unit has access to the following equipment:</p> <ul style="list-style-type: none"> <li>a. Resuscitation</li> <li>b. Blood gas analysis (on the neonatal unit by unit staff)</li> <li>c. Phototherapy</li> <li>d. Non-invasive blood pressure measurement</li> <li>e. Transillumination by cold light</li> <li>f. Portable x-rays</li> <li>g. Ultrasound scanning</li> <li>h. Expression of breast milk</li> <li>i. Transport equipment (including mechanical ventilation)</li> <li>j. Instant photographs (consent based).</li> </ul>			
<p>3.11</p>			
<p>3.12</p>			
<p>3.13</p>			
<p>3.14</p>	<p><b>OBJECTIVE 4: CARE OF THE BABY AND FAMILY/PATIENT EXPERIENCE</b>  Rationale: The baby and the family receive holistic child and family centred care as close to home as possible, with ease of access to specialist centres when this care is required.</p>		
<p>4.1</p>		<p>Breast feeding is actively encouraged in the unit.</p>	
<p>4.2</p>		<p>Breast feeding is facilitated by the provision of breast pumps, an area for expressing and for storing expressed milk.</p>	

In place

In place

In place

4.3	<p>Access to the following support services are available:</p> <ul style="list-style-type: none"> <li>Social Worker</li> <li>Spiritual Adviser</li> <li>Bereavement Counsellor</li> <li>Breastfeeding support staff</li> <li>Psychological/Psychiatric Advice</li> <li>Multi-ethnic health advocates and translators.</li> </ul>		In place
4.4	<p>Post discharge care is provided for all babies by appropriate staff with specialist training.</p>		In place
4.5	<p>Resources are available to support parent training.</p>		In place
4.6	<p>Information is available at all antenatal facilities about post natal service provision.</p>		In place
<p><b>OBJECTIVE 5: TRANSPORTATION</b>  <b>Rationale: A transport service, staffed by trained personnel is in place 24/7 for all areas of Wales, to provide rapid and timely transport for neonates to and from appropriate service across the network and country boundaries.</b></p>			
5.1	<p>Transport services are planned and commissioned on an all Wales basis with working arrangements in place for each network and across the border with England. All units accepting and/or referring neonates have, or have access to, an appropriately staffed and equipped transport service.</p>		In place
5.2	<p>Arrangements are in place in partnership between maternity and neonatal units for the timely transfer of the mother (in-utero transfer) when a high-risk situation is anticipated. Written arrangements are in place for the transfer of the neonate who requires care at a level not available at the place of birth.</p>	<p>CHANT service available 12 hours a day outside of this time transfers are reliant on WAST, on occasions transfers are made via WAST during day time hours when appropriate</p>	Monitor transfer issues
			In place

5.3	Written arrangements are in place for: the transfer of a mother with a high risk pregnancy across the network. the transfer of mother and baby together when moving back to a unit near home.		Written guideline for transfer and risk assessment of in utero transfer in place	Develop appropriate guideline for mother and baby transfer	End March 2012
5.4	Staff responsible for transfers are in addition to those of the clinical inpatient team.		No written guideline for transfer of mother and baby in place at present		
5.5	Each unit keeps a detailed log of all transfers including unmet requests with the reasons. This information should be included as part of the MCN annual audit process.		Staff are made available in addition to the clinical teams when transfers arranged Log of transfers kept unmet need issues not always recorded	Develop system to monitor all requests and escalate issues	Feb 2012
<b>OBJECTIVE 6: CLINICAL PATHWAYS, PROTOCOLS AND GUIDELINES/CLINICAL GOVERNANCE</b> Rationale: Care will be delivered based on the best available evidence. Pathways and guidelines circulated widely and agreed nationally will ensure that the child receives high					
6.1	Clinical pathways, guidelines and protocols are in place and audited within the MCN. These include as a minimum, hand washing, use of alcohol gel and the care and management of babies requiring: Antenatal steroid administration Surfactant therapy Ventilatory support Fluid management Inotropic support Inhaled nitric oxide ECMO		Partially met	To ensure all local areas identified are met	March 2012
6.2	An agreed protocol is in place for the resuscitation and management of the extremely preterm infant.			In place	

6.3	Protocols are in place to ensure babies are transferred between units within the network according to clinical need. Arrangements are in place with neighbouring networks to ensure a seamless service when babies need to be transferred across in Wales or across the border to England.		Network
6.4	Protocols are in place for: a. Cerebral Ultrasound examination of the brain b. Screening and treatment for retinopathy of prematurity c. Screening for hearing loss d. Screening of hip abnormalities e. Post mortem examination procedures. f. Infection control (including HIV and Hepatitis B )		In place
6.5	Every unit must submit detailed reports on morbidity to the MCN. The MCN will produce an annual report that assesses morbidity.		In place
6.6	All babies with an identified neurodevelopmental condition should be referred to a local child development team.		In Place
6.7	Systems are in place to feed into National Databases - CARIS and CESDI.		In Place

In process of development with MCN

6.8	<p>It is essential that each designated specialist centre:-</p> <ul style="list-style-type: none"> <li>• identifies a named individual who is responsible to the Trust clinical governance lead for the comprehensive capture of information on all neonatal cases admitted to the designated specialist centre;</li> <li>• produce an annual report for the Trust on quality of care;</li> <li>• participate in the all Wales audit programme co-ordinated through the MCN;</li> <li>• participate in national neonatal audit programmes coordinated through the BAPM - set up a clinical audit group;</li> <li>• to consider the audit report produced by the lead clinician and to recommend improvements within the Trust;</li> <li>• audit the service against these standards and report the outcome to the Trust clinical governance committee on an annual basis;</li> <li>• ensure exception reporting to the Trust Board occurs when patient safety is compromised;</li> <li>• ensure systems are in place for reporting, investigating and learning from adverse incidents.</li> </ul>	<p>There are named lead individuals in each unit. The health Board are linking with the national neonatal Audit Programme to ensure an annual report is available for 2012/2013. The Health Board has implemented Badgernet . There are robust governance arrangements in place with incident reporting of all untoward incidents.</p>	
<p><b>OBJECTIVE 7: EDUCATION AND TRAINING/CLINICAL GOVERNANCE</b> Rationale: All members of the multi-professional team are trained to the required standard to deliver a high quality service safely.</p>			
7.1	Staff attending home births, including paramedics are trained in Newborn Life Support (NLS).		In place
7.2	All doctors and nurses caring for critically ill neonates have initial access to and a rolling revalidation programme for Newborn Life Support (NLS).		In place
7.3	Post registration neonatal education is readily available based on a competency framework.		In place
7.4	All staff involved in feeding babies receive training on supporting the family unit for successful breastfeeding.		In place



7.5	Research into neonatal care is a core component of the service.			In place	
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# Agenda Item 4



GIG  
CYMRU  
NHS  
WALES

Bwrdd Iechyd  
Aneurin Bevan  
Health Board

Our Ref: AG/JP

Direct Line: 01495 765072

16 March 2012

Ms Christine Chapman  
Chair  
Children and Young People Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

Dear Ms Chapman

## **Children and Young People Committee – Neonatal Services**

Thank you for your letter dated 21 February 2012 regarding the above and the request for information for the Committee ahead of an oral evidence session to be held after Easter. I am pleased to provide the information requested and for ease of reference I will address each of the bullet points from your letter in turn as follows:

- **A copy of your current local neonatal action plan, including information about the mechanisms you have put in place to monitor and evaluate the implementation of the key actions within these plans with timescales.**

Attachment 1 for is our detailed action plan that we complete for the Network on a 6 monthly basis.

Attachment 2 is our updated action plan towards achieving compliance with the All Wales Neonatal Standards based on the recommendations of the Neonatal Network's 2012 Capacity Review.

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- **A copy of the latest annual report on quality of care (as set out in Standard 6.8 of the All Wales Neonatal Standards), alongside information on the number of instances of when patient safety has been compromised.**

Attachment 3 is a copy of latest Neonatal Annual Report for the Royal Gwent Hospital.

Attachment 4 is a copy of latest Neonatal Annual Report for Nevill Hall Hospital.

- **An outline of any action taken and any plans for investing into neonatal services in the short, medium and longer term to ensure all services in your area are fully compliant with the Standards.**

The Health Board has appointed an additional 10 WTE nurses to its neonatal unit over the last 18 months reducing reliance on nurse bank and agency staffing. You will appreciate that the national shortage of experienced neonatal nurses results in many of the newly recruited nurses requiring skills and competence to care for the most sick and premature babies. As a consequence we have reviewed the induction and training programme where nurses acquire the skills and competencies by the end of a 6 month period rather than previously when this could take up to 2 years to achieve.

The Board recognises that further investment is needed to address the shortfall in compliance with the All Wales Standards. The Health Board plans to continue its investment in nurse staffing on a phased basis and work towards providing the cot configuration and occupancy levels required to meet the recommendations of the 2012 Capacity Review recently published by the Neonatal Network.

A paper on the All Wales Neonatal standards will be considered by the Health Board at its meeting on 28 March 2012. This will propose the appointment of a further 6.2 WTE registered nurses and 1.6 WTE unregistered/nursery nurses in 2012/13.

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- **The costs associated with cross border transfers, including the amount paid to English PCTs for the transfer of neonates as well as the income generated by Welsh Providers.**

Information on our spend outside of the Health Board for neonatal activity is not readily and specifically available on an actual basis. This is because neonatal activity is part of the WHSSC portfolio so all costs get charged there in the first instance and are then recharged back to us on a risk share basis. The current forecast level for this is just over £1m for 2011/12 but this will be predominantly for costs with other Welsh Health Boards (mainly Cardiff but a small element for Cwm Taf and ABM as well). In addition, we pay English PCTs direct as part of our contracts (circa £60k this year) but this is predominantly special care baby unit (SCBU) charges as again neonatal activity will be charged to WHSSC either initially or through contract validation.

In terms of income for the Health Board for neonatal activity, as a provider we report neonatal activity within SCBU numbers. The combined income for income for SCBU and neonatal activity in 2011/12 is forecast at c£300k.

- **Whether you have had any discussions with WHSSC and neighbouring LHBs about the overall increase in cots needed and any joint planning as to where they are located and at what level of intensity.**

Discussions have been initiated by the Neonatal Network (which includes all the local Health Boards and WHSSC in its membership) following the very recent publication of the 2012 Neonatal Capacity Review which identifies cot requirements by level by Health Board. Addressing the recommendations of this Review is a priority for Chief Executives and Boards and Neonatal Services are routinely discussed within and across Health Boards.

- **Whether any work has been undertaken with neighbouring Boards, or the Welsh Government via WHSSC, on workforce planning to address what impact changes to junior doctor recruitment and the number of training places in the future will have on services in coming years.**

I can confirm that all Local Health Boards are currently engaged in reviewing the future implications of changes to junior doctor recruitment and availability on services. Collectively the impact on service delivery is being planned through the work currently taking place to develop a South Wales regional plan. Clearly there will be significant issues to work through around

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sustaining some fragile services and different service models. There will be limits on future paediatric posts and future neonatal services have to be managed alongside those solutions.

I hope this information is helpful but if anything further is required please do hesitate to let me know.

Yours sincerely



**Judith Paget**

**Deputy Chief Executive**

**For and on behalf of Dr Andrew Goodall, Chief Executive, and in his absence**

Enc.

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<p>6.8 It is essential that each designated specialist centre:-</p> <ul style="list-style-type: none"> <li>• identifies a named individual who is responsible to the Trust clinical governance lead for the comprehensive capture of information on all neonatal cases admitted to the designated specialist centre;</li> <li>• produce an annual report for the Trust on quality of care;</li> <li>• participate in the all Wales audit programme co-ordinated through the MCN;</li> <li>• participate in national neonatal audit programmes coordinated through the BAPM - set up a clinical audit group;</li> <li>• to consider the audit report produced by the lead clinician and to recommend improvements within the Trust;</li> <li>• audit the service against these standards and report the outcome to the Trust clinical governance committee on an annual basis;</li> <li>• ensure exception reporting to the Trust Board occurs when patient safety is compromised;</li> <li>• ensure systems are in place for reporting, investigating and learning from adverse incidents.</li> </ul>			<p>2012</p>
<p><b>OBJECTIVE 7: EDUCATION AND TRAINING/CLINICAL GOVERNANCE</b>  <b>Rationale: All members of the multi-professional team are trained to the required standard to deliver a high quality service safely.</b></p>			
<p>7.1 Staff attending home births, including paramedics are trained in Newborn Life Support (NLS).</p>	<p style="background-color: red;">Not achieved</p>	<p>Achieved</p>	<p>NLS programme is part of mandatory training for ABHB Community Midwives. Paramedics not under remit of ABHB.</p>
<p>7.2 All doctors and nurses caring for critically ill neonates have initial access to and a rolling revalidation programme for Newborn Life Support (NLS).</p>	<p style="background-color: green;">Achieved</p>	<p>Achieved</p>	
<p>7.3 Post registration neonatal education is readily available based on a competency framework.</p>	<p style="background-color: green;">Achieved</p>	<p>Achieved</p>	
<p>7.4 All staff involved in feeding babies receive training on supporting the family unit for successful breastfeeding.</p>	<p style="background-color: green;">Achieved</p>	<p>Achieved</p>	
<p>7.5 Research into neonatal care is a core component of the service.</p>	<p style="background-color: orange;">Partially achieved</p>	<p>Partially achieved</p>	<p>Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012</p>
			<p>2012/13</p>

<b>OBJECTIVE 6: CLINICAL PATHWAYS, PROTOCOLS AND GUIDELINES/CLINICAL GOVERNANCE</b> Rationale: Care will be delivered based on the best available evidence. Pathways and guidelines circulated widely and agreed nationally will ensure that the child receives high							
6.1 Clinical pathways, guidelines and protocols are in place and audited within the MCN. These include as a minimum, hand washing, use of alcohol gel and the care and management of babies requiring: Antenatal steroid administration Surfactant therapy Ventilatory support Fluid management Inotropic support Inhaled nitric oxide ECMO					Achieved		
6.2 An agreed protocol is in place for the resuscitation and management of the extremely preterm infant.					Achieved		
6.3 Protocols are in place to ensure babies are transferred between units within the network according to clinical need. Arrangements are in place with neighbouring networks to ensure a seamless service when babies need to be transferred across in Wales or across the border to England.					Partially achieved	Protocols still require formalisation between networks	2012/13
6.4 Protocols are in place for: a. Cerebral Ultrasound examination of the brain b. Screening and treatment for retinopathy of prematurity c. Screening for hearing loss d. Screening of hip abnormalities e. Post mortem examination procedures. f. Infection control (including HIV and Hepatitis B)					Achieved		
6.5 Every unit must submit detailed reports on morbidity to the MCN. The MCN will produce an annual report that assesses morbidity.					Ongoing and possible	Further work required through BadgerNet	2012/13
6.6 All babies with an identified neurodevelopmental condition should be referred to a local child development team.					Achieved		
6.7 Systems are in place to feed into National Databases - CARIS and CESDI.					Achieved		

<p>4.3 Access to the following support services are available: Social Worker Spiritual Adviser Bereavement Counsellor Breastfeeding support staff Psychological/Psychiatric Advice Multi-ethnic health advocates and translators.</p>		<p>Not or partially achieved for bereavement counsellors; psychological/psychiatric advice; multi-ethnic health advocates.</p>	<p>Directorate to pursue partnership arrangements in order to develop and provide relevant support services - skills / experience not currently held within the Directorate</p>	<p>2012/13</p>
<p>4.4 Post discharge care is provided for all babies by appropriate staff with specialist training.</p>		<p>Achieved</p>		
<p>4.5 Resources are available to support parent training.</p>		<p>Partially achieved (staff within the unit have taken on these roles in addition to their routine work).</p>	<p>Parent training will be formalised following confirmation of staffing levels - Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012</p>	<p>2012/13</p>
<p>4.6 Information is available at all antenatal facilities about post natal service provision.</p>				
<p><b>OBJECTIVE 5: TRANSPORTATION</b> Rationale: A transport service, staffed by trained personnel is in place 24/7 for all areas of Wales, to provide rapid and timely transport for neonates to and from appropriate service across the network and country boundaries.</p>				
<p>5.1 Transport services are planned and commissioned on an all Wales basis with working arrangements in place for each network and across the border with England. All units accepting and/or referring neonates have, or have access to, an appropriately staffed and equipped transport service.</p>		<p>Achieved with the start of the CHANTS</p>		
<p>5.2 Arrangements are in place in partnership between maternity and neonatal units for the timely transfer of the mother (in-utero transfer) when a high-risk situation is anticipated. Written arrangements are in place for the transfer of the neonate who requires care at a level not available at the place of birth.</p>		<p>Partially achieved (informal agreements and arrangements are in place).</p>	<p>Arrangements to be formalised with written protocols in agreement with the Network</p>	<p>2012/13</p>
<p>5.3 Written arrangements are in place for: the transfer of a mother with a high risk pregnancy across the network, the transfer of mother and baby together when moving back to a unit near home.</p>		<p>Partially achieved (informal agreements are in place agreed by obstetricians and neonatologists)</p>	<p>Arrangements to be formalised with written protocols in agreement with the Network</p>	<p>2012/13</p>
<p>5.4 Staff responsible for transfers are in addition to those of the clinical inpatient team.</p>		<p>Achieved</p>	<p>Achieved but funding only provided for a 12 hour period via the neonatal Transport Network, therefore gap covered by ABHB</p>	
<p>5.5 Each unit keeps a detailed log of all transfers including unmet requests with the reasons. This information should be included as part of the MCN annual audit process.</p>		<p>Achieved with the data available from BadgerNet</p>		





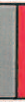

<p>3.6 An agreed appropriate budget is available to purchase and maintain equipment for neonatal care to meet these standards.</p>		<p>Partially achieved (replacement equipment requirements are identified on a rolling basis, however there is no top sliced funding and all replacement items have to be bid for).</p>	<p>Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012</p>	<p>2012/13</p>
<p>3.7 Joint working arrangements are in place with the local Medical Technical Department responsible for equipment safety and maintenance including the blood-gas analyser.</p>		<p>Achieved</p>		
<p>3.8 24-hour laboratory services are available which are orientated to neonatal needs.</p>		<p>Achieved</p>		
<p>3.9 Each cot on a Neonatal Intensive Care Unit or High Dependency Unit has the following equipment:  a. Incubator or unit with radiant heating  b. Ventilator* and NCPAP driver with humidifier  c. Syringe/Infusion Pumps  d. Facilities for monitoring the following variables:  i. Respiration  ii. Heart rate  iii. Intra-vascular blood pressure  iv. Transcutaneous or intra-arterial oxygen tension  v. Oxygen saturation  vi. Ambient Oxygen. * Intensive Care Cot only</p>		<p>Achieved at Royal Gwent Hospital and Nevill Hall Hospital</p>		
<p>3.10 Each Neonatal Intensive Care or High Dependency Unit has access to the following equipment:  a. Resuscitation  b. Blood gas analysis (on the neonatal unit by unit staff)  c. Phototherapy  d. Non-invasive blood pressure measurement  e. Transillumination by cold light  f. Portable x-rays  g. Ultrasound scanning  h. Expression of breast milk  i. Transport equipment (including mechanical ventilation)  j. Instant photographs (consent based).</p>		<p>Achieved</p>		
<p><b>OBJECTIVE 4: CARE OF THE BABY AND FAMILY/PATIENT EXPERIENCE</b>  Rationale: The baby and the family receive holistic child and family centred care as close to home as possible, with ease of access to specialist centres when this care is required.</p>				
<p>4.1 Breast feeding is actively encouraged in the unit.</p>		<p>Achieved</p>		
<p>4.2 Breast feeding is facilitated by the provision of breast pumps, an area for expressing and for storing expressed milk.</p>		<p>Achieved</p>		

2.21	A Level II unit has SHOs/ANNPs dedicated to the neonatal service.						Not achieved at Nevill Hall Hospital (SHO's cross cover General Paediatrics out-of-hours)	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
<b>Level III Care in Level II Unit</b>									
<b>Neonatal Special Care</b>									
2.22	A nursing ratio of 1:4 is provided for babies requiring Special Care.						Not applicable to the Aneurin Bevan Health Board		
2.23	The unit can provide evidence that the establishment is correct for the number of Special Care cots commissioned.						Not applicable to the Aneurin Bevan Health Board		
2.24	A Level I unit has a designated consultant paediatrician responsible for the clinical standards of care of the newborn babies.						Not applicable to the Aneurin Bevan Health Board		
<b>OBJECTIVE 8: FACILITIES FOR NEONATAL SERVICES INCLUDING EQUIPMENT</b>									
<b>Rationale: Appropriate, up to date and safe equipment and facilities are available to care for babies with neonatal care needs and their families.</b>									
3.1	Neonatal facilities are commissioned based on population need, taking into account local differences.						Partially achieved (number of intensive and high dependency cots adequate in number for activity level).	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
3.2	Neonatal facilities are adjacent to labour suites.						Achieved at Royal Gwent Hospital and Nevill Hall Hospital		
3.3	All units within a MCN have in place an IT infrastructure that allows consistent information to be collected and collated across the network.						Achieved with the use of BadgerNet		
3.4	All neonatal units are able to transfer clinical details of a baby electronically when a baby is transferred.						Achieved with the use of BadgerNet		
3.5	Support services are readily available. These include: Pharmacy Dietetics Therapy Screening Genetics Physiotherapy Social Work Speech and Language Therapy These include staff with expertise in the care of neonates.						Achieved at Royal Gwent Hospital and Nevill Hall Hospital		

2.12	A Level III unit has SHO/SHO equivalent dedicated to the neonatal service.						Achieved (gaps in the rota are an ongoing problem though)		
2.13	Clerical and support staff are in place in all units to provide discharge support, e.g. specialist nurse, liaison health visitor. This is in addition to the clinical establishment.						Partially achieved for nursing but they are not in addition to the clinical establishment. The shortage of medical secretarial support for additional Transport consultants is resolved	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.14	Follow up support near the baby's home is provided by the local community children's nursing team in liaison with a specialist neonatal nurse.						Achieved		
2.15	Every level III unit should have a designated senior nurse manager who is supernumerary to the staff establishment. An element of this role will be to manage the Level III unit and its relationship with Level I and II units in its network.						Achieved		
<b>LEVEL II Care in Level II Unit</b>									
<b>Neonatal High Dependency Care</b>									
2.16	A nursing ratio of 1:2 is provided for babies requiring High Dependency care. The named nurse has training in neonatal care.						Partially achieved at Nevill Hall Hospital	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.17	The unit can provide evidence that the establishment is correct for the number of High Dependency cots commissioned.						Not achieved at Nevill Hall Hospital	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.18	A Level II unit has one consultant who is responsible for the direction and management of the unit including the monitoring of clinical policies, practice and standards.						Achieved. (neonatal consultants at the Royal Gwent Hospital take on that role for Nevill Hall Hospital)		
2.19	A Level II unit has 24-hour availability of a consultant or non consultant career grade doctor with neonatal training. This consultant can evidence up to date CME in neonatology and new developments.						Partially achieved (evidence of CME in neonatology may not be available in all)	Further discussions and plans regarding CME in Neonatology in NHH	2012/13
2.20	A Level II unit has trained and experienced middle grade staff readily available to resuscitate and stabilise babies unexpectedly requiring short term intensive care.						Achieved		

1.4	Effective communication mechanisms are in place for access to and discharge from level I, II and III services.						Achieved		
<b>OBJECTIVE 2: STAFFING OF NEONATAL SERVICES</b>									
Rationale: Neonatal Services are staffed with appropriately trained, multi-disciplinary professional teams, according to the level of service they provide.									
2.1	All units involved in the care of babies have established arrangements for the prompt, safe and effective resuscitation and stabilisation of babies.						Achieved in both sites		
2.2	Staff trained in neonatal resuscitation are available at every birth. When delivery of a baby at <30 weeks gestational age is anticipated, a consultant or career grade/training grade doctor with neonatal training and experience should also be present.						Achieved in both sites		
2.3	All staff involved in the delivery of high-risk pregnancies are trained to recognise and manage neonatal and obstetric emergencies.						Achieved at both sites		
2.4	When a delivery is planned at <28 completed weeks, arrangements are in place for the baby to be delivered at a level III centre.						Achieved		
2.5	All neonatal units have a designated neonatal nurse with protected time dedicated to providing teaching and education of the neonatal team.						Partially achieved (this nurse has other duties in addition)	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.6	All MCNs should have in place a MCN with a clinical Chair who has time dedicated to the role.						Achieved		
<b>LEVEL II Care in Level III Unit</b>									
<b>Neonatal Intensive Care</b>									
2.7	A nursing ratio of 1:1 is provided for babies requiring Neonatal Intensive Care. The named nurse has post registration qualification in Neonatal Intensive Care.						Not achieved	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.8	The unit can provide evidence that the establishment is correct for the number of Neonatal Intensive Care cots commissioned.						Not achieved	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13
2.9	Level III unit consultants have their principal duties to the Neonatal Intensive Care Unit. There is a neonatal consultant on-call rota.						Achieved		
2.10	All consultants appointed to Trusts with Level III units have CCST in Paediatrics, Neonatal Medicine or equivalent training.						Achieved		
2.11	A Level III unit has a separate middle grade staff rota.						Achieved (gaps in the rota are an ongoing problem though)		

Compliance with All Wales Neonatal Standards  
 Aneurin Bevan Health Board  
 December 2011

KEY:  
 Fully compliant with standard  
 Some areas of standard not yet achieved  
 Compliance with standard not achieved  
 Not applicable

Standard Number	Standard Text	Compliance December 2010	Compliance March 2011	Compliance June 2011	Compliance December 2011	Compliance Statement at each unit at December 2011	Action Planned	Timescale for Action	
<b>OBJECTIVE 1: ACCESS TO NEONATAL CARE</b> Rationale: All newborn babies who require over and above the normal birth pathway have equitable access to the appropriate level of care in a timely manner.									
1.1	Neonatal care is commissioned to meet the local and national population need.					Partially achieved (the demand for intensive care and high dependency care outstrips current capacity)	Compliance and Development Plan being prepared to set out gap and confirm investment requirements - to be presented to ABHB Executive Group in January 2012	2012/13	
1.2	Neonatal care is available at all levels as close to home as possible as part of a MCN. Each MCN has defined Level III units(s).					Achieved (in principle)			
1.3	There is a clear referral pathway to and from all levels of care. These pathways include: <ul style="list-style-type: none"> <li>feto-maternal assessment</li> <li>transfer of the mother antenatally (including from home to specialist centre for high risk management)</li> <li>neonatal transfer</li> <li>access for step up from level I to II and subsequent step down</li> <li>access for step up from level II to III and subsequent step down</li> <li>access to other specialist services i.e. surgery, cardiology, neurology and ECMO.</li> </ul>					Partially achieved (informal agreements and arrangements are in place)	With the formation of the Neonatal Network, these will be formalised; this work is ongoing	Ongoing	

**WALES NEONATAL NETWORK  
CAPACITY REVIEW 2012 – HEALTH COMMUNITY SUMMARY RECOMMENDATIONS AND ACTION POINTS**

**ATTACHMENT 2**

**Aneurin Bevan Health Board (South East Network Health Community)  
Action Plan updated: 13<sup>th</sup> March 2012**

<b>RECOMMENDATION REFERENCE</b>	<b>NETWORK UNDERSTANDING OF CURRENT POSITION</b>	<b>NETWORK COMMENT</b>	<b>ACTION PLANNED</b>	<b>LEAD</b>	<b>TIMESCALE</b>
5.4.1 pt 4 & 5.4.6 AB is advised to urgently address the shortfall in nurse staffing numbers against the All Wales Standards.	AB has increased its nursing establishment by 10 WTE over the past 18 months reducing reliance on bank and agency.  AB Executive team to consider report on implications of Capacity Review 2012 in March.	Confirmation needed that this has improved the number of hands-on nurses at unit level.  AB have had a detailed Neonatal services compliance and development Plan in place since June 2011.	The ABHB Neonatal Services Compliance and Development Plan was updated in February 2012 and submitted to the ABHB Executive Team to consider the investment options. On the advice of the Executive Team, a paper will now be formally submitted to the Board in March 2012, seeking additional investment in 2012/13  No further action required	Adam Southan, Divisional Director	March 2012
5.4.1 pt 1 AB should confirm dis-establishment of the IC cot in NHH Abergavenny	The AB has confirmed dis-establishment of the IC cot on 28.02.12	Once Badgernet data is available, a retrospective analysis methodology is agreed with the Gwent clinical team to explore in comparison with the rest of the Network.	ABHB (in collaboration with the Network) to benchmark use of intensive care cots with other units (UK wide) with similar mortality outcomes to better understand the link between intensive care utilisation and mortality outcomes. ABHB units	Siddhartha Sen, Clinical Director	September 2012
5.4.1 pt 2 The Network and AB need, in collaboration, to explore why critical care activity in the South East Community appears to be relatively high compared with the other Health Communities in South					

16/03/2012

Version 1

**WALES NEONATAL NETWORK**  
**CAPACITY REVIEW 2012 – HEALTH COMMUNITY SUMMARY RECOMMENDATIONS AND ACTION POINTS**  
**ATTACHMENT 2**

<p>Wales relative to population size.</p>			<p>are currently within the recommended mortality rate and compare well against other similar Welsh units. ABHB also to commission work to analyse local population factors that could create additional demand for intensive care input not explained simply by population numbers.</p>		
<p>5.4.1 pt 3 &amp; 5.4.5                  Scope to reduce low dependency activity should be explored. If no further improvements can be made an additional 4 to 5 SC cots will be required to meet 80% occupancy standard..</p>		<p>Action to be identified in line with Network Review of Low Dependency Care.</p>	<p>ABHB have considered the number of low dependency cots required to be compliant with the standards and meet 80% occupancy (current advice); this is reflected in the updated Compliance and Development Plan. The level of low dependency capacity will continue to be reviewed in line with the continued Network review of low dependency care.</p>	<p>Adam Southan, Divisional Director</p>	<p>Ongoing</p>
<p>5.4.1 pt 6 &amp; 5.4.6                  AB will need to consider the implications of the BAPM Service Standards for Hospitals Providing Neonatal Care 2010 as they</p>			<p>ABHB is reviewing arrangements for the unit situated at Nevill Hall Hospital in relation to the BAPM standards; this work is also tied into the ongoing work of the South Wales Programme</p>	<p>Adam Southan, Divisional Director</p>	<p>September 2012 (anticipated date of report from South Wales Programme Board)</p>

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**WALES NEONATAL NETWORK**

**CAPACITY REVIEW 2012 – HEALTH COMMUNITY SUMMARY RECOMMENDATIONS AND ACTION POINTS**

**ATTACHMENT 2**

<p>relate to medical staffing of Local Neonatal Units and Abergavenny.</p>			<p>Board which is looking at medical staffing and neonatal and paediatric service configuration across the wider network community.</p>		
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**Annual Report 2010  
David Ferguson Neonatal Unit  
Royal Gwent Hospital  
Newport**

**Compiled and written by**

Anitha James  
S Sen

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## Annual Report 2010 - Summary

### **Section 1** **Perinatal Statistics**

There were a total of 3732 babies delivered in the Royal Gwent (including home deliveries) and there were 25 still births. The total births are 4.7% higher than that of the average of the region over the last 5 years, 2005- 2009 (3562 births).

The Perinatal Mortality Rate, Stillbirth Rate and the Neonatal Mortality Rates of the Royal Gwent Hospital (2010) are compared to that of Wales and England, (Table 6) and it is seen that the Royal Gwent Hospital figures, particularly Neonatal Mortality Rates (per 100 live births) compare very well with the national figures.

### **Section 2** **Admissions and Activity** **(Tables 9 to 26)**

There were a total of 395 admissions in 2010, of which 24 were readmissions making a total of 371 infants admitted to the unit. A majority of the admissions (322, 86.8%) were inborn babies which included 25 *in-utero* transfers from other hospitals. Forty eight babies were *retrieved* or *transferred in* after birth from another hospital.

There were 24 readmissions (19 babies) which included babies that had been referred for specialist surgical or cardiac care. A total of 32 specialist referrals out were made and it involved 28 babies. Seventy-seven babies were transferred back to their parent units for follow up care (tables 6-11).

#### **Activity and occupancy:**

The British Association of Perinatal Medicine (BAPM) redefined the categories of care in 2001. These categories of care reflected the increasing complexity of care and resources required for babies in the three categories, Intensive care (IC), High Dependency Care (HD) and Special Care (SC). For historical comparisons, the sum of IC and HD care, under these new definitions approximates to the former BAPM definition of intensive care (Level 1 and Level 2). From table 21 it can be seen that the high level of IC and HD care activity have been increasing steadily and the current figure of 3786 days is 2.5 times the figure in 1994 when the cot allocations were made. The relative drop in SC activity from historical figures is explained by some changes in neonatal practices including earlier discharges and repatriation of many stable babies to level 2 units. Also, the Transitional Care, which has been in operation for the last 7 years, has prevented 116 admissions to the Unit and accounted for 236 fewer days of SC.

At the NICU at the Royal Gwent Hospital the funded capacity is based historically on the Stroud Report of 1993: 7 Intensive Care/High Dependency cots (this has never been separated out) and 13 Special Care cots. Since the Interim Business Case (2008) the funded cot capacity was notionally increased to: 7 Intensive care, 7 High Dependency care and 6 Special care cots. The cot occupancy rates have been increasing year on year and the ITU/HDU occupancy currently is currently 80% (unfunded spaces), with a total occupancy rate of 89% (unfunded spaces) against a recommendation of 70% (Table 30). Overall activity is continuing to rise with continuing improvement in survival in babies less than 28 weeks gestation. (Table 31, Fig 3) and increasing birth rates throughout Wales. With the functional de-designation of other neighbouring units as a Level III Unit within a South Wales Neonatal Network this increasing trend in intensive care activity will accelerate. This increase in activity can only be accommodated by an increase in resource allocation.

### **Section 3**

#### **Outcome (Tables 27-35, Figs. 3-4)**

##### Survival:

The outcome for survival has been sustained and been improved across all gestations in 2010 (Table 27 and 32). The 6 year rolling commutative data over the past 20 years shows that survival has increased dramatically in babies of the youngest gestations. During 2004-2010, babies born between 25-30 weeks gestation had a 94% chance of survival to discharge (Table 32).

A comparison of gestation specific survival for all of Wales (including the Royal Gwent Hospital) in 2009 (All Wales Perinatal Survey, 2009) against the Royal Gwent Hospital (2006-2010) figures (Table 33) shows that the RGH compares very well to the all Wales figures across all gestations.

A comparison of birth weight specific survival shows a continued and sustained improvement in survival from historical figures in all weight bands but particularly in the lower weight bands (table 34).

##### Short term morbidity:

###### Sepsis:

Blood culture proven sepsis was seen in 9.2% of all admissions. This figure was 11% for 2009 and 12.1% in 2008. Our report from the Vermont Oxford database report (Table 37) however shows that our late onset infection rates among VLBW infants is very high and most are related to percutaneous long lines. We have introduced the long-line care bundle in 2011 and expect some improvement in these figures.

###### *Chronic lung disease (CLD), Retinopathy of prematurity (ROP stage 3), Intraventricular haemorrhage (IVH grades 3 and 4) and Necrotising enterocolitis (NEC):*

Short term morbidity in surviving babies born between 401-1500g is presented in table 35. Chronic lung disease (CLD) was seen in 18%, necrotising enterocolitis (NEC) in 9.6% and Grades 3 and 4 intraventricular haemorrhages (IVH) was seen in 8.1% in this group. Stage 3 retinopathy of prematurity (ROP) was seen in 9.6%. All these figures are comparable to previous years and published literature.

##### Long term morbidity:

For premature babies of 30 weeks gestation and less born in 2005, follow-up data at 2 years of age was analysed using the National Perinatal Epidemiology (NPEU) criteria. Neuromotor impairment was seen in 10%, hearing impairment 2%, visual disability 0% and growth failure 32%. These figures compare very well to published figures. These data were collected retrospectively, and from the next year, we would be able to present more accurate and comprehensive data from the ongoing 2 year neurodevelopmental clinic database.

### **Section 4**

#### **Benchmarking (Tables 36-38, Figs. 5-9)**

The Vermont Oxford Network (VON) is a network collaboration of over 700 neonatal units, mainly in the USA and includes about 20 units from the UK. Since 2007, we have been submitting our data to the VON for benchmarking.

The detailed reports for 2007-2010 are presented in figures 5-11 and table 36. As was presented in the Annual Report 2009, most parameters, apart from late infection and coagulase negative staphylococcus infection is within the 1-3 quartiles seen within the network.

The 2010 raw data shows a very similar trend (table 37 and figure 12). These figures show that mortality was significantly lower in the RGH; death or morbidity, necrotising enterocolitis, severe ROP and severe IVH were comparable whereas chronic lung disease (CLD) and coagulase negative staphylococcal infection were higher at the RGH in 2010. The reasons for this are being looked at very carefully, and the high diagnosis of CLD is a reflection of the higher survival rates. The combined data for 2007 to 2010 is presented in a consolidated table (table 38) and in future years, this will be expanded.

### ***New Developments***

- Dr Anneli Allman has continued to provide a detailed neurodevelopment assessment service where all babies <32 weeks are assessed at 2 years corrected. These babies undergo a Baileys assessment and a detailed neurologic assessment. This service has extended to include all babies born at Nevill Hall Hospital.
- Dr Sunil Reddy has started a neonatal murmur clinic at Nevill Hall Hospital
- Dr Sue Papworth leads the liaison with maternity services and a fetal liaison is being developed.
- The BadgerNet neonatal data collecting system has been functional since December 2010 and is now the principle system of data collection.
- A total of 16 babies have been undergone therapeutic hypothermia till December 2010 and reported to the TOBY Encephalopathy Registry.
- The Royal Gwent Hospital has been a part of the Vermont Oxford Network and has been submitting data for the 4<sup>th</sup> successive year.
- Successful recruitment of 2 consultants (Dr Anitha James and Dr Maria Tsakmakis) has taken place as a part of all Wales transport service which became operational in January 2011.

### ***Audit and Research***

- A list of unit audits carried out during 2009-10 is shown in Table 39

### **Staffing**

#### **Medical Staff:**

#### **Senior Medical Staff:**

Dr Siddhartha Sen, Consultant Neonatologist, Clinical Director Neonatal Services.

Secretary: Eireen Sakke

Dr Sue Papworth, Consultant Neonatologist

Secretary: Beverly Collins

Dr Anneli Allman, Consultant Neonatologist

Secretary: Wendy Underwood

Dr Tanoj Kollamparambil, Consultant Neonatologist

Secretary: Beverly Collins

Dr Sunil Reddy, Consultant Neonatologist

Secretary: Eireen Sakke

Dr Aftab Murtaza, Associate Specialist

**Table 1: Middle Grade Staff:**

<b>March 10 - Sep 10</b>	<b>Sep 10 – March 2011</b>
Dr Sarmistha Maity (Specialty Doctor) Dr Anitha James (SpR, Grid Trainee) Dr Ram Venkata (ST3) Dr Deepa Punjwani (Flexible Trainee, ST4) Dr Vaishali Patel (Flexible Trainee, ST4) Dr Ambika Shetty (Flexible Trainee, ST4) Dr Takin Omolukin (ST3) Dr Saurabh Patwardhan (ST3)	Dr Sarmistha Maity (Specialty Doctor) Dr Satish Billa (ST6) Dr Naomi Thomas (ST5) Dr Deepa Punjwani (Flexible Trainee, ST5) Dr Vaishali Patel (Flexible Trainee, ST5) Dr Ram Venkata (ST3) Dr Prasad Parvathamma (Clinical Fellow)

**Table 2: Senior House Officers:**

<b>Feb 10 – Aug 10</b>	<b>Aug 10 – Feb 11</b>
Dr Emily Payne (ST3) Dr Anne-Marie Proctor (Flexible Trainee, ST2) Dr Swapa Abraham (Flexible Trainee FTSTA2) Dr Anu Sharma (ST2) Dr Ian Morris (ST1) Dr Ruth Hanks (ST1) Dr Nathalie MacDermott (ST2) Dr Ifaeyeni Kody Onunkwo (Locum)	Dr Mariangela Labruzzo (FTSTA1) Dr Bassam Al-Hussaini (FTSTA1) Dr Indraneel Adkar (ST2) Dr David Hanna (FTST2) Dr Juliette Oakley (ST1) Dr Sarika Goel (FTSTA2) Dr Naveena Jain (locum FTSTA1)

## Nurse Staffing and Activities

**Table 3: Nurse Staffing**

	WTE	Neonatal Modules	NLS Certified	Additional Qualifications/Roles
<b>Band 8A</b>				
Joan Foy	1.0	1+ 2	Yes	Senior Nurse Manager, Neonatal Services Diploma in Professional Practice, Diploma in Research, Diploma in Infection Control, Diploma in Clinical Effectiveness, RCN Clinical Leadership Programme, LEO Programme, Health and Safety Competent Person BSc Clinical Governance Vital Signs 2 Management Programme
<b>Band 7</b>				
Francis Harries	1.0	1+ 2	Yes	Lead for Community Liaison Service Research Diploma, Teaching and Assessing Diploma, LEO Programme, Venepuncture and cannulation, BSc Clinical Practice, Vital Signs
Nichola Maggs	0.80	1+ 2	Yes	Certificate in Education, Research Diploma, Clinical Effectiveness Diploma, Teaching and Assessing Diploma, Diploma in Professional Practice R23 Module – Enhanced Neonatal Nursing Practice (London), BSc Nursing Studies, Venepuncture and cannulation NLS Instructor. FFP mentorship Vital Signs
Debra Broom	0.64	1+ 2	Yes	Clinical Effectiveness Diploma, Teaching and Assessing Diploma, Diploma in Community Health Studies R23 Module- Enhanced Neonatal Nursing Practice (London), BSc (Hons) Nursing Studies Venepuncture and cannulation FFP mentorship, Vital Signs
Clare Payne	0.64	1+2	Yes	Teaching and Assessing Diploma Research Diploma LEO Programme BSc Nursing Studies FFP mentorship, Vital Signs
Kym Pyne	1.00	1+2 (405)	Yes	State Registered Midwife Teaching and Assessing Diploma Respiratory Module FFP mentorship, Vital Signs
Belinda Cook	0.64	1+2	Yes	Diploma in Professional Practice, Clinical Effectiveness Diploma, Research Diploma, Teaching and Assessing Diploma Venepuncture and cannulation FFP mentorship, Vital Signs, Practice Development Facilitator
Leanne Cridland	0.64	1+2	Yes	BSc (Hons) in Neonatal Nursing LEO Programme FFP mentorship, Vital Signs
Jane Stacey	1.00	1+2 (405)	Yes	State Registered Midwife Teaching and Assessing Diploma R23 Module – Enhanced Neonatal Nursing Practice Seconded to ANNP
Claire Richards	0.64	1+2	Yes	Evidence Based Practice Module Teaching and Assessing Module BSc Clinical Practice, FFP mentorship, Vital Signs, Seconded to WHISC
<b>Band 6</b>				

Pamela Boyd	1.00	1+2	Yes	State Registered Midwife. Teaching and Assessing Diploma LEO Programme Health and Safety Competent Person. FFP mentorship Clinical Teacher
Miriam Sheppard	0.64	1+ 2	Yes	
Susan Watkins	0.96	1+ 2	Yes	Teaching and Assessing Diploma Research Diploma Diploma in Professional Practice Venepuncture and cannulation
Alison Davies	0.48	1+ 2	Yes	Teaching and Assessing Diploma FFP mentorship
Rachel Mackie	0.64	1+ 2	Yes	Degree Nurse Project 2000, Teaching and Assessing Diploma NLS Instructor Enhanced Neonatal Nurse Practitioner -R23 Module (London) FFP mentorship
Susan Woods	0.80	1+ 2	Yes	Venepuncture and cannulation
Niki Harris	1.00	1+ 2	Yes	Teaching and Assessing Diploma, Research Diploma BSc in Clinical Practice Venepuncture and cannulation FFP mentorship
Becky Graves	0.64	1+ 2	Yes	Community Liaison Sister Teaching and Assessing Diploma Higher Education Diploma in Healthcare Evidence Based Practice Module
Jane Lewis	0.80	1+2	Yes	Teaching and Assessing Diploma FFP mentorship
Amanda Bartlett	1.00	1	Yes	Care Pathway Co-ordinator Teaching and Assessing Diploma FFP mentorship
Emma Prytherch- Roberts	0.64	1+2	Yes	Diploma in Nursing (Child) FFP mentorship
Lisa Bickerstaff	0.96	1+2	Yes	Teaching and Assessing Diploma. Evidence Based Research Diploma. BSc In Children's Critical Care FFP mentorship
Paula Wallace	0.64	1+2	Yes	Teaching and Assessing Diploma FFP mentorship
Adele Parfitt	0.80	1+2	Yes	Teaching and Assessing Diploma FFP mentorship
Hannah McIntyre	0.96	1+2	Yes	Evidence Based Practice Module Enhanced Neonatal Nurse Practitioner -R23 Module (London)
Clare Avery	0.96	1+2	Yes	Teaching and Assessing Diploma FFP mentorship
Claire Smallbone	1.00	1+2	Yes	Evidence Based Practice Module Degree pathway
Anna Edwards	0.80	1+2	Yes	FFP mentorship Degree pathway
Ceri Halborg	0.96	1+2	Yes	FFP mentorship Degree pathway
Claire Payne (Goode)	0.64	1+2	Yes	
Dean Pask	1.00	1+2	Yes	FFP mentorship
<b>Band 5</b>				
Julie Seldon	1.00	1+ 2	Yes	Research Diploma Teaching and Assessing Diploma FFP mentorship
Louise James	0.64	1	Yes	Community Liaison Service Teaching and Assessing Diploma
Becki Pembridge	0.64	1+2	Yes	



Tracey Williams	1.00	ENB 402	Yes	Registered General Nurse ENB 998-Teaching and Assessing Research Diploma Essentials in Nursing the Critical Care Patient Diploma, FFP mentorship
Ros Price	0.96	1+2	Yes	Research Diploma Evidence Based Practice Module FFP mentorship
Lyn Franklin	0.64	1+ 2	Yes	Community Liaison Service Teaching and Assessing Diploma
Sue Elliot	0.80	1		FFP mentorship
Rachel Penny	0.64	1+2	Yes	Degree Nurse Project 2000 FFP mentorship
Teresa Kiraly	0.96	1+2	Yes	Degree nurse Teaching and Assessing Degree module FFP mentorship
Emma Rich	0.64			FFP mentorship
Sarah Norris	1.00	1+2	Yes	Degree nurse
Sarah McGee	0.96	1+2	Yes	
Caroline English	0.64	1		
Sarah Porter	1.00	1+2	Yes	Degree nurse
Kayleigh Williams	0.96	1		Degree nurse
Joanne Milton	1.00	1		Degree nurse
Meleri Edwards	1.00	1		Degree nurse
Vanessa Dos Santos	1.00	1		Degree nurse
Ayelet Levi-Brown	0.96			Degree nurse
Lauren Owen	1.00			Degree nurse
Kathryn Price	1.00			Degree nurse
Rachel Roberts	1.00			Degree nurse
Rachel Walker	1.00			Degree nurse
Judith Johnson	1.00	1+2	Yes	
Sian Dobie	1.00	1		Degree nurse
Kay Parker	0.48	1		
Jancy Varghese	1.00			
Rhianne Periam	1.00			Degree nurse
Melanie Davies	1.00			Degree nurse
Maricel Arcenal	0.96			
Kaye Seaward	0.96	1+2		
Rebecca Davies	1.00			Degree nurse
<b>Band 4</b>				
Jane Powell	0.96			NNEB
Chris Kelly	0.96			NNEB
Gill Smith	0.96			NNEB First Aid at Work
Hilary Jones	0.64			NNEB First Aid at Work
Emma Burns	0.96			NNEB First Aid at Work
Lisa Marshall	0.64			NNEB First Aid at Work
<b>Administration Lead for the Service and P.A. to Senior Nurse Manager</b>				
Gill Adams	1.0			
<b>Neonatal Secretaries</b>				
Beverley Collins	1.0			Secretary to S Papworth, T Kollamparambil
Eireen Sakke	1.0			Secretary to S Sen and S Reddy
Wendy Underwood	0.5			Secretary to A Allman
<b>Ward Clerks</b>				
Eireen Sakke	0.53			
Sofia Begum	0.18			
<b>HSW Band 3</b>				
Jayne Josling	1.00			
<b>HCW Band 2</b>				
Tina Conlon	1.00			

**Table 4: Nursing Staffing Levels and vacancies**

Band	Funded	In post	Vacancies	Full Time	Part Time	Total Heads
Band 8A	1	1	0	1	0	1
Band 7	8.00	7.00	1.00 (PDF)	3	6	9
Band 6	19.45	17.32	2.13	4	16	20
Band 5	34.78	21.56	13.22	17	15	32
Band 4	5.12	5.12	0	0	6	6
<b>Total</b>	<b>68.35</b>	<b>52.0</b>	<b>16.35</b>	<b>25</b>	<b>43</b>	<b>68</b>

QUALIFIED (nursing) heads 44 (46.88WTE)  
UNQUALIFIED (nursing) heads 6 (5.12 WTE)

#### **Neonatal Modules and NLS Qualifications**

Total and percentage of staff with both Module 1 + 2 = 41heads = 60% of all qualified staff

Total and percentage of staff with Module 1 only = 8heads = 11% of all qualified staff

Total and percentage of qualified staff with a neonatal module = 49heads = 72% of all qualified staff

Total and percentage of staff with NLS certificate = 43heads = 63 % of all qualified staff

#### **Other activities**

Currently 4 staff are on a Degree Pathway.

Nichola Maggs, Rachel Mackie and Dean Pask are qualified NLS Instructors.

Nichola Maggs is also seconded part time to the Health Boards Resuscitation Service to deliver basic neonatal life support throughout the Trust.

Staff are managed via a teams system. Within the teams, all staff have annual IPR/ KSF via eKSF. There are Neonatal Service Mandatory Study days annually for each team to cover all statutory and mandatory training and updates.

The Practice Development Facilitator is a member of the education sub group for the All-Wales Network.

Staff members are also active in the Outreach sub group for the Network.

Nursing Care Pathways are in place for Discharge, Transport, Bereavement, Neonatal Abstinence Syndrome, Ventilation and Education.

There are many Link nurses and Working Groups in place throughout the Service e.g. Infection Control and Developmental care.

Pamela Boyd remains Secretary of the Neonatal Nurses Association.

#### **The David Ferguson Annual Neonatal Award.**

This is a joint Nursing and Medical Award for outstanding contribution to neonatal services.

The nursing component was won jointly by Senior Sisters Clare Payne and Nichola Maggs for their exceptional work and the development of the Ventilation Pathway.

The medical recipient of the award was given collectively to the registrars for their commitment and dedication to the service.

#### **Presentation at Conferences.**

Senior Sisters Clare Payne and Nichola Maggs presented the Ventilation Pathway at the Inaugural ABHB Nursing Conference, Newport.

#### **Vermont Oxford Network Annual Meeting and Hot Topics Conference Washington DC**

Nursing attendance: Senior Nurse Joan Foy & Senior Sister Claire Richards

### **Development of service in 2010**

Role of Lead Nurse for Welsh Neonatal Network by Joan Foy

A new teaching pathway was developed to teach and assess various aspects of ventilation.

Secondment into Lead for Transport Service by Senior Sister Claire Richards.

In-house transport training began in preparation for the introduction of the All Wales Transport Service.

The Gentamicin care bundle was introduced in-line with the NPSA recommendations.

Preparation for BadgerNet began.

Introduction of service weeks for Band 7's.

Development of the Annual Memorial Service.

Introduction of weekly physio assessments on unit.

Development of the ROP clinic with the Retcam.

Appointment of clinical teacher.

Nurse-led discharge planning meeting reintroduced

### **Future developments in 2011**

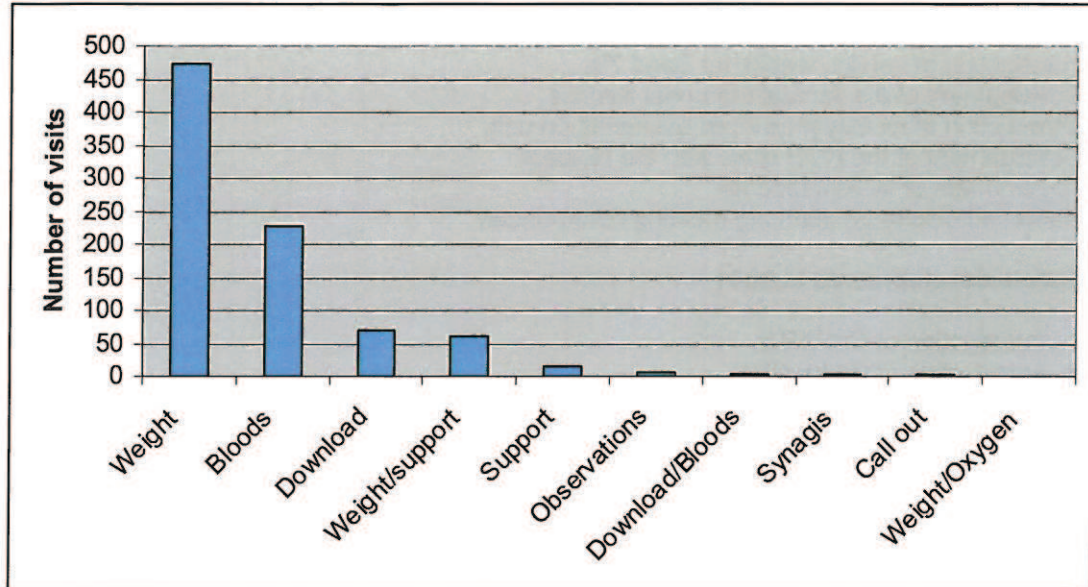
1. Introduction of CHANTS
2. Introduction of BadgerNet
3. Introduction of weekly hand hygiene audits in-line with SPI & 1000 lives
4. Introduction of central line care bundle
5. Appointment of clinical teacher
6. Development of ITU education pathway

## All Gwent Neonatal Liaison Services

The Neonatal Liaison Teams of the Royal Gwent and the Nevill Hall Hospitals have merged into one team and provide cover over both sites.

Total number of babies seen 244  
Total number of visits: 844

Figure 6: Liaison service visits



### Development of service in 2010

A new care pathway for home oxygen is has been implemented.

Nurse led discharge planning meetings have started and have become a routine.

### Future developments in 2010

1. Audit the home oxygen pathway.
2. Review documentation and audit current practice and device new format if required.

# **Section 1**

## **Perinatal Statistics 2010**

**Table 5: Birth and Mortality Statistics RGH 2010** *(includes deaths after transfer/discharge)*

Total no. of mothers delivered		3613
	Twins	40
	Triplets	1
Number of babies born in hospital		3656
Number of home deliveries		76
Total number of babies born		<b>3732</b>
Total still births		25
Total number of live births		<b>3707</b>
Deaths in the delivery suite		0
Early neonatal deaths		4
Late neonatal deaths (168-671 hours)		2
Live births < 500g		1
Still births with congenital abnormalities		0
<b>Uncorrected Rates</b>		
Perinatal Mortality Rate		7.9
Still Birth Rate		6.8
Neonatal Mortality Rate		1.6
<b>Corrected rates (excluding babies &lt; 500g and deaths in delivery room)</b>		
Perinatal Mortality Rate		7.9
Still Birth rate		6.8
Neonatal Mortality Rate		1.3

**Table 6: Perinatal statistics compared**

	RGH 2005-2009*	RGH 2010	Wales 2009*	England, Wales, NI and Crown Dependencies 2009**
Perinatal Mortality Rate	7.7	7.8	7.6	7.6
Stillbirths Rate	5.3	6.7	5.2	5.2
Neonatal Mortality Rate	3.3	1.3	3.1	3.2

\*Source: All Wales Perinatal Survey, Annual Report 2009

\*\* Source: Centre for Maternal and Child Enquiries (CMACE) Perinatal Mortality Report 2009  
Adjusted rates excluding <500g, <22 weeks and lethal congenital abnormalities

**Table 7: Details of deaths in NICU**

Place of birth	Gestation (wks)	Weight (g)	Diagnosis	Days of stay	PM done
RGH	24	840	Prematurity, respiratory distress syndrome, grade IV intraventricular haemorrhage, hypotension	2	No
RGH	24	706	Prematurity, chronic lung disease grade IV intraventricular haemorrhage, abnormal neurology	140	No
RGH	25	770	Prematurity, respiratory distress syndrome, intraventricular haemorrhage, sepsis, disseminated intravascular coagulation	5	No
RGH	39	2930	Perinatal asphyxia, hypoxic ischemic encephalopathy grade 3, renal failure, disseminated intravascular coagulation	3	No
RGH	41	2760	Term, small for gestation, meconium aspiration syndrome, persistent pulmonary hypertension	1	No

**Table 8: Deaths after discharge or transfer**

Place of birth	Gestation (wks)	Weight (g)	Diagnosis	Transfer to	PM done
RGH	24	450	Prematurity, sepsis, necrotising enterocolitis with perforation	74	No

## **Section 2**

### **Admissions and Activity**



**Table 9: Unit Admissions**

	2007	2008	2009	2010
Total Number of admissions:	412	405	374	395
Total Number of readmissions:	16	32	13	24
Total Number of <i>infants</i> admitted:	396	373	361	371

**Table 10: Sources of admissions of inborn deliveries**

Inborn (at RGH)	
Total deliveries	3656
Total live births	3631
No. of Inborn admissions:	323
Total number of inborn babies admitted	
Admitted from delivery suite	268
Admitted from post-natal ward	54
Admitted from CDU	
Readmissions from outside hospital:	48
No of babies admitted to Transitional Care	

**Table 11: Booking status of *inborn* babies**

Hospital	2007	2008	2009	2010
Royal Gwent Hospital	317	292	291	297
University Hospital of Wales, Cardiff	4	2	11	5
Others	13	6	7	4
Singleton Hospital, Swnasea	1	0	5	2
Caerphilly District Miners Hospital	0	3	4	8
Nevill Hall Hospital	7	4	3	2
Royal Glamorgan Hospital	0	1	3	1
Princess of Wales, Bridgend	0	0	2	2
St Michael's Hospital, Bristol	0	0	2	0
Unbooked	1	5	2	1
Prince Charles Hospital, Merthyr	0	0	1	0
Southmead Hospital, Bristol	1	0	0	0

**Table 12: Outborn sources of admission (excluding readmissions)**

Outborn (sources of admission outside maternity Unit)	2007	2008	2009	2010
Total number of infants:	49	56	43	48
Booked at Royal Gwent Hospital	17	14	9	10
Booked elsewhere or un-booked	32	42	34	38
Delivered at				
Nevill Hall Hospital	23	14	13	18
University Hospital of Wales	8	12	5	6
Royal Glamorgan Hospital	0	7	1	1
Southmead Hospital, Bristol	3	6	0	0
Other	3	6	2	2
Caerphilly District Miner's Hospital	4	5	6	7
St Michael's Hospital, Bristol	2	3	4	1
Home	6	2	4	4
Brecon Birth Centre	0	1	0	0
Gloucester	0	0	3	
Prince Charles Hospital, Merthyr	0	0	3	2

**Table 13: Reasons for admission**

Reason for admission	No. of admissions	% Admissions
Prematurity	148	4.4
Respiratory problem	71	19.4
Sepsis or suspected sepsis	25	6.8
Hypoglycaemia	22	6.0
Feeding difficulty	14	3.8
Hypoxic ischemic encephalopathy	13	3.6
For follow up care	11	3.0
Intra-uterine growth retardation	10	2.7
Narcotic abstinence syndrome	9	2.5
Other	9	2.5
For Observation	9	2.5
Neurological problem	8	2.2
Social reasons	5	1.4
Cardiac problem	4	1.1
Apnoeic/choking episode	4	1.1
Congenital abnormality	3	0.8
Haematological problem	1	0.3

**Table 14: Readmissions (in 2010)**

Gestation	BW (g)	Source	Reason for readmission
23	615	Bristol	Following ductal ligation
23	720	UHW	Following laser treatment for retinopathy of prematurity
24	706	UHW	Following ophthalmology review for retinopathy of prematurity
24*	706	UHW	Following laprotomy and ileostomy for sealed perforation
24*	706	UHW	Following stoma reversal
24*	450	UHW	Following surgical review for abdominal distension
24*	450	UHW	Following removal of Hickman's line
25	805	Bristol	Following ductal ligation
25	820	UHW	Following laser therapy for retinopathy of prematurity
25*	855	UHW	Following conservative management for suspected perforation
25*	855	UHW	Following ENT review for stridor
26	550	UHW	Following inguinal herniotomy and orchidopexy
27*	1035	Bristol	Following surgery for meconium ileus perforation
27*	1035	UHW	Following reversal of stoma
28	1280	UHW	Following conservative management of NEC in UHW
29*	1210	UHW	Following GI contrast study and rectal biopsy
29*	1210	Bristol	Following laprotomy for midgut volvulus and B/L inguinal hernia repair
29	1110	NHH	For intensive care
32	1685	NHH	For intensive care
32	1630	UHW	Following ventriculo-peritoneal shunt insertion
38	2635	NHH	For intensive care
38	3740	Bristol	Following repair of tracheo-oesophageal fistula
39	3250	UHW	Following surgical review for bile stained vomiting
40	5750	UHW	Following drainage of testicular haematoma

Numbers with symbols indicate the same baby  
UHW: University Hospital of Wales, Cardiff

### ***Transfer out of Unit***

**Table 15: Destinations of babies transferred out**

Destination	Number
Nevill Hall Hospital for FU care	61
UHW for surgical care/assessment	18
UHW for ROP treatment/assessment	2
UHW for neuro assessment	3
UHW for ENT review	1
UHW for FU care	1
St Michael's Bristol, for cardiac care	4
St Michael's Bristol for surgical care	4
Birmingham Children Hospital for liver care	1
Birmingham Women's Hospital for FU care	1
Royal Glamorgan Hospital for FU care	4
Prince Charles Hospital, Merthyr, for FU care	4
Singleton Hospital Swansea, for FU Care	1
Princess of Wales Hospital, Bridgend for follow-up care	2
Other local hospital for FU care	3
<b>Total</b>	<b>110</b>

**Table 16: Specialist Referrals out**

Gestation	Weight	Hospital	Diagnosis
23	720	UHW for Ophthalmology review	Retinopathy of prematurity for Laser treatment
24	706	UHW for Ophthalmology review	Retinopathy of prematurity for Laser treatment
24*	706	UHW for Surgical care	Perforated bowel (not NEC) with ileostomy
24*	706	UHW for Surgical care	For Hickman line and surgical review of stoma
24*	450	UHW for Surgical care	For abdominal distension with ascitis
24*	450	UHW for Surgical care	For removal of Hickman line following sepsis
24*	450	UHW for Surgical care	Necrotising enterocolitis with obstructed hernia
25	855	UHW for ENT review	ENT review for stridor
25	820	UHW for Ophthalmology review	Retinopathy of prematurity for Laser treatment
25	855	UHW for Surgical care	Small bowel perforation, conservative management
25	855	UHW for ENT review	Stridor : Ulcer in the subglottic area
25*	805	Bristol for cardiac care	Ligation of PDA
25*	805	Bristol for cardiac failure	Repair of ventricular septal defect
27	1075	UHW for surgical care	Meconium ileus with perforation Stoma reversal
28	1280	UHW for Surgical care	Necrotising enterocolitis
29	1210	Bristol for Surgical care	Laprotomy for midgut volvulus
29	1210	UHW for Surgical care	For abdominal distension –for lower GI contrast and rectal biopsy (normal)
29	1600	UHW for Surgical care	Meconium ileus perforation (antenatally), cystic fibrosis positive
32	1.63	UHW for Neurosurgical review	Ventriculo-peritoneal shunt insertion following post haemorrhagic ventricular dilatation
33	1.5	Bristol for Surgical care	
33	2475	UHW for Surgical care	Congenital diaphragmatic hernia
37	1.935	Bristol for Cardiac care	VECTERL association with complex congenital heart disease
37	2.17	Bristol for Surgical care	
38	3.74	Bristol for Surgical care	Oesophageal atresia with suspected tracheo-oesophageal fistula
38	2.755	Birmingham Children Hospital for hepatic care	Choledochal Cyst
38	2.63	UHW for neurology review	Tuberous sclerosis
38	4.45	UHW for Neurology review	Crisponi syndrome
39	3850	UHW for Surgical care	Suspected upper GI obstruction, contrast normal
39	4535	UHW for Surgical care	Subcutaneous fat necrosis
40	4.57	Bristol for Cardiac care	Transposition of great arteries
40	2980	UHW for Surgical care	Inguinal hernia
40	5750	UHW for Surgical care	Testicular haematoma

## NICU Activity

**Table 17: Level of care**

Level of care	Number (%) of admissions needing this level of care		Number (%) of babies needing this level of care	
	2009	2010	2009	2010
Intensive Care	222 (59.8)	238 (60%)	216 (59.8)	226 (61%)
High Dependency Care	237 (63.8)	248 (63%)	231 (63.9)	233 (63%)
Special Care	286 (77.1)	291 (73%)	276 (76.5)	273 (74%)
Normal Care	9	44 (11.5)	9	44 (11.8)
Transitional Care	101	111	111	

**Table 18: Level of care and cot occupancy rates**

Level of Care	No of days	% Occupancy of cots*	% Occupancy of cots**
Intensive Care	1573		62%
High Dependency Care	2213	148%	87%
Special Care	2661	56%	122%
Normal Care	44		
Transitional Care			
Intensive care + High Dependency Care	3786	148%	74%
Total days of care (IC + HD + SC + NC)	6491	89%	89%

\* Based on 7 IC + HDU cots and 13 SC cots that is historically funded

\*\* Based on 7 IC cots + 7 HDU cots + 6 SC cots notionally available

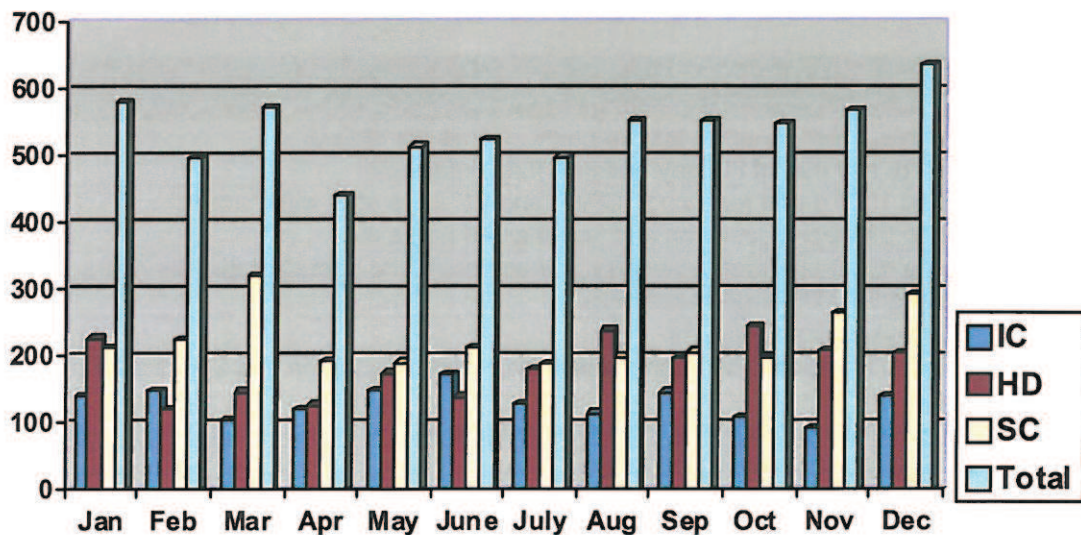
**Table 19: Break-up of Intensive Care activity (BAPM 2001 categories)**

Type of Intensive Care activity	Number of days
1. ET tube respiratory support and 24 hours after its withdrawal	691
2. NCPAP for any part of the day and less than 5 days old	353
3. Less than 1000 g and receiving nCPAP and 24 hours after withdrawal	377
4. Less than 29 weeks gestation and less than 48 hours old	4
5. Requiring major emergency surgery, pre-operative and post operative 24 hours	5
6a. Requiring full exchange transfusion	2
6b. Requiring peritoneal dialysis	1
6c. Infusion of inotropes, pulmonary vasodilator or prostaglandin and 24 hrs after withdrawal	6
7. Any other unstable baby needing 1:1 nursing care	134
8. On the day of the death of the baby	0
<b>Total</b>	<b>1573</b>

**Table 20: Monthly activity**

Month	No of A/D	No of D/S	IC	HD	IC+HDU	SC	Total (IC+HD+SC)
January	31	32	141	227	368	212	580
February	28	28	150	122	272	225	497
March	32	36	106	147	253	320	573
April	32	33	122	127	249	193	442
May	27	30	149	175	324	191	515
June	35	33	173	139	312	213	525
July	27	25	128	182	310	189	499
August	30	28	115	239	354	199	553
September	37	37	147	198	345	207	552
October	33	34	108	244	352	198	550
November	46	45	94	209	303	265	568
December	38	33	140	204	344	293	637
<b>Totals</b>	<b>396</b>	<b>394</b>	<b>1573</b>	<b>2213</b>	<b>3786</b>	<b>2705</b>	<b>6491</b>
Mean	33	33	131	184	316	225	541
Max	46	45	173	244	368	320	637
Min	27	25	94	122	249	189	442

**Figure 1. Monthly activity of level of care**



**Table 21: 18 years comparison of activity (2010)**

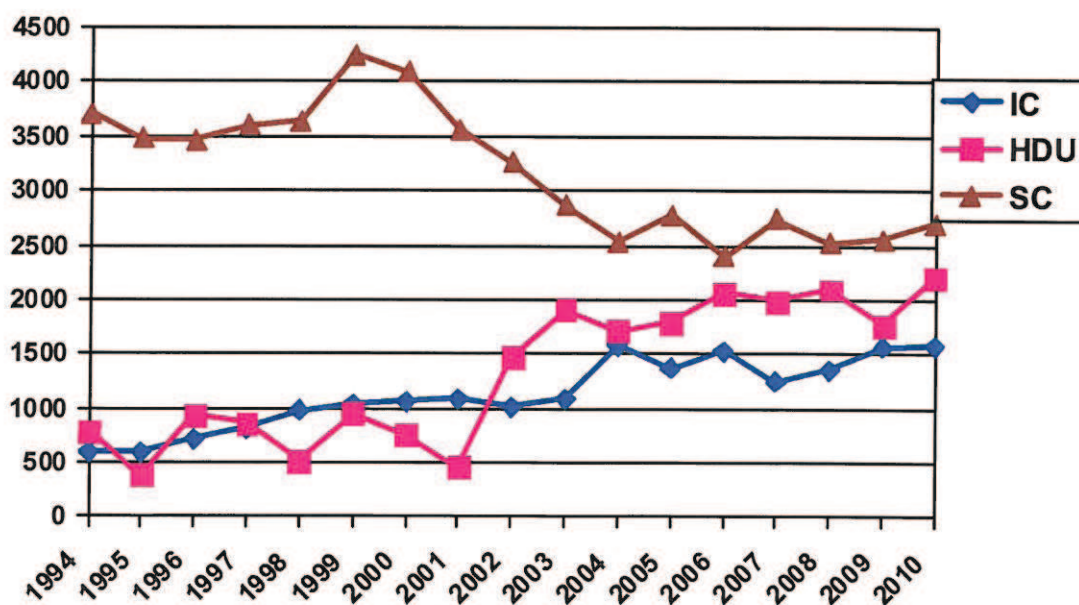
Year	IC	HD	IC+ HD	IC + HD Occupancy	SC Days	SC occupancy	Total (IT+HD+SC)	% Occupancy	
			‡	Φ					
1994	588	788	1376	53		3711	78 <sup>‡</sup>	5057	69
1995	593	390	983	38		3480	73 <sup>‡</sup>	4463	61
1996	714	936	1650	65		3460	73 <sup>‡</sup>	5110	70
1997	809	859	1668	65		3595	76 <sup>‡</sup>	5263	72
1998	981	518	1499	59		3630	77 <sup>‡</sup>	5129	70
1999	1030	951	1981	78		4143	87 <sup>‡</sup>	6124	84
2000	1059	750	1806	71		4092	86 <sup>‡</sup>	5898	81
2001	1090	465	1555	61		3562	75 <sup>‡</sup>	5117	70
2002	1011	1463	2474	97		3252	69 <sup>‡</sup>	5726	79
2003	1080	1906	2986	117		2860	60 <sup>‡</sup>	5846	80
2004	1573	1710	3283	128		2526	53 <sup>‡</sup>	5819	80
2005	1364	1796	3160	123		2778	59 <sup>‡</sup>	5938	81
2006	1522	2064	3585	140		2394	50 <sup>‡</sup>	5991	82
2007	1240	1995	3235	127		2739	58 <sup>‡</sup>	5981	82
2008	1352	2097	3449		73	2517	115 <sup>Φ</sup>	5977	82
2009	1566	1773	3339		70	2559	117 <sup>Φ</sup>	5898	80
2010	1573	2213	3786		80	2705	124 <sup>Φ</sup>	6491	89

‡ Based on historically funded cots (7 IC and HD cots and 13 SC cots)

Φ Based on available but unfunded cot spaces (6+1 IC, 7 HD and 6 SC cots)

(IC= intensive care, HDU= high dependency care, SC= special care)

**Fig 2. Levels of activity 1994-2010**



**Table 22: Respiratory Therapy given**

	No of babies		No of days		Percentage of admissions	
	2009	2010	2009	2010	2009	2010
IPPV	100	76	727		26.9	19.2
CPAP	171	163	1676		46.1	41.2
Only CPAP	103	107	502		27.7	27
HFOV	17	12	71		4.5	3
Nitric Oxide	10	6	38		2.6	1.5
<b>Inborn babies</b>						
	<b>2009</b>	% of inborn admissions	<b>2010</b>	% of inborn admissions		
No. of inborn babies intubated at birth	75	23.5	63	15.9%		
No of babies given surfactant at birth	50	15.7	51	12.8%		

**Table 23: A/N Steroid exposure in inborn babies**

Gestation	Complete	Partial	Nil	Unknown
23-25	50%	21%	29%	
26-28	42%	32%	21%	5%
29-31	82%	12%		6%
32-33	71%	18%	11%	
Total <34	67%	19%	12%	2%
Total Percentage				



**Table 24: Practical procedures/investigations done**

Procedure	Successful	Failed	% babies needing this
UAC insertion	48	7	14.9
UVC insertion	67		18.2
UAC and UVC	45		12.2
Long line	58		15.7
Lumber puncture	37	4	10
	No of Babies	No of procedures	% babies needing this procedure
Cranial Ultrasound	131	432	33.2
EEG	13		3.3
Cardiac Echo	72	146	18.2
Renal Ultrasound	14	14	3.5
X ray		628	
CT/MR Scan	9	9	2.3
Blood cultures	300	512	76

**Table 25: Treatments given**

Treatment	No of babies	% of babies	
<b>Antibiotics</b>			
1 <sup>st</sup> line antibiotics	288	78.2	
2 <sup>nd</sup> line antibiotics	86	23.4	
3 <sup>rd</sup> line antibiotics	41	11.1	
<b>Transfusions</b>			
RBC transfusions	43		122 (total)
Platelets	14		37 (total)
Immunoglobulin	4		
Reduction transfusions	0		
Exchange transfusions	4		
<b>Indomethacin</b>			
Prophylactic only Indomethacin	0		
Prophylactic + treatment Indomethacin	1		
Treatment only Indomethacin	8	2.2% of all babies 11.9% of <32 wks	
<b>Inotropes</b>			
1 <sup>st</sup> line inotropes only	9	2.4	
1 <sup>st</sup> and 2 <sup>nd</sup> line inotropes	1		
1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> line inotropes	7	1.9	
<b>Other</b>			
Phototherapy	121	32.8	
Dexamethasone	11	3	
Under 28 wks	11/25	44	

**Table 26: Significant organisms isolated**

Organism	No
Group B streptococcus	1
Other streptococci	1
Coagulase negative staphylococcus	21 (26 isolates)
<i>Staphylococcus aureus</i>	2
<i>E coli</i>	2
Klebsiella sp	0
<i>Serratia sp</i>	0
Enterococci sp	3
<i>H influenzae</i>	0
<i>Candida albicans</i>	1
<i>Candida parapsilosis</i>	1
Enterobacter	0
MRSA	1
<b>Culture proven sepsis</b>	<b>34/368 (9.2%) of babies</b>



**Annual Report 2010  
Neonatal Unit  
Nevill Hall Hospital,  
Abergavenny**

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## **Summary**

### ***Annual activity and statistics***

2010 has seen an increase in activity at NHH. As before, as a level 2 neonatal unit, it aims to provide high quality high dependency and special neonatal care, and only short term intensive care. In 2009 there was a drop in high dependency and special care days. In 2010 the level of intensive and high dependency care has remained constant, while there has been an increase in special care activity. The occupancy of 12 cots has increased from 61% in 2009 to 66% in 2010. The reasons for this are probably multifactorial, and include an increase in number of infants transferred from RGH for continuing care in NHH.

In 2010 there were 2207 live births, 37 homebirths and 13 stillbirths. There were no early neonatal deaths in 2010. This gives a neonatal mortality rate of 0/1000 live births. The stillbirth rate was 5.8/1000 births in 2010 with a perinatal mortality rate of 5.8/1000 births. These figures are small so must not be over interpreted.

NHH neonatal unit is run by consultant neonatologist ward rounds 3 times per week with consultant paediatrician led ward rounds twice a week and at weekends. There is neonatal advice available 24 hours a day every day. Both RGH and NHH continue to use shared guidelines and drug information formularies which are updated regularly. Clinics for neonatal follow up are held by neonatologists in NHH twice weekly.

RGH continues to provide a 24 hour retrieval service for NHH for sick or preterm infants. This remains unfunded.

Business meetings run monthly and feed into the perinatal meetings, also monthly. All clinical incidents are reviewed at the business meetings, which are multidisciplinary. There is weekly dedicated neonatal teaching for NHH junior and middle grade staff, overseen by the attending neonatologist.

### ***New Developments***

Following some new developments in 2009, including senior staff changes and the introduction of neurodevelopmental assessment clinics, NHH neonatal unit was in status quo for 2010. However preparations began during the latter half of the year in readiness for some major changes in 2011, such as the South Wales transport system and a new data collection system known as "Badgernet".

Dr Christopher Bidder was appointed a sixth consultant general paediatrician at NHH. Dr Bidder's area of interest is endocrinology.

The gentamicin care bundle was introduced as a tool for auditing gentamicin prescription and administration.

"High flow", a system to complement and in some cases replace CPAP was successfully introduced.

## **Staffing**

### **Medical Staff:**

#### **Senior Medical Staff:**

Dr Siddhartha Sen, Consultant Neonatologist, Clinical Director, Neonatal Services  
Dr Sue Papworth, Consultant Neonatologist  
Dr Anneli Allman, Consultant Neonatologist  
Dr Tanoj Kollamparambil, Consultant Neonatologist  
Dr Sunil Reddy, Consultant Neonatologist  
Dr Aftab Murtaza, Associate Specialist

#### **Consultant Paediatricians:**

Out of hours and weekends are covered by the on general paediatric on call team consisting of consultant, middle grade and SHO or PRHO.

Dr T Williams, Lead Clinician, Nevill Hall Hospital  
Dr M J Pierrepont  
Dr M Northey  
Dr Y Cloete  
Dr S Ashtekar  
Dr C Bidder

There is a consultant neonatologist lead ward round every Monday, Wednesday and Friday. According to the on call rota, a local consultant covers Tuesday and Thursday ward rounds. Consultant input is available at all times. FP1, SHO equivalent and middle grade staff are rostered to SCBU 9-5 weekdays to provide a service to the neonatal unit, postnatal ward and delivery suite.

#### **Middle Grade Staff:**

##### **March 2010 -September 2010:**

Dr Bodla (ST4)  
Dr Morgan (ST4)  
Dr HalpinEvans (ST3)  
Dr Varghese (ST4)  
Dr Ozieh (ST3)  
Dr Arun (clin fellow- less than full time)  
Dr Dienst (clin fellow – less than full time)  
Dr Poh (Clinical Fellow)

##### **September 2010-March 2011**

Dr Syed (SpR)  
Dr Glenn (ST4)  
Dr Joy (ST5)  
Dr Patankar (ST3)  
Dr Murch (ST3)  
Dr Arun (clin fellow- less than full time)  
Dr Jaganathan (clin fellow)  
Dr Dienst (clin fellow – less than full time)

#### **Junior Grade Staff:**

##### **March 2010 – September 2010**

Dr Groves (GP ST)  
Dr Davies (GP ST)  
Dr Salek (ST1 paed)  
Dr MacKensie (ST1)  
Dr Quinney (GP ST)  
Dr Jones (GP ST)  
Dr Arnott (F1)  
Dr Beckett (F1)

##### **September 2010 – March 2011**

Dr Cousins (ST1)  
Dr Saif (GP ST)  
Dr Minhas (GP ST)  
Dr Boggaram (FTSTA1)  
Dr Watson (GP ST)  
Dr Beer (GP ST)  
Dr Gillingham (F1)  
Dr Nathwani (F1)

## Nurse Staffing and Activities

**Table 1. Nursing Staffing and Activities**

	WTE	Neonatal Modules	NLS Certified	Additional Qualifications/Roles
<b>Band 7</b>				
Sally PyrahBarnes	1.00	1+2	Yes	Diploma in Child Health RGN RSCN Teaching and Assessing module FFP Mentor
<b>Band 6</b>				
Dawn Edwards	0.80	1+ 2	Yes	Research Diploma Teaching and Assessing Diploma LEO Programme FFP mentorship Infection Control Champion
Chris Jones	0.80	1+ 2	Yes	Research Diploma Teaching and Assessing Diploma Clinical Effectiveness Diploma Examination and assessment of the Newborn – Degree Module Breast Feeding Link Nurse FFP mentorship
Angela Francis	0.80	Module 2	Yes	Research Diploma Teaching and assessing Diploma Certificate in Health Education
Dawn Flower	1.00	1+ 2	Yes	Teaching and Assessing Diploma Bereavement Care Link Nurse FFP mentorship
Joanne Bartlett	1.00	1+ 2	Yes	Teaching and Assessing Diploma Evidence Based Practice Degree Module Leadership and Management Degree Module Developmental Care Link Nurse Intravenous Group Link Nurse FFP mentorship
Merenna Williams	0.8	1+ 2	Yes	Teaching and Assessing Diploma Infection Control Link Nurse
Jayne Cleaves	1.0	1+ 2	Yes	Research diploma
Dean Pask	1.0	1+ 2	Yes	Teaching and Assessing Diploma Manual Handling Link Nurse
Jan Lewis	0.8	1+ 2	Yes	Conversion Course Teaching and Assessing Certificate Common Core Certificate
Jo Jones	1.0	1+ 2	Yes	Evidence based practice module
<b>Band 5</b>				
Lyn Mugridge	1.0	Module 1+2	Yes	Registered Midwife Breast Feeding Link Nurse
Kath Goodenough	0.64	Module 1+2	Yes	
Laura Shepherd	1.0	1+2	Yes	
Lara Roberts	1.0	1+2	Yes	
Rhiannon Thomas	1.00			Degree nurse
<b>Band 4</b>				

Ann Vincent	1.0			NNEB Open University Child Care Certificate PPA Teaching Certificate Breast Feeding Support Certificate First Aid in the Workplace Certificate Bereavement Care Link Nurse
Marjorie Donnelly	0.8			NNEB Breast Feeding Support Certificate First Aid in the Workplace Certificate
Deb Law	0.8			NVQ – nursery nurse Breast Feeding Support Certificate First Aid in the Workplace Certificate
<b>Liaison Service Band 6</b>				
Lisa Jones	0.64	1+2	Yes	Health Visiting degree Teaching and Assessing certificate
<b>Health Care worker</b>				
Deborah McCann	1.0			
<b>Administration Lead for the Service and P.A. to Senior Nurse Manager</b>				
Gill Adams	1.0			
<b>Neonatal Secretaries</b>				
Sian Webster	1.0			

**Table 2. Nursing Staffing Levels and vacancies Nevill Hall**

Band	Funded	In post	Vacancies	Full Time	Part Time	Total Heads
Band 8A					0	
Band 7	1.0	1.00	0	1		1
Band 6	9.2	9.0	0.2	5	5	10
Band 5	4.64	4.64	0	4	1	5
Band 4	2.60	2.60	0	1	2	3
<b>Total</b>	<b>17.2</b>	<b>17.44</b>	<b>0.2</b>	<b>12</b>	<b>7</b>	<b>19</b>

QUALIFIED (nursing) heads 16  
UNQUALIFIED (nursing) heads 3

#### **Neonatal Modules and NLS Qualifications**

Total % of staff with both Module 1 + 2 = 15heads = 79% of all qualified staff  
Total % of staff with Module 1 only = 0heads  
Total % of staff with Module 2 only = 1 head = 5% of all qualified staff  
Total of Qualified staff with a neonatal module = 16 heads = 84%  
Total % of staff with NLS certificate = 16 heads = 84%

#### **Other activities**

Currently 3 staff are on a Degree Pathway.  
Staff are managed via a teams system. Within the teams, all staff have annual IPR/ KSF via eKSF. There are Neonatal Service Mandatory Study days annually for each team to cover all statutory and mandatory training and updates.

Nursing Care Pathways are in place for Discharge, Transport, Bereavement, Neonatal Abstinence Syndrome, Ventilation and Education.

There are many Link nurses and working Groups in place throughout the Service e.g. Infection Control and Developmental care.



## Neonatal Unit Statistics

Total Number of admissions:	254
Total Number of readmissions:	12
Total Number of <i>infants</i> admitted:	242

**Table 1. Sources of admissions of inborn deliveries (based on babies discharged in 2010)**

Inborn (at NHH)	
Total deliveries	2220
Total live births	2207
Total still births	13
Total number of inborn admissions	197
Admitted from delivery suite	143
Admitted from post-natal ward	41
Admitted from home	01
Readmissions from outside hospital:	12

**Table 2. Outborn sources of admission**

Outborn (sources of admission outside maternity Unit)	Number
Total number of infants:	54
Delivered at	
Royal Gwent Hospital	43
University Hospital of Wales	06
Royal Glamorgan	02
Prince Charles Hospital	01
Home	01
Birmingham Children's Hospital	01

**Table 3. Readmissions**

Gestation	Birth wt	Source	Reason
26	840	UHW	Following Hernia repair at UHW
27	785	RGH	Following intensive care at RGH
31	1720	RGH	Following intensive care at RGH
31	1305	RGH	Following intensive care at RGH
32	1685	RGH	Following intensive care at RGH
32	1685	RGH	Following intensive care at RGH
33	2340	RGH	Following intensive care at RGH
38	2635	RGH	Following intensive care at RGH
39	3135	RGH	Following intensive care at RGH
40	1950	RGH	Following intensive care at RGH
40	3300	UHW	UHW for Neuro assessment
40	4400	RGH	Following intensive care at RGH
Total number of infants readmitted:		12	

**Table 4. Destinations of babies transferred out**

Destination	Number
Royal Gwent Hospital for intensive care	21
Royal Glam for FU Care	02
Merthyr for FU care	01
Poole Hospital for FU Care	01
NHH Usk Ward [Peds]	01
UHW for Surgical Care	06
UHW for Neuro assessment	01
Bristol for cardiac care	01
<b>Total transfers out</b>	<b>34</b>

**Table 5. Survival of babies by gestational age (2010 admissions)**

Gestation	Inborn		Outborn		All admissions		
	Total	Deaths	Total	Deaths	Total	Deaths	% Survival
23	0	0	1	0	1	0	100
24	0	0	0	0	0	0	-
25	0	0	0	0	0	0	-
26	0	0	2	0	2	0	100
27	2	0	2	0	4	0	100
28	0	0	2	0	2	0	100
29	0	0	2	0	2	0	100
30	1	0	10	0	11	0	100
31	12	0	4	0	16	0	100
32	17	0	2	0*	19	0	100
33-36	64	0	22	0	86	0	100
37-42	101	0	10	0	111	0	100
43	0	0	0	0	0	0	
<b>Totals</b>	<b>197</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>254</b>	<b>0</b>	<b>100</b>

Note – Outborn babies transferred to NHH for continuing care

**Table 6. SCBU Admissions and Deaths by gestation bands (excluding readmissions)**

Gestation	Inborn		Outborn		All admissions		
	Total	Deaths	Total	Deaths	Total	Deaths	% Survival
23-25	0	0	1	0	1	0	-
26-28	1	0	5	0	6	0	100
29-31	11	0	16	0	27	0	100
32	15	0	2	0	17	0	100
33-36	63	0	22	0	85	0	100
=/ >37	96	0	10	0	106	0	100

**Table 7. SCBU Admissions and Deaths below defined gestations (excluding readmissions)**

Gestation	Inborn		Outborn		All Admissions		
	Total	Deaths	Total	Deaths	Total	Deaths	% Survival
<24	0	0	1	0	1	0	100
<26	0	0	1	0	1	0	100
<28	1	0	4	0	5	0	100
<30	2	0	9	0	11	0	100
<32	15	0	23	0	38	0	100
<37	96	0	47	0	142	0	100

**Table 8. SCBU Admissions and Deaths in various weight bands (excluding readmissions)**

Weight	Inborn		Outborn		All Admissions		
	Total	Deaths	Total	Deaths	Total	Deaths	% Survival
401-500	0	0	0	0	0	0	-
501-750	0	0	1	0	1	0	-
751-1000	1	0	8	0	9	0	100
1001-1250	1	0	4	0	5	0	100
1251-1500	5	0	5	0	10	0	100
1501-2500	79	0	28	0	107	0	100
2501-4500	94	0	9	0	103	0	100
>4500	7	0	0	0	7	0	100
<b>Total</b>	<b>186</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>242</b>	<b>0</b>	<b>100</b>

**Table 9. SCBU Admissions and Deaths below specified weight categories**

Weight range	Inborn		Outborn		All Admissions		
	Total	Deaths	Total	Deaths	Total	Deaths	% Survival
=/< 750	1	0	0	0	1	0	100
=/<1000	2	0	11	0	13	0	100
=/<1250	3	0	14	0	17	0	100
=/<1500	9	0	19	0	28	0	100
=/<2500	93	0	48	0	142	0	100

**Table 10. Level of care and cot occupancy rates\***

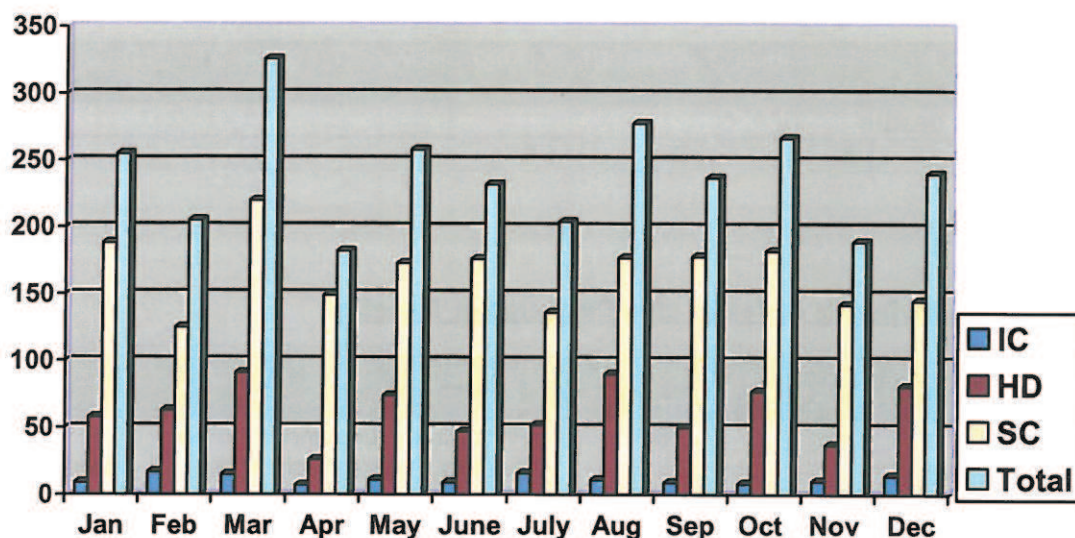
Level of Care	No of days	% Occupancy of cots*
Intensive Care	136	
High Dependency Care	746	
Special Care	1991	
Intensive care + High Dependency Care	882	
Total days of care (IC + HD + SC + NC)	2873	66% average

\* Based on 12 cots (4380)

**Table 11. Monthly Activity**

Month	No of A/D	No of D/S	IC	HD	IC+HDU	SC	Total (IC+HD+SC)
January	27	26	9	58	67	188	255
February	18	14	17	63	80	125	205
March	28	30	15	91	106	220	326
April	21	19	7	26	33	149	182
May	25	19	11	74	85	173	258
June	19	23	9	47	56	176	232
July	23	17	16	52	68	136	204
August	17	22	11	90	101	177	278
September	21	20	9	50	59	178	237
October	14	17	8	77	85	182	267
November	17	14	10	37	47	142	189
December	24	25	14	81	95	145	240
<b>Totals</b>	<b>254</b>	<b>246</b>	<b>136</b>	<b>746</b>	<b>882</b>	<b>1991</b>	<b>2873</b>
Mean	21.2	20.3	11.3	62.2	73.5	165.9	239.4
Max	28	30	17	91	106	220	326
Min	14	14	7	26	33	125	182

**Figure 1. Monthly activity of level of care**



**Table 11. Reasons for admission**

Reason for admission	No. of admissions	% Admissions
Prematurity	61	24
For continuing care	65	25
Respiratory problem	35	14
Hypoglycaemia	26	10
Sepsis or suspected sepsis	15	6
Seizures	1	0.4
Feeding difficulty	12	4.7
Jaundice	6	2.3
Social reasons	2	0.8
Congenital anomaly	2	0.8
IUGR	5	1.9
Dusky episode	6	2.3
Suspected surgical problem	4	1.6
NAS	5	1.9
Apnoeic episode	2	0.8
HIE/birth problem	9	3.5
Suspected Cardiac problem	1	0.4

**Table 12. Details of deaths in SCBU**

Booking	Gestation (Wks)	Weight (g)	Diagnosis	Days of stay	PM done
<b>Inborn deaths</b>					
0	0	0	0	0	0

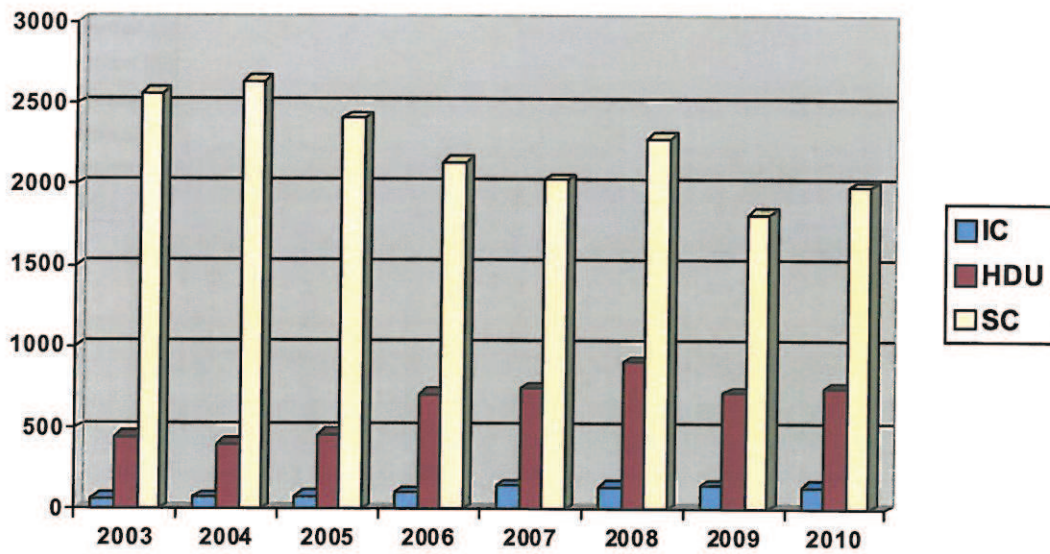
**Table 13. Details of deaths after Discharge or Transfer**

Booking	Gestation (Wks)	Weight (g)	Diagnosis	Days of stay	PM done
NHH	32	1550	Prematurity, unplanned home delivery, hypoxic ischaemic encephalopathy, Dandy Walker malformation, aortic stenosis	2 (first admission) Died 24/3/2011	yes

**Table 14. 12 years comparison of activity**

Year	IC	HDU	IC+HDU	SC days	Total days	% Occupancy (12 cots)
1998			162		2504	57
1999			121		2298	52
2000			133		2718	62
2001			117		2058	47
2002	76	282	358	2470	2828	65
2003	65	447	512	2565	3077	70
2004	75	399	474	2637	3111	71
2005	84	458	542	2415	2957	68
2006	104	709	813	2143	2956	67
2007	147	746	893	2028	2921	67
2008	140	907	1047	2162	3329	73
2009	145	712	857	1821	2680	61
2010	136	746	882	1991	2873	66

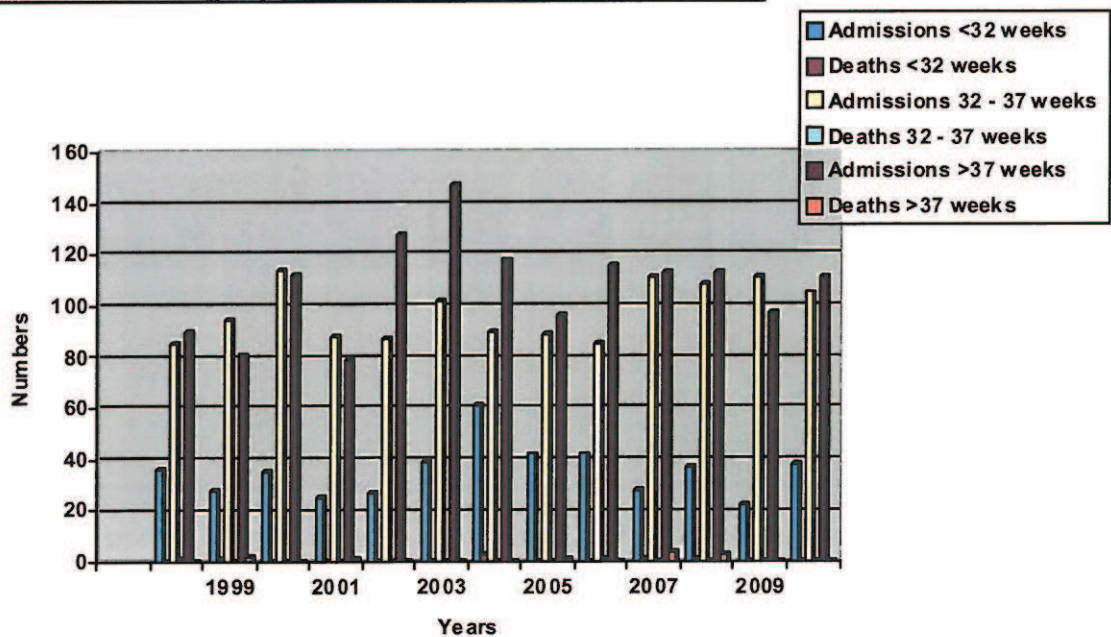
**Figure 2. Levels of activity 2003-2010**



**Table 15. Gestational Age Specific Admissions and Deaths 1998 – 2010** (excluding readmissions, based on admissions in 2010)

	Admissions <32 weeks	Deaths <32 weeks	Admissions 32–37 weeks	Deaths 32-37 weeks	Admissions >37 weeks	Deaths >37 weeks
1998	36	0	85	1	90	0
1999	28	1	94	0	81	2
2000	35	0	114	0	112	0
2001	25	0	88	0	79	1
2002	27	0	87	0	128	0
2003	39	0	102	0	147	0
2004	61	3	90	0	118	0
2005	42	0	89	0	96	1
2006	42	0	85	1	116	0
2007	28	1	111	0	113	4
2008	37	1	108	0	113	3
2009	22	0	111	0	97	0
2010	38	0	105	0	111	0

**Figure 3. Gestational age specific admissions & deaths 1998 - 2010**





## **North Gwent Neonatal Liaison Team**

Gwent now operates an outreach liaison service which covers all Gwent both North and South via a centrally based allocation system. The statistics for North Gwent are therefore included in the Royal Gwent Hospital Annual Report.

**Table 16. Summary of Audits (2010)**

Title	Done by/Date	Period	Standard	Findings	Recommendation	Comment
Audit of the Gentamicin Guideline Are we seeing an excess of high trough levels?	Dr Chris Poh	Sept 2009 to May 2010 Presented 16/07/2010	Gwent neonatal unit guidelines	Apparent high number of trough values above recommended level.	Drop dosage by 0.5mg	Re-audit after the change
Audit of Perinatal and Postnatal GBS guideline	Dr Richard Davies	Presented 16/07/2010	Gwent neonatal unit guidelines	Cases where infant should have received postnatal antibiotics, but did not. Antenatal information not always known perinatally	Develop care pathway for use by midwives, obstetricians and paediatricians	Re-audit following introduction of care pathway
Audit of neonates admitted with weight loss	Dr Hari Bodla	Presented 31/08/2010	Infants should not lose more than 10% of birth weight	Higher than expected number of infants admitted with >10% weight loss	Weigh babies in community earlier than 10 days	Re-audit 12 months

## Children and Young People Committee

### Inquiry into Neonatal Care

#### **Additional information from the Royal College of Nursing (Wales) on details of under capacity in level 1cots and details of the educational pathways to neonatal nursing**

Further to the Committee's request for information on Level 1 cots we have consulted with our members working in this area and although it is felt that some development is needed (and referred to in the written evidence from Dr Mark Drayton) our members strongly feel that the urgent priority should be to increase capacity at Level 2 and Level 3.

The Committee also asked for details of the educational pathway to neonatal nursing.

A registered nurse will have completed a 3 year nursing degree in one of four areas (learning disability, adult, children and young people or mental health). This degree is 50% theory and 50% practice working full-time in the third year. Following successful completion of this degree and registration with the regulator (NMC) the nurse could apply for an Agenda for Change Band 5 nursing post in the NHS.

The majority of nurses in neonatal services today emerge from the Children and Young People's branch. It is worth noting that this year the Welsh Government have substantially reduced the number of university places available in children and young people's nursing, from over a hundred places across Wales last year to around 60 this year.

In Wales the University of Glamorgan offers two specialist neonatal courses. Each 20 credit module last 15 weeks with 1 day's attendance a week required. Each place costs £520. The courses offered are "specialist neonatal care" and "intensive neonatal care" with the former a prerequisite for the latter.

Outside Wales the course "advanced neonatal nurse practitioner" is also offered.

Around 10% of nurses undertaking post-registration study in neonatal care in Wales fund this themselves either in full or in part. An additional issue is that some nurses are required to take the time for the studies and teaching out of their own Annual Leave. We would certainly not see this as a desirable policy direction since neonatal skills nursing are so clearly identified as an area of need for the NHS in Wales.

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