



GIG  
CYMRU  
NHS  
WALES

Bwrdd Iechyd Prifysgol  
Betsi Cadwaladr  
University Health Board

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

**Ein cyf / Our ref:** GL/BH/6879/943

**Eich cyf / Your ref:**

**☎:** 01248 384910

**Gofynnwch am / Ask for:** Linda Hughes

**Ffacs / Fax:** 01248 384937

**E-bost / Email:** linda.hughes@wales.nhs.uk

**Dyddiad / Date:** 15 March 2012

Dear Ms Chapman

## **CHILDREN AND YOUNG PEOPLE COMMITTEE – NEONATAL SERVICES**

Thank you for your letter dated 21 February 2012 regarding the issues raised by your Committee.

The achievement of full compliance with the BAPM standards presents a very considerable challenge to all units in Wales in the present financial environment, as it does throughout the UK. We are aware that the average % compliance with the neonatal nursing ratios recommended by BAPM is in the 70s across Wales, and acknowledge that BCU Health Board is a low outlier.

I give below our response to your request for information:

**1 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**

A copy of the latest action plan and performance report, as presented to the last Neonatal Working group (13<sup>th</sup> February 2012) is attached for your information. The longer term actions in the Plan refer to the development of a Business Case for neonatal services as a key component of the wider review of maternity & child health services in North Wales. It is anticipated that this much larger review of services will report its recommendations to the Board of Betsi Cadwaladr LHB in summer 2012.

**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 of when patient safety has been compromised**

Details of 'incidents' recorded on Neonatal Units in 2011 are set out below. These incidents are, as will be seen from the analysis, of varying nature and their impact upon care is also variable. It is important to note that not all incidents will have resulted in harm. However, all have been included in this response for completeness :



### **Ysbyty Glan Clwyd**

Drug dosage error	8
Unit closure	8
Patient injury	3
Pharmacy error	2
Ambulance delay	4
Instrument failure	2
Others	9
<b>TOTAL</b>	<b>36</b>

### **Wrexham Maelor**

Clinical incidents	7
Unit Closures	
Staff accident	2
Patient/visitor accident	2
Faulty equipment	1
Staff shortages	6
<b>TOTAL</b>	<b>18</b>

### **Ysbyty Gwynedd**

Clinical Incidents	6
Patient/relative accident	1
Medication error	1
Security	1
Needlestick injury	1
Medical devices	1
<b>TOTAL</b>	<b>11</b>

### **Latest Annual Reports:**

Ysbyty Glan Clwyd, Ysbyty Maelor Wrexham and Ysbyty Gwynedd

### **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**

The main short term action to improve capacity in North Wales has been the repatriation of investment and activity from Arrowe Park Hospital. This is one of the short-term priorities agreed by the Health Board to increase capacity to treat neonates within North Wales. To do this required increased staffing at all 3 Neonatal Units within North Wales, which is assisting in the move towards the BAPM standards. We have also provided additional training to existing staff at Ysbyty Gwynedd, Bangor to allow that unit to undertake a higher level of care. In turn, this will reduce the demands on Ysbyty Glan Clwyd and consequently Wrexham Maelor. This interim investment in our local network will reduce the number of transfers to England due to lack of local capacity.



As described earlier, the medium / long-term strategy for Neonatal services is presently being developed in the form of a Business Case which will inform the wider review of maternity & child health services in North Wales. The Business Case will outline the changes required to provide services which meet the requirements of the latest BAPM standards (2010). Recommendations for a future configuration of Neonatal Units will be explicit within the Business Case.

**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**

The number of transfers to England due to lack of capacity in North Wales is as follows:

	<i>2009/10</i>	<i>2010/11</i>	<i>2011/12 (10 months / 18 January 2012)</i>
<b><i>Total number of transfers (acute)</i></b>	<b><i>4</i></b>	<b><i>3</i></b>	<b><i>8 (FO 11)</i></b>
<b><i>Total number of transfers (non - acute)</i></b>	<b><i>8</i></b>	<b><i>7</i></b>	<b><i>1</i></b>
<b><i>Total Number of Transfers</i></b>	<b><i>12</i></b>	<b><i>10</i></b>	<b><i>9 (FO 11)</i></b>

The charge per transfer for these journeys was £1200. These were facilitated by Cheshire & Merseyside Neonatal Transport Service.



The cost of care provided by Arrowe Park Hospital due to lack of local capacity in North Wales was as follows:

**Wirral Hospital NHS Hospital  
Arrowe Park - Neonatal Activity**

Month	Special Care		High Dependency		Intensive Care		
	ITU Level 1		ITU Level 2		ITU Level 3		
	Bed Days	Cost	Bed Days	Cost	Bed Days	Cost	
Jan-11	10	2	824	0	0	0	0
Feb-11	11	12	4,944	2	1,490	28	29,120
Mar-11	12	0	0	7	5,215	24	24,960
Apr-11	1	3	1,217	26	19,079	20	20,488
May-11	2	0	0	0	0	2	2,049
Jun-11	3	0	0	0	0	0	0
Jul-11	4	33	13,392	4	2,935	11	11,268
Aug-11	5	10	4,058	1	734	14	14,342
Sep-11	6	0	0	0	0	31	31,756
Oct-11	7	6	2,435	24	17,612	11	11,268
Nov-11	8	0	0	0	0	0	0
Dec-11	9	0	0	0	0	23	23,561
<b>Total</b>							
<b>2011</b>	<b>66</b>	<b>26,870</b>	<b>64</b>	<b>47,065</b>	<b>164</b>	<b>168,812</b>	

**5 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 number of cots and level of acuity required for the predicted catchment population of North Wales and some of North Powys has been guided by recommendations from the All Wales Neonatal Network Capacity Reviews. This guidance has been applied with local adaptations and projections to enable us to determine options for future configuration. We have also actively engaged with neighbouring services providers in England regarding potential to extend capacity across the border and to ensure alignment of future service plans.



**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 coming years**

- **Work with Neighbouring Health Boards / NHS Trusts**

The Countess of Chester NHS Foundation Trust, Wirral NHS Foundation Trust, Liverpool Womens Hospital NHS Trust and the Merseyside and Cheshire Neonatal Network have been included as partner organisations in the dissemination of information and have been invited to the engagement events which have taken place. In addition to these more formal contacts, there have been ongoing and regular contacts with key individuals in these organisations (most notably, via the Chair of the BCU Children & Young People Clinical Programme Group's Neonatal Sub-Group) to keep them informed of planning.

Via the Office of the Executive Director of Planning, there have been similar ongoing contacts and engagement with Hywel Dda LHB and Powys LHB.

- **Working with WHSSC**

Plans for the development of neonatal intensive care come under the auspices of WHSSC (as a specialist service). Plans for development of Special and High Dependency Care (where delivered on a site not designated as an Intensive Care Unit) are explicitly excluded from WHSSCs responsibilities. These latter responsibilities rest with LHBs. BCU is taking a coordinated approach to developing services at all levels, in liaison with the all Wales Neonatal Steering Group. WHSSC is represented on this group, and is therefore aware of our planning on all levels even if it is not responsible for them all.

- **Workforce planning**

The supply of senior and junior doctors to work on neonatal units comes from the national paediatric training programmes. There are currently no plans at UK level to decrease the number of doctors in training for paediatrics. However, recommendations from both Deaneries and the Royal College of Paediatrics and Child Health require us to plan to concentrate trainees in fewer hospitals than presently, to improve the quality of their training. We are told that a failure to do this in the near future will result in these doctors (and their funding) being withdrawn. The trainees will then be reallocated to units which can offer this better experience. If we cannot rely on doctors in training to keep all our present units running, then the alternative option would be to employ other, non-training doctors. Even if alternative funding were available, the change in UK immigration rules has removed what was previously the main alternative - offering unfilled jobs to overseas doctors and therefore medical capacity and recruitment is a major challenge.



**GIG**  
CYMRU  
**NHS**  
WALES

Bwrdd Iechyd Prifysgol  
Betsi Cadwaladr  
University Health Board

Inquiry into Neonatal Care

Evidence from Betsi Cadwaladr University Health Board

Given that nationally (UK), the number of training posts for paediatrics is not changing, it is essential to consider why Wales has a problem recruiting. There is no simple answer to this but factors which may impact include: the relative rurality of Wales, the practical difficulties faced by trainees who rotate between North and South Wales, the lower number of trainees on rotas compared to some areas of the UK, the greater proportion of our junior workforce who are non-training grades, the lack of academic opportunities, the statistic that the number of medical students and Foundation Programme doctors from Wales who seek jobs outside Wales is not matched by those seeking to come in to Wales.

In response to the pressures placed upon our traditional medical staffing rotas we are looking carefully at alternative ways to sustain these roles by developing enhanced and advanced nursing roles. Whilst indications are that this is a more costly option, it is potentially a way to respond in part to the predicted shortages and provide high quality, safe and sustainable services in the future.

BCUHB is seeking a solution to all these negative pressures which not only prevent achievement of the improved standards which people expect, but also threaten to degrade the present level of service delivery. The mechanism to do this is via a coordinated review of Maternity & Child Health Services. This includes the attempted projection of realistic future manpower requirements. Talking about such issues is distressing for staff who have a strong affiliation to the present service and to the public who are accustomed to the present configuration. However, through our engagement sessions it is clear that many of our staff and service user representatives understand and agree that the status quo cannot deliver the standards proposed by the British Association of Perinatal Medicine, endorsed by Wales Government in the all Wales Neonatal Standards, and supported by the leading neonatal parent group, BLISS. BCU Health Board has the support of the All Wales Neonatal Group in terms of our plan which sets out the short, medium and long term steps to complete this journey. The process will not be easy and it presents a number of challenges which will take time to deliver, but we believe this is what we need to do to deliver a safe and high quality neonatal service for the future.

Yours sincerely

**GEOFF LANG**  
**ACTING CHIEF EXECUTIVE**

CHILDREN & YOUNG PEOPLE'S CLINICAL PROGRAMME GROUP NEONATAL SUB-GROUP PLANNING AND PERFORMANCE REPORT								PERFORMANCE SCORING CRITERIA				
Updated: 01/02/2012								RED	Evidence from Betsi Cadwaladr University Health Board			
								AMBER				
GREEN												
Row Reference	PRIORITY	Objective	Action Ref	Actions / Milestones Include actions to mitigate risks to delivery	Quantifiable Output (what the specified action will achieve)	Risks (to delivering specified actions)	Identified Lead	TARGET: Action complete by end: (Mmm-yy)	Q4 Jan 2012	SELF-ASSESSMENT (January performance) Timescale any additional required actions and outcomes (This is a compulsory field if your self assessment is AMBER or RED)	Expected benefits realisation dates (mmm/yy) or FUTURE year	
<b>Neonatal Intensive Care</b>												
<b>1 Interim Strategy</b>												
To provide Neonatal Intensive care within North Wales	1.1 To successfully repatriate Welsh Neonatal Intensive Care activity provided by Arrows Park hospital	1.1.1	Approval of business case	Transfer of funding funding from BCUHB			Cilla Robinson	Oct-11	GREEN		Mar-12	
		1.1.2	Develop, agree and progress an implementation plan	Implementation plan			Chris Jones / Paula Knight	Nov-11	GREEN			
		1.1.3	Execute actions described within the implementation plan	Increased capacity to undertake Intensive Care at Ysbyty Glan Clwyd and Ysbyty Maelor		Delayed recruitment during Xmas period	Paula Knight Liz Fletcher Gail Barton-Davies	Mar-11	GREEN	At shortlisting stage for Band 6 Community Neonatal post West and Band 5 Central and East.	Feb-12	
	1.2 To successfully repatriate Welsh Neonatal Care activity provided by Liverpool Women's hospital	1.2.1	Develop business case:									
		a)	Audit of activity at LWH during 2010/11 due to insufficient capacity within North Wales Units	Activity cost and volume for option appraisal			Chris Jones	Jan-12	GREEN			
<b>2 Long term Strategy</b>												
To agree a long-term strategy which clearly communicates a vision for Neonatal Intensive Care services and how this will be achieved	2.1 To generate and evaluate options for future provision of Neonatal Intensive Care as part of the BCUHB review of Maternity and Child Health service review	2.1.1	Ensure influence through involvement in the Maternity, Gynaecology and Neonatal work stream of the Maternity & Child Health review	List of potential options for appraisal via business case (2.1.2 below)				Jan-11	AMBER	Need to agree configuration and cot location in accordance with the BAPM 2010 terminology and new Categories of Care 2011.		
		2.1.2	BCU/Wirral Hospitals Contract Review meeting	Confirm status of Arrows Park's business case proposing the provision of NICU for North Wales.				Dec-11 Jan-12	AMBER	Awaiting response		
		2.1.3	Video Conference North West Specialist Commissioners re:Neonatal transport charges - Cheshire and Merseyside Neonatal Network	Information for decision making and options appraisal					Dec-11 Jan-12	GREEN	Meeting deferred to 28th February	
		2.1.4	Develop a business case containing detailed options appraisal and recommendations for a preferred option for the provision of Neonatal Intensive Care	Business Case for submission to BCUHB Executive team			Chris Jones Michael Cronin Cilla Robinson			AMBER	Working group will be required to 'sign-off' draft business case March 2012	
	2.2 To consult with the public on proposals if change is deemed significant											
2.3 To develop and agree an implementation plan												
<b>High Dependency Care</b>												



CHILDREN & YOUNG PEOPLE'S CLINICAL PROGRAMME GROUP NEONATAL SUB-GROUP PLANNING AND PERFORMANCE REPORT								PERFORMANCE SCORING CRITERIA			
Updated: 01/02/2012								RED	Evidence from Betsi Cadwaladr University Health Board		
								AMBER			
GREEN											
Row Reference	PRIORITY	Objective	Action Ref	Actions / Milestones Include actions to mitigate risks to delivery	Quantifiable Output (what the specified action will achieve)	Risks (to delivering specified actions)	Identified Lead	TARGET: Action complete by end: (Mmm-yy)	Q4 Jan 2012	SELF-ASSESSMENT (January performance) Timescale any additional required actions and outcomes (This is a compulsory field if your self assessment is AMBER or RED)	Expected benefits realisation dates (mmm/yy) or FUTURE year
<b>3 Interim strategy</b>											
To increase High Dependency capacity at Ysbyty Gwynedd	3.1 Increase the number of High Dependency cots at Ysbyty Gwynedd from 0 to 2	3.1.1	HD Training for existing nursing staff	Existing nurses trained in all aspects of HD care					GREEN		
		3.1.2	HD training for existing medical staff	Existing medical staff trained in all aspects of HD care							
		3.1.3	Develop carepathway for TPN	Carepathway			Michael Cronin	Feb-12	AMBER		
		3.1.4	Establish protocol for TPN transportation from YGC to YG	TPN available at YG					GREEN	2 Cool boxes have been purchased. Mark Oldcorn to establish a group to standardise procedures for parental nutrition as a longer-term strategy for Pharmacy.	
<b>4 Long term Strategy</b>											
<b>Low Dependency / Special Care</b>											
<b>5</b>											
Reduce number of Low dependency cots	Reduce admission to Low dependency / Special care cots		admission criteria review						RED	Work to be covered by the Transitional Care group about to be established.	
			readmissions from community to neonatal units						AMBER	MC / GBD to progress	
			Discuss with Obstetricians the potential for reducing Caesarean section rates for mothers whose babies are likely require special care								Action plan has been agreed to reduce CS rate.
	Reduce Length of Stay		Review discharge criteria / LOS relating to Safeguarding issues particularly around emergency fostering services						AMBER	Met twice with Soc Serv. Looking at planning prior to admission	
			Review transition care arrangements across all 3 sites						GREEN	Paula to meet with Heledd Jones 9/2 to establish T&F Group to consider development of transition care arrangements	
<b>Use of North Wales Transport service</b>											
<b>5</b>											
Ensure availability of 12 hour transportation service in north Wales	To ensure staff are in post and available to deliver the transport services for all levels of care						Mar-12		GREEN	Shortlisting stage	
<b>Information Management</b>											
<b>5</b>											



CHILDREN & YOUNG PEOPLE'S CLINICAL PROGRAMME GROUP NEONATAL SUB-GROUP PLANNING AND PERFORMANCE REPORT								PERFORMANCE SCORING CRITERIA			
Updated: 01/02/2012								RED	Evidence from Betsi Cadwaladr University Health Board		
								AMBER			
								GREEN			
Row Reference	PRIORITY	Objective	Action Ref	Actions / Milestones Include actions to mitigate risks to delivery	Quantifiable Output (what the specified action will achieve)	Risks (to delivering specified actions)	Identified Lead	TARGET: Action complete by end: (Mmm-yy)	Q4 Jan 2012	SELF-ASSESSMENT (January performance) Timescale any additional required actions and outcomes (This is a compulsory field if your self assessment is AMBER or RED)	Expected benefits realisation dates (mmm/yy) or FUTURE year
	Information and data quality	Reporting workload for activating escalation		Adopt acuity tool all areas					GREEN	Complete	
				Develop the use of the Cot locator					GREEN	Complete	
		To provide timely, accurate and robust information for operational and strategic planning purposes		Daily stats - consistency and calculations					GREEN	Complete	
				Accurate and consistent recording of Transitional Care activity across BCU					GREEN	Complete	

**Neonatal Sub-group**

**Members:**

1 Aled Fleming (BCUHB - Family Services)	<a href="mailto:Aled.Pleming@wales.nhs.uk">Aled.Pleming@wales.nhs.uk</a>	<a href="mailto:Aled.Pleming@wales.nhs.uk">Aled.Pleming@wales.nhs.uk</a>
2 BIDYUT KUMAR (Betsi Cadwaladr University Health Board - Gynae & Obstetrics)	<a href="mailto:BIDYUT.KUMAR@wales.nhs.uk">BIDYUT.KUMAR@wales.nhs.uk</a>	
3 BRENDAN HARRINGTON (Betsi Cadwaladr University Health Board - Paediatrics)	<a href="mailto:BRENDAN.HARRINGTON@wales.nhs.uk">BRENDAN.HARRINGTON@wales.nhs.uk</a>	<a href="mailto:BRENDAN.HARRINGTON@wales.nhs.uk">BRENDAN.HARRINGTON@wales.nhs.uk</a>
4 CILLA ROBINSON (Betsi Cadwaladr University Health Board - Child & Family)	<a href="mailto:CILLA.ROBINSON@wales.nhs.uk">CILLA.ROBINSON@wales.nhs.uk</a>	<a href="mailto:CILLA.ROBINSON@wales.nhs.uk">CILLA.ROBINSON@wales.nhs.uk</a>
5 Gail Barton Davies (Betsi Cadwaladr University Health Board - West, Women and Families)	<a href="mailto:GailBarton.Davies@wales.nhs.uk">GailBarton.Davies@wales.nhs.uk</a>	<a href="mailto:GailBarton.Davies@wales.nhs.uk">GailBarton.Davies@wales.nhs.uk</a>
6 Glynne Roberts (Betsi Cadwaladr University Health Board - West, Women and Families)	<a href="mailto:Glynne.Roberts@wales.nhs.uk">Glynne.Roberts@wales.nhs.uk</a>	
7 Heledd Jones (Head of Women's Inpatient Services)	<a href="mailto:Heledd.Jones@wales.nhs.uk">Heledd.Jones@wales.nhs.uk</a>	<a href="mailto:Heledd.Jones@wales.nhs.uk">Heledd.Jones@wales.nhs.uk</a>
8 Ian Barnard (Betsi Cadwaladr University Health Board - Women & Children)	<a href="mailto:Ian.Barnard@wales.nhs.uk">Ian.Barnard@wales.nhs.uk</a>	<a href="mailto:Ian.Barnard@wales.nhs.uk">Ian.Barnard@wales.nhs.uk</a>
9 JACKIE BAKER (Betsi Cadwaladr University Health Board - SCBU)	<a href="mailto:JACKIE.BAKER@wales.nhs.uk">JACKIE.BAKER@wales.nhs.uk</a>	
10 Jane Trowman (BCUHB - Planning Department)	<a href="mailto:Jane.Trowman@wales.nhs.uk">Jane.Trowman@wales.nhs.uk</a>	
11 Karen Stapleton (Cwm Taf LHB - Welsh Health Specialised Services Committee)	<a href="mailto:Karen.Stapleton@wales.nhs.uk">Karen.Stapleton@wales.nhs.uk</a>	
12 Lesley Bolton (BCUHB - Women & Families)	<a href="mailto:Lesley.Bolton@wales.nhs.uk">Lesley.Bolton@wales.nhs.uk</a>	<a href="mailto:Lesley.Bolton@wales.nhs.uk">Lesley.Bolton@wales.nhs.uk</a>
13 Liz Fletcher (Betsi Cadwaladr University Health Board - Child & Adolescent Health)	<a href="mailto:Liz.Fletcher@wales.nhs.uk">Liz.Fletcher@wales.nhs.uk</a>	<a href="mailto:Liz.Fletcher@wales.nhs.uk">Liz.Fletcher@wales.nhs.uk</a>
14 Mandy Cooke (Betsi Cadwaladr University Health Board - Family Services)	<a href="mailto:Mandy.Cooke@wales.nhs.uk">Mandy.Cooke@wales.nhs.uk</a>	
15 Mark Drayton (Cardiff and Vale UHB - Neonatology)	<a href="mailto:Mark.Drayton@wales.nhs.uk">Mark.Drayton@wales.nhs.uk</a>	
16 Michael Cronin (Betsi Cadwaladr University Health Board - West, Women & Family)	<a href="mailto:Michael.Cronin2@wales.nhs.uk">Michael.Cronin2@wales.nhs.uk</a>	<a href="mailto:Michael.Cronin2@wales.nhs.uk">Michael.Cronin2@wales.nhs.uk</a>
17 Dr Miroslav Kotrec, Locum Consultant Neonatologist	<a href="mailto:Miroslav.kotrec@wales.nhs.uk">Miroslav.kotrec@wales.nhs.uk</a>	<a href="mailto:Miroslav.kotrec@wales.nhs.uk">Miroslav.kotrec@wales.nhs.uk</a>
18 NicolaT Owen (Betsi Cadwaladr University Health Board - West, Special Care Baby Unit)	<a href="mailto:NicolaT.Owen@wales.nhs.uk">NicolaT.Owen@wales.nhs.uk</a>	
19 Nigel Bickerton	<a href="mailto:bick@elitemail.org">bick@elitemail.org</a>	
20 Palghat Gopalakrishnan (BCUHB - Family Services)	<a href="mailto:Palghat.Gopalakrishnan@wales.nhs.uk">Palghat.Gopalakrishnan@wales.nhs.uk</a>	<a href="mailto:Palghat.Gopalakrishnan@wales.nhs.uk">Palghat.Gopalakrishnan@wales.nhs.uk</a>
21 PAULA KNIGHT (Betsi Cadwaladr University Health Board - Paediatrics)	<a href="mailto:PAULA.KNIGHT2@wales.nhs.uk">PAULA.KNIGHT2@wales.nhs.uk</a>	<a href="mailto:PAULA.KNIGHT2@wales.nhs.uk">PAULA.KNIGHT2@wales.nhs.uk</a>
22 Peter Stutchfield (Betsi Cadwaladr University Health Board - Women & Children)	<a href="mailto:Peter.Stutchfield@wales.nhs.uk">Peter.Stutchfield@wales.nhs.uk</a>	
23 Sonia Thompson (Welsh Ambulance Service NHS Trust - 020 Regional Director (North))	<a href="mailto:Sonia.Thompson@wales.nhs.uk">Sonia.Thompson@wales.nhs.uk</a>	
24 YVONNE HARDING (Betsi Cadwaladr University Health Board - Child Health)	<a href="mailto:YVONNE.HARDING@wales.nhs.uk">YVONNE.HARDING@wales.nhs.uk</a>	<a href="mailto:YVONNE.HARDING@wales.nhs.uk">YVONNE.HARDING@wales.nhs.uk</a>
25 Chris Jones (BCUHB Planning)	<a href="mailto:Chris.jones7@wales.nhs.uk">Chris.jones7@wales.nhs.uk</a>	<a href="mailto:Chris.jones7@wales.nhs.uk">Chris.jones7@wales.nhs.uk</a>
26 Fiona Lewis (admin)	<a href="mailto:fiona.Lewis@wales.nhs.uk">fiona.Lewis@wales.nhs.uk</a>	<a href="mailto:fiona.Lewis@wales.nhs.uk">fiona.Lewis@wales.nhs.uk</a>
27 Louise Bell	<a href="mailto:Louise.bell2@wales.nhs.uk">Louise.bell2@wales.nhs.uk</a>	<a href="mailto:Louise.bell2@wales.nhs.uk">Louise.bell2@wales.nhs.uk</a>
28 Tracey Worthington	<a href="mailto:Tracy.worthington@wales.nhs.uk">Tracy.worthington@wales.nhs.uk</a>	<a href="mailto:Tracy.worthington@wales.nhs.uk">Tracy.worthington@wales.nhs.uk</a>

**NEONATAL STATS 2009/2010/2011**

Admissions

	2009	2010	2011
Admissions	239	288	334
Readmissions	9	8	11
Total	248	296	345

	2009	2010	2011
Level 1- Intensive care days	733	527	738
Level 2- High dependency days	792	815	710
Level 3 – Special care days	2392	3440	2997
Total number ventilation days	1133	749	953
Total number of nCPAP days	442	578	656

Admissions by Gestations

(All admissions whether booked at YGC or other hospitals)

	2009	2010	2011
>37 weeks	92	122	153
36	23	22	35
35	17	36	31
34	29	29	27
33	14	14	18
32	13	13	16
31	9	15	12
30	7	5	6
29	12	7	8
28	4	10	6
27	7	7	9
26	4	2	2
25	6	2	7
24	1	2	2
23	1	2	1

Admissions by birth weight

(all admissions admitted regardless of place of birth or unit booked in)

	2009	2010	2011
>2500	111	145	187
2250-2500	21	29	32
2000-2250	25	23	20
1750-2000	24	26	22
1500-1750	13	21	21
1250-1500	19	18	17
1000-1250	11	12	14
750-1000	10	10	13
500-750	5	3	7
<500	0	1	0

In –Utero Patients transferred into YGC ( Patients born at YGC, but not booked to deliver at YGC)

	2009	2010	2011
Bangor	6	6	6
Wrexham	11	2	14
Other Wales	0	0	3
England	7	3	5

Ex-utero transfers into YGC

1) booked at YGC and delivered in another unit

	2009	2010	2011
Arrowe Park/ Chester/ LWH	3	9	5
Other units	0	0	3

2) Not booked at YGC

	2009	2010	2011
YG	11	14	18
WXH	0	6	4
Other Wales	2	1	1
Other - England	2*	2**	0

\* 33 week twins, booked in YG, delivered Arrowe Park, referred for feeding.

\*\*27 week twins, booked in YG, delivered in Coventry, referred in for TPN/CPAP

Transfers Out ( not including back transfers)

	2009	2010	2011
Alderhay	11	13	13
Liverpool Womens	2	1	0
Wrexham	0	1*	0
Manchester	1	1	1
Other	0	0	0

- 24 week infant transferred to Wrexham as YGC full.

Mortality

2009

Gestation (weeks)	Weight (g)	Cause of death	Age at death ( days)
Term	2880	Myopathy	6
Term	3623	HIE/MAS	1
29	827	Pulmonary insufficiency	124
24	633	Extreme prematurity	2
26	847	Group B strept sepsis	1
26	851	Group B strept sepsis	2
27	1298		1
28	995	Respiratory insufficiency	91
29	1790	Hydrops	1
25	524	Pulmonary Insufficiency	154
25	878	Pulmonary insufficiency	49

2010

Gestation ( weeks)	Birth weight (g)	Cause of death	Age at death (days)
33	2054	Congenital abnormalities	1
30	1890	Pulmonary hypoplasia	1
23	475	Extreme prematurity	21
24	680	Extreme prematurity	9
23	595	Extreme prematurity	3

2011

Gestation (weeks)	Birth weight (g)	Cause of death	Age at death (days)
Term	2790	HIE	1
Term	3202	HIE	1
34	1417	Pulmonary insufficiency	56
25	866	Extreme prematurity	17
23	609	Extreme prematurity	2
29	1248	Congenital abnormality	1

Cumulative 3 year survival 2009-2011 – Babies <30 weeks age gestational age

Gestation ( weeks)	Births	Deaths	Survival (%)
29	27	3	89
28	20	1	95
27	23	1	95
26	8	2	75
25	15	3	80
24	5	2	60
23	4	3	25

---

# *Annual Report*

*Special Care Baby Unit*

*Wrexham Maelor Hospital, 2010*

---



# Admissions, at first glance

Inquiry into Neonatal Care  
Evidence from Betsi Cadwaladr University Health Board

---

<b>Total babies admitted, <i>n</i></b>	298	
<b>≥37 wks</b>	154	51.6%
<b>≤37 wks</b>	144	48.4%
<b>Transferred in</b>	29	9.7%
<b>Transferred out</b>	34	11.4%

---

# Admissions by gestation, *wks*

Inquiry into Neonatal Care  
Evidence from Betsi Cadwaladr University Health Board

<b>Gestation, wks</b>	<b>Babies, <i>n</i></b>	<b>% total</b>
23	1	0.33
24	5	1.7
25	7	2.3
26-27	7	2.3
28-31	21	7
32-33	27	9
34 - 36	83	27.8
≥37 wks	154	51.6

# Admissions by birth weight, *gram*

Birth weight, g	Babies, <i>n</i>	% total
500 – 749	9	3
750 – 999	11	3.7
1000 – 1249	12	4
1250 – 1499	6	2
1500 – 2499	85	28.5
≥2500	175	58.7

---

ET ventilated, <i>n</i>	53	17.8%
ET ventilated, days	257	
CPAP, <i>n</i>	76	25.5%
CPAP, days	564	
Level 1, days	415	
Level 2, days	583	
Level 3, days	2632	

---

---

# Transfers out by age, *days*

Inquiry into Neonatal Care  
Evidence from Betsi Cadwaladr University Health Board

---

<b>Age</b>	<b>Babies, <i>n</i></b>	<b>% total</b>
Within 1 <sup>st</sup> day	13	38.2
1 – 7	9	26.4
8 – 14	12	35.2
>14	3	8.8

---

# Transfers out by gestation at birth, *wks*

Inquiry into Neonatal Care

Evidence from Betsi Cadwaladr University Health Board

<b>Gestational groups, wks</b>	<b>Babies, <i>n</i></b>	<b>% of babies within gestational group</b>
≤25	8	61.5
26 - 27	2	28.6
28 - 31	4	19
32 - 33	3	11.1
34 - 36	9	10.8
Term	8	5.2

# Transfers out by birth weight, *gram*

<b>Birth weight group, g</b>	<b>Babies, <i>n</i></b>	<b>% within the weight group</b>
<750	7	77.7
750 – 999	4	36.4
1000 – 1499	2	11.1
1500 – 2499	11	12.9
≥2500	10	5.7



# Transfers out, *destination*

Inquiry into Neonatal Care  
Evidence from Betsi Cadwaladr University Health Board

Destination	Babies, <i>n</i>	% total
AHCH	13	38.2
LWH	3	8.8
RMCH	1	2.9
YGC	9	26.4
YBangor	5	14.7
Other (local units)	3	11.7

# Survival by gestation, *wks*

Inquiry into Neonatal Care  
Evidence from Betsi Cadwaladr University Health Board

<b>Gestation, <i>wks</i></b>	<b>Babies, <i>n</i></b>	<b>Survived, <i>n</i></b>	<b>Survival, %</b>
23	1	0	0
24	5	3	60
25	7	5	71.5
26-27	7	6	85.7
28-31	21	20	95.3
32-33	27	26	96.3
34 - 37	83	83	100
≥37 wks	154	154	100

# Survival by birth weight, *gram*

Inquiry into Neonatal Care

Evidence from Betsi Cadwaladr University Health Board

<b>Birth weight, g</b>	<b>Babies, <i>n</i></b>	<b>Survived, <i>n</i></b>	<b>Survival, %</b>
500 – 749	9	5	55.5
750 – 999	11	10	90.9
1000 – 1249	12	10	83.3
1250 – 1499	6	6	100
1500 – 2499	85	84	98.8
≥2500	175	175	100

# Mortality, *total neonatal deaths*

Gestation, wks	Birth weight, g	Place	Age, days	Cause of death
23	600	AHCH	>13	NEC
24	725	RMCH	>8	NEC
24	770	<b>WMH</b>	1	Extreme prematurity
25	530	LWH	>1	Extreme prematurity
25	640	LWH	>1	Extreme prematurity
26	1046	<b>WMH</b>	1	Holopros-encephaly
28	1232	<b>WMH</b>	1	PPHN
33	?	<b>WMH</b>	1	Anencephaly

## Care Levels by Month

Evidence from Betsi Cadwaladr University Health Board

Report: Counts of care level and HRG4 days for a single neonatal unit broken down by month for a specified 12 month period. Shows the count of days based on BAPM 2001 definitions for level of care and HRG4 days.

Unit: Ysbyty Gwynedd, Bangor.

Date Range: Care days between '01/01/2011' and '31/12/2011'.

Generated: '01/03/2012 12:54:43' by Nicola Owen (owenn).

## BAPM

Month	BAPM 1	BAPM 2	BAPM 3	UNK	Total
January 2011	1	2	6	0	9
February 2011	0	0	0	0	0
March 2011	0	0	0	0	0
April 2011	2	14	42	0	58
May 2011	0	16	58	0	74
June 2011	8	0	34	0	42
July 2011	0	4	20	0	24
August 2011	10	19	95	0	124
September 2011	0	4	95	0	99
October 2011	15	10	115	0	140
November 2011	8	9	152	0	169
December 2011	15	29	75	0	119
Total	59	107	692	0	858

## HRG

Month	HRG 1	HRG 2	HRG 3	HRG 4	HRG 5	UNK	Total
January 2011	0	1	1	6	0	1	9
February 2011	0	0	0	0	0	0	0
March 2011	0	0	0	0	0	0	0
April 2011	2	14	34	6	2	0	58
May 2011	0	16	47	6	5	0	74
June 2011	8	0	29	3	2	0	42
July 2011	0	4	11	6	3	0	24
August 2011	8	20	69	19	8	0	124
September 2011	0	4	60	33	2	0	99
October 2011	7	10	65	49	9	0	140
November 2011	4	5	89	52	19	0	169
December 2011	15	28	50	20	6	0	119
Total	44	102	455	200	56	1	858

## Unit Discharges

Evidence from Betsi Cadwaladr University Health Board

Report	Count of discharges from a single neonatal unit. Note: This is discharges and not number of babies. A baby may have more than one discharge from this unit during the specified time period.
Unit(s):	Ysbyty Gwynedd, Bangor.
Date Range:	Admissions between '01/01/2010' and '31/12/2011'.
Generated:	'01/03/2012 12:56:53' by Nicola Owen (owenn).

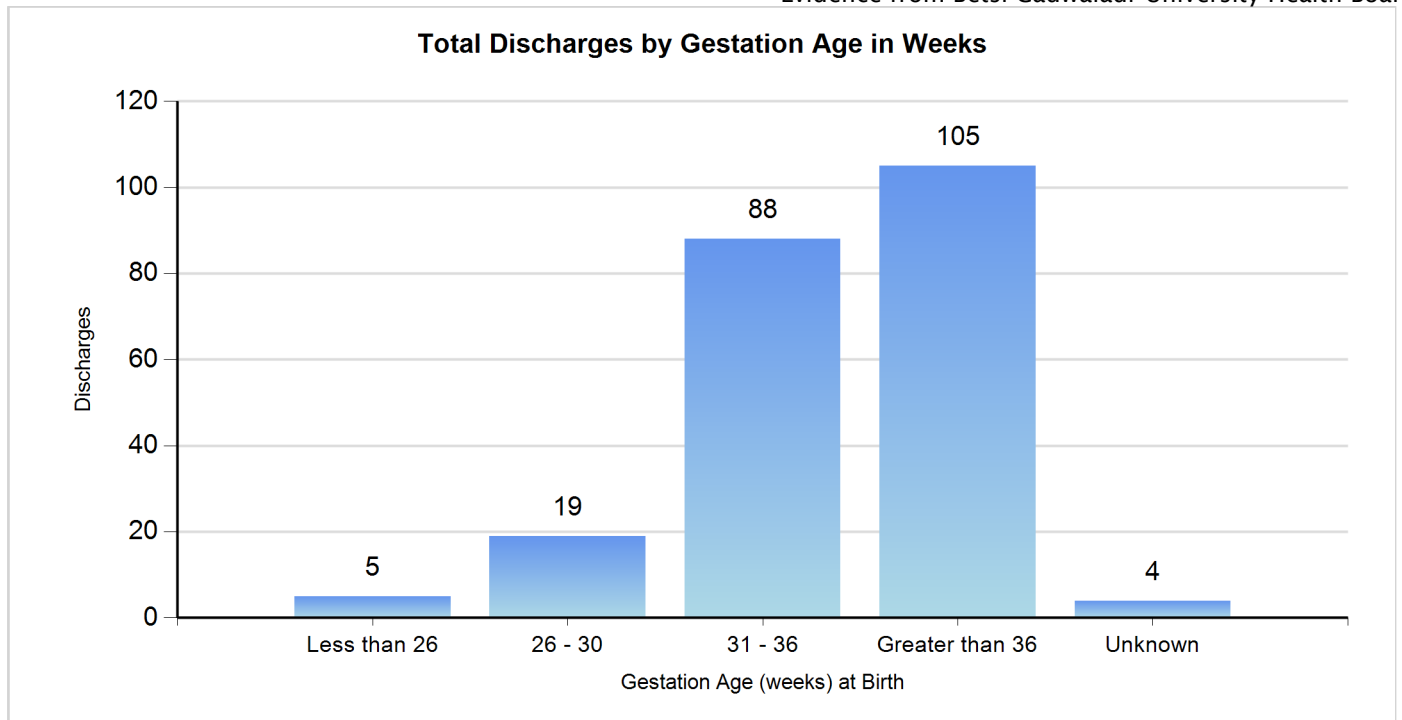
## Gestation by Discharge Type

Discharge Type	< 26	26 - 30	31 - 36	> 36	Unknown	Total
Died (< 7 days)	0	1	0	0	0	1
Died (> 28 days)	0	0	0	0	0	0
Died (7-28 Days)	0	0	0	0	0	0
Home	2	9	70	54	0	135
otherhospcc	2	7	8	3	1	21
otherhospssc	1	0	1	2	0	4
otherhospsurg	0	1	0	1	0	2
Transfer (cardiac care)	0	0	0	0	0	0
Transfer (continuing care)	0	0	0	0	0	0
Transfer (specialist care)	0	0	0	0	0	0
Unknown	0	1	1	4	2	8
Ward	0	0	8	41	1	50
Total	5	19	88	105	4	221

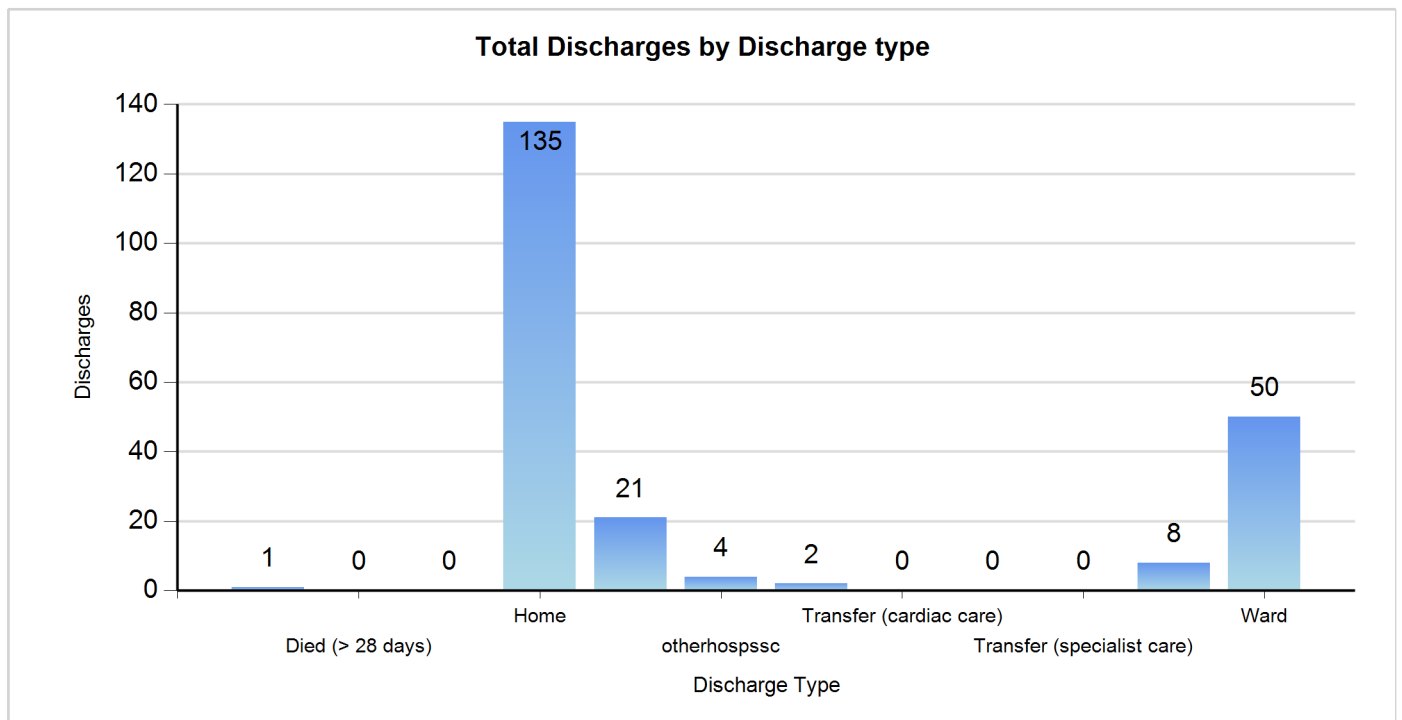
## Total Discharges by Gestation

# Unit Discharges

Evidence from Betsi Cadwaladr University Health Board



## Total Discharges by Discharge Type





## Unit Admissions

Evidence from Betsi Cadwaladr University Health Board

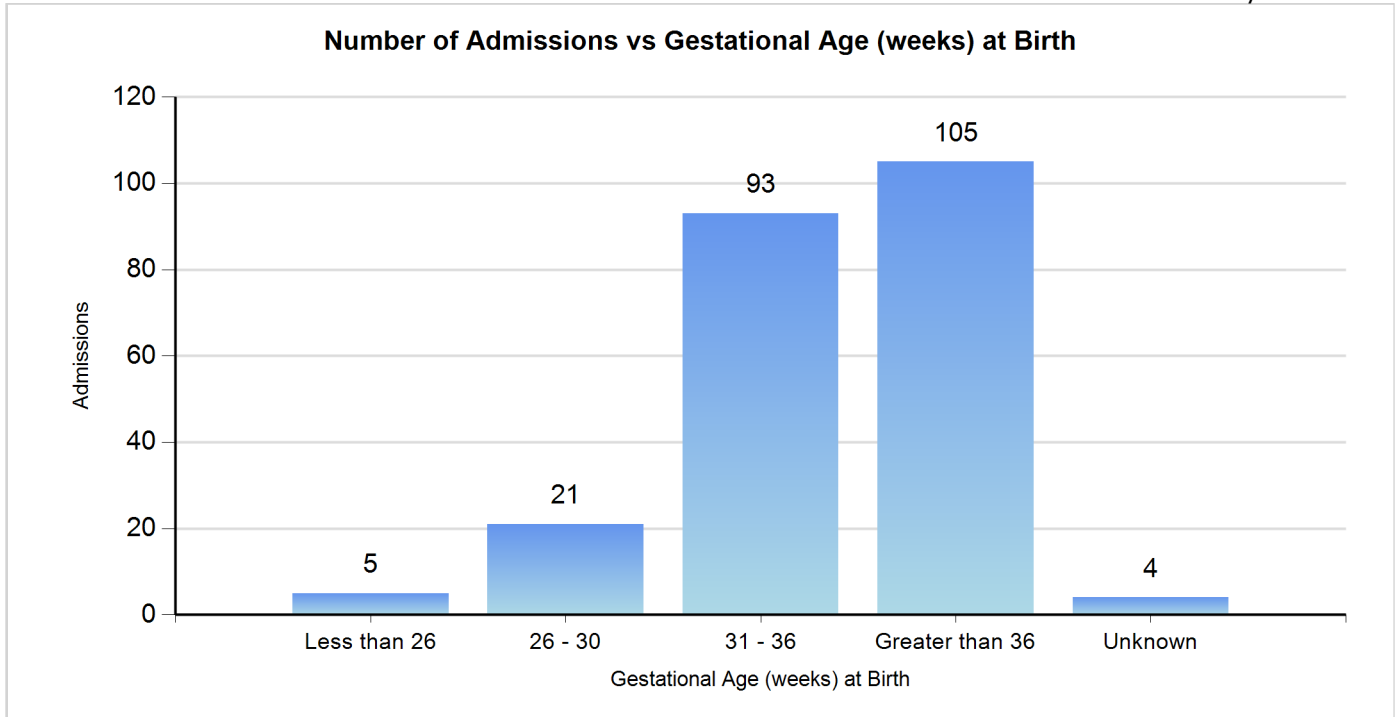
Report	Count of admissions to a single neonatal unit. Note: This is admissions and not number of babies. A baby may have more than one admission to this unit during the specified time period.
Unit(s):	Ysbyty Gwynedd, Bangor.
Date Range:	Admissions between '01/01/2010' and '31/12/2011'.
Generated:	'01/03/2012 12:58:53' by Nicola Owen (owenn).

## Gestation by Referral Type

Referral	Gestation (weeks)					Total
	< 26	26 - 30	31 - 36	> 36	Unknown	
Cannot Derive	0	6	24	35	4	69
Home Admission	0	0	2	4	0	6
Inborn - Booked	1	6	45	54	0	106
Inborn - Booked Elsewhere	0	1	4	1	0	6
Inborn - Unbooked	0	0	0	1	0	1
Postnatal Transfer In	0	0	0	0	0	0
Postnatal Transfer In - Booked	1	1	2	0	0	4
Postnatal Transfer In - Booked Elsewhere	1	4	9	6	0	20
Readmission	2	3	7	4	0	16
Total	5	21	93	105	4	228

## Admissions by Gestation

Evidence from Betsi Cadwaladr University Health Board



### Admissions by Referral Type

