# The Scrutiny Panel Report on service change proposals regarding neonatal services in relation to Glangwili Hospital, Carmarthen and Withybush Hospital, Haverfordwest

**September 2013**

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***The Panel would like to preface this advice by stating that the configuration of neonatal services cannot be determined in the absence of clear and definite plans for obstetric and midwifery services in the Hywel Dda area, including Bronglais Hospital, Ceredigion as well as at Glangwili Hospital, Carmarthen, and Withybush Hospital, Haverfordwest. Our advice to the Minister is to seek confirmation from Hywel Dda Local Health Board of the maternity (obstetric and midwifery) plans that will be implemented before reaching a conclusion on the configuration of neonatal services.***

**Short summary of recommendations**

**1. The Panel supports the development of services to look after new-born babies who require what is known as transitional care, in all obstetric units in Hywel Dda. This is care that is more than healthy babies need but not as much as babies needing special care. The mother continues to provide most of her baby's needs but there is support from a midwife who needs no specialist neonatal training. Examples include babies requiring treatments that can be administered on a post-natal ward, such as antibiotics or phototherapy for jaundice.**

**2. The Panel supports the development of 24 hour emergency resuscitation and stabilisation services at all obstetric and midwifery units. This means that staff will need to be trained and skilled in the resuscitation of newborn babies that require immediate support at birth, and in stabilising their condition so that they can be transferred safely to specialised neonatal units for more complex care.**

**3. The Panel supports the development of a Level 2 neonatal unit at Glangwili Hospital. This means that; babies born in other obstetric and midwifery units in Hywel Dda, requiring more complex but not the most complex or surgical care, can be looked after within the Hywel Dda area; reducing travelling for parents. This decision, however, can only be made when a final decision is made on which hospitals in Hywel Dda provide what type of obstetric and midwifery care.**

**4. The development of a high risk obstetric unit at Glangwili Hospital would mean that many of the babies born there would need more complex care than can be provided in a Level 2 neonatal unit. This would mean they would need to be transferred to a Level 3 (Neonatal Intensive Care Unit). This carries more risk than transferring the babies' mother before giving birth to an obstetric unit where more complex care for the newborn is available. For this reason, the Panel rejects this proposal.**

**5. The Panel accepts the proposal for how newborn babies needing high dependency care will be looked after. Following their initial care at delivery, including resuscitation and stabilisation, a clearly defined plan must be in place for their transfer to a neonatal unit able to provide high dependency care. This is called a service specification for a pathway of care.**

**6. The care of mothers and babies is very closely interrelated. For this reason the Panel recommends that there is a clear description of the sort of midwifery or obstetric care that will be provided in the future in Glagnwili, Withybush and Bronglais Hospitals before final decisions are made in relation to newborn services.**

**List of key recommendations set out in relation to the proposals of the Hywel Dda Health Board and the counter-proposals of the Community Health Council.**

1. ***"There should be well developed transitional care services at each obstetric unit" (Local Health Board)***
   **Recommendation:** Accept, with the proviso that there is clarification of the model to be developed and reassurances are provided that midwifery staffing and training will be adequate to support transitional care.

2. ***"There should be clear and robust stabilisation and resuscitation services at Withybush, Bronglais and Glangwili Hospitals" (Local Health Board)***
   **Recommendation:** Accept, with the proviso that the process for ensuring prompt, safe transfer to a centre able to provide an appropriate level of care, should the baby require on-going higher intensity support, is made explicit, the pathway of care clearly defined, and resuscitation and stabilisation is provided by staff trained and skilled in the required competences.

3. ***"To aspire to achieve a Level 2 neonatal service in Glangwili Hospital, whilst acknowledging this is unlikely with the present availability of trainee doctors" (Local Health Board)***
   **Recommendation:** The non-availability or limited availability of trainee doctors does not preclude the delivery of a Level 2 neonatal service as alternative models exist; the development of a Level 2 neonatal service should not be aspirational but is essential if obstetric services are to be maintained at Glangwili Hospital.

4. ***"To develop an obstetric unit at Glangwili Hospital, also managing the highest risk births, recognising the requirement of safe and sustainable services" (Local Health Board)***
   **Recommendation:** Reject, as the development of a high risk obstetric unit, i.e. a unit providing care for women whose babies have a high likelihood of requiring high dependency or intensive care is unsafe without concurrent provision of neonatal high dependency/intensive care facilities.

5. ***"To develop a paediatric high dependency unit co-located with the neonatal unit at Glangwili Hospital" (Local Health Board)***
   **Recommendation:** The decision regarding the development of a co-located paediatric high dependency unit should be made in conjunction with final decisions around neonatal services.

6. ***"To develop a service specification for high dependency neonatal care in Hywel Dda with clear pathways to Level 2 and Level 3 units" (Local Health Board)***
   **Recommendation:** Accept, noting that the service specification will be dependent on the outcomes of proposals 3, 4, 5, and 7.

7. ***"Retain obstetric services at Withybush and Bronglais Hospitals" (Local Health Board)***
   **Recommendation:** Seek clarification of the nature of the proposed "obstetric services".

8. **"*The Community Health Council does not support the proposal to develop a Level 2 neonatal unit at Glangwili Hospital and would seek a strengthening and enhancement of the existing service model across hospitals in the Hywel Dda area and the Special Care Baby Units therein"***

**Recommendations:** These are based upon the goal of providing Hywel Dda residents with safe, sustainable, modern, equitable, and family-centred newborn care.

**8.1** Strong justification for the centralisation of neonatal care is provided by the need for equitable access to trained specialists with up-to-date skills working in fully equipped centres; the provision of neonatal special care facilities across all Hywel Dda hospitals is neither safe nor sustainable given the low volume of patient throughput

**8.2** The development of a Level 2 Neonatal Unit at Glangwili, if accompanied by appropriate changes in obstetric services, a collaborative approach to deliver medical cover across the Health Board, and the establishment of clear pathways of care, offers opportunity for improved efficiency, safety, sustainability, and equity in the delivery of neonatal services to all Hywel Dda residents

**8.3** As maternity and neonatal services are closely interrelated, the appointment of obstetric and midwifery leads to work with the Hywel Dda paediatric lead would facilitate clear and effective decision making and enhancement of collaborative working

**8.4** A 24 hour neonatal transport service would further strengthen neonatal care especially if combined with other innovative support for rural paediatricians through the Welsh Neonatal Network

## 1 Background

The Wales Audit Office Report "*A Picture of Public Services"* (2011) identified that transformational change was essential if public services were to deliver improved services for the people of Wales. The Welsh Government report "*Together for Health: A Five Year Vision for the NHS in Wales*" (November 2011) set out the challenges facing the NHS, namely rising demand, increasing patient expectations, financial constraint and recruitment difficulties. To meet this challenge, every Local Health Board in Wales was required to set out its plans for creating sustainable services for all communities with service change processes taken forward in accordance with the requirements of the "*Guidance for Engagement and Consultation on Changes to Health Services"*. Hywel Dda Local Health Board published its proposal for changes to health services in Mid and West Wales "*Your Health Your Future"* in January 2013. Two elements of the Hywel Dda Health Board's proposals were referred by Hywel Dda Community Health Council to the Welsh Health Minister for determination. In accordance with the "*Referrals from Community Health Councils Guidance"*, the Minister for Health and Social Services established a Service Change Scrutiny Panel to provide expert advice to assist him in making his determination.

## 2 Information considered

A face-to-face meeting was held on August 15th 2013 with members of Hywel Dda Health Board and Hywel Dda Community Health Council (Appendix 2). Face-to-face and telephone discussions were held with members of the Welsh Health Services Specialised Services Committee and the Neonatal Network (Appendix 2). A list of documents received, and documents referenced are listed at Appendix 3. A large number of documents provide a description of neonatal and maternity services in Wales and set out national standards and specifications. It is not intended to duplicate this material.

## 3 Neonatal care

### 3.1 General description

Neonatal services provide care for babies that have needs over and above normal care requirements. Approximately 10% of babies have "over and above" needs, and 1% require the highest level of support (intensive care). Babies requiring intensive care are the most unwell or unstable and have the greatest needs in relation to staff skills and staff to patient ratios. At least some period of intensive care is usually required for extremely preterm babies, born less than 28 weeks gestation. This is also not infrequently needed by more mature babies with a variety of conditions, such as severe infections, neurological conditions, and congenital malformations. High dependency care is provided for babies who require highly skilled staff but where the ratio of nurse to patient is less than intensive care. Special care is provided for babies who require additional care but do not require either Intensive or High Dependency care. A list of the care processes that define a Special Care Day, High Dependency Care Day, Intensive Care Day and Transitional Care (BAPM 2011), is provided at appendix 4.

### 3.2 Categories of Neonatal Units

The terminology of Neonatal Unit categories can be inconsistent and confusing. The Department of Health Toolkit for High Quality Neonatal Services (October 2009) categorises these as Special Care Unit (SCU) (also known as Special Care Baby Unit,

SCBU, or Level 1 Neonatal Unit), Local Neonatal Unit (LNU) (also known as High Dependency Unit or Level 2 Neonatal Unit), and Neonatal Intensive Care Unit (NICU) (also known as Level 3 Neonatal Unit).

SCUs primarily provide special care for their local population and a stabilisation facility for babies who need to be transferred to a NICU for intensive or high dependency care. LNU provide all categories of neonatal care for their local population except for the sickest babies requiring complex or longer-term intensive care who are transferred to a NICU. The majority of babies over 27 weeks of gestation will usually receive their full care, including short periods of intensive care, within their LNU. Neonatal care is family centred and facilities required include parent accommodation, private and comfortable breastfeeding/expressing facilities and privacy for confidential conversations.

NICUs are sited alongside specialist obstetric and feto-maternal medicine services, and provide the whole range of medical neonatal care for their local population, along with additional care for babies and their families referred from the neonatal network. NICUs receive input from a range of specialists allied to medicine, including dieticians, physiotherapists, occupational therapists, and speech and language therapists. Many NICUs are co-located with neonatal surgery services and other specialised services. Medical staff in a NICU should have no clinical responsibilities outside the neonatal and maternity services. Standards must also be met for the proportion of nursing staff holding a post registration qualification in specialised neonatal care.

### 3.3 Organisation of neonatal services

There is a growing body of evidence, nationally and internationally, that indicates that care for very preterm babies and other more mature sick babies requiring highly specialist care including prolonged intensive support, should be concentrated in relatively few centres, as this is associated with reduced mortality and morbidity. In this model the delivery of a baby, in whom a need for additional care is anticipated, takes place in a specialist centre (i.e. the mother is booked to received her care in a specialist centre, or be transferred there prior to delivery; so-called "in-utero transfer"). Where delivery of a very preterm or sick baby occurs unexpectedly, transfer to a specialist centre takes place as rapidly as is possible and safe. Once the intensity of support required has reduced, the aim is to transfer the baby to a neonatal unit closer to home, to receive on-going care and preparation for discharge. This pattern of organisation of neonatal services aims to ensure that:

- babies receive high quality, expert care in accordance with their needs delivered by a full complement of highly and appropriately skilled and trained staff
- babies receive care in a location appropriate to their needs, with low intensity care provided closest to home
- staff maintain their skills and expertise by treating sufficient numbers of cases;
- care is family-centred
- pathways of care across institutional boundaries are clear
- health-care staff deliver care collaboratively to serve the needs of patients across institutional boundaries
- efficiencies are gained in relation to in the purchase and maintenance of expensive equipment, provision of appropriate facilities for parents and families, and support services from professions allied to medicine (e.g. dieticians, counsellors, physiotherapists)

The "*All Wales Neonatal Standards for Children and Young People's Specialised Healthcare Services"* (2008) includes standards for neonatal specialised care.

### 3.4 Current neonatal services in Hywel Dda Health Board

#### 3.4.1 Geography

Hywel Dda is a large, predominantly rural community with many roads that are single carriage-way and/or readily compromised by bad weather. Travel distances and approximate times between Withybush and Glangwili are 30 miles and 40min, Bronglais and Withybush 65 miles and 1h 40min, Bronglais and Glangwili 50 miles and 1h 25min.

#### 3.4.2 Obstetric services

The number of annual births is low, at around 500 at Bronglais, 1200 at Withybush, and 1600 at Glangwili. Each of the three hospitals is described as having a consultant led obstetric service.

#### 3.4.3 Neonatal services

Bronglais has a neonatal "stabilisation" facility, and Withybush and Glangwili have Special Care Baby Units. None of the hospitals has a dedicated neonatal rota, i.e. neonatal care is provided by doctors also providing paediatric care.

#### 3.4.4 Neonatal transfer services

CHANTS (Cymru inter-Hospital Acute Neonatal Transfer Service), the neonatal transport service for South Wales became operational in January 2011, replacing the day time ad hoc neonatal transport service provided by South Wales neonatal units. The service operates from 8am to 8pm and is run from each of the three tertiary neonatal units in South Wales, Cardiff, Newport and Swansea, working one week in three in rotation. Out of hours, an ad hoc service continues, relying on the goodwill and availability of the medical and nursing staff and an emergency ambulance and driver.

## 4 Hywel Dda Health Board proposals

The Hywel Dda Health Board sets out the case for change primarily in respect of:

### 4.1 Workforce issues

- Inability to recruit to meet Royal College of Obstetricians and Gynaecologists guidance on consultant cover on labour wards
- Difficulties in recruiting medical staff to maintain paediatric rota cover on all 3 sites, Glangwili, Withybush, and Bronglais
- Inability to achieve European Working Time Directive and British Association of Perinatal Medicine compliant rotas

### 4.2 Training issues

- The Welsh Deanery has said that trainees will not be allowed to work in units where the delivery rate is less than 2500, as they would gain insufficient experience

- The Welsh Deanery has required that, from March 2014, all paediatric trainees will have to work on one site to deliver their on-call commitment
- In order to maintain status as a training provider in paediatrics, and obstetrics and gynaecology, the obstetric units must have a sufficient number of births to meet curriculum requirements for training, and it will no longer be possible to include trainees in on-call rotas at both Glangwili and Withybush.

### 4.3 Geographical issues

Glangwili is located within a relatively short drive from Swansea. It was considered likely that should the Glangwili obstetric service close, many women currently delivering there would choose to go to Swansea, i.e. there would be no substantial increase in the number of deliveries at Withybush and the 2500 per annum requirement to maintain training provider status would not be met.

## 5 Comment and recommendations relating to the Hywel Dda Health Board proposals

Each of the key Hywel Dda Health Board proposals as they relate to neonatal services is discussed in turn.

**5.1 Proposal:** *"Ensuring there are well developed transitional care services at each obstetric unit"*

**5.1.1 Comment:** There is no definition provided by the Health Board of the term "*transitional care service*". The British Association of Perinatal Medicine considers this can usually be delivered in two service models, within a dedicated transitional care ward or within a postnatal ward. In either case the mother is resident with her baby and provides care with support from a midwife/healthcare professional who needs no specialist neonatal training. Examples include babies requiring treatments that can be administered on a postnatal ward, such as antibiotics or phototherapy.

This provision of transitional care services at each obstetric unit recognises that babies may need minor additional care that can be safely administered without admission to a neonatal unit. It is in keeping with the principle of family centred care, and reduces the separation of mother and baby, and the pressure upon neonatal unit cots.

**5.1.2 Recommendation:** Accept, with the proviso that there is clarification of the model to be developed and reassurances are provided that midwifery staffing and training will be adequate to support transitional care.

**5.2 Proposal:** To develop "*clear and robust stabilisation and resuscitation services at Withybush, Bronglais and Glangwili Hospitals*"

**5.2.1 Comment:** The birth of a baby requiring resuscitation can occur unexpectedly. Stabilisation and transfer to a centre able to provide an appropriate level of care should then take place as soon as it is safe and practicable should the

baby require on-going higher intensity support. These services are essential for all hospitals where babies are born.

**5.2.2 Recommendation:** Accept, with the proviso that the process for ensuring prompt, safe transfer to a centre able to provide an appropriate level of care, should the baby require on-going higher intensity support, is made explicit, the pathway of care clearly defined, and resuscitation and stabilisation provided by staff trained and skilled in the required competences.

**5.3 Proposal:** "*to aspire to achieve a Level 2 neonatal service in Glangwili Hospital, whilst acknowledging this is unlikely with the present availability of trainee doctors*"

**5.3.1 Comment:** The non-availability or limited availability of trainee doctors does not preclude the delivery of a Level 2 neonatal service. Alternative models include consultant and/or post Certificate of Completion of Training non-consultant/SAS (Staff Grade, Specialty Doctors and Associate Specialists) delivered services (RCPCH 2012).

**5.3.2 Recommendation:** See section 7 below for detailed discussion; the development of a Level 2 neonatal service should not be aspirational but is essential if obstetric services are to be maintained at Glangwili Hospital**.**

**5.4 Proposal:** "*develop an obstetric unit at Glangwili Hospital also managing the highest risk births, recognising the requirement of safe and sustainable services*"

**5.4.1 Comment:** The delivery of "highest risk births" requires that there is adequate provision for the care of these babies. Unless otherwise specified the phrase "highest risk births" would normally be taken to include babies with complex conditions or otherwise with a high likelihood of requiring high dependency or intensive care. This proposal requires clarification.

**5.4.2 Recommendation:** Reject, as the development of a high risk obstetric unit, i.e. a unit providing care for women whose babies have a high likelihood of requiring high dependency or intensive care, is unsafe without concurrent provision of neonatal high dependency/intensive care facilities.

**5.5 Proposal:** "*develop a paediatric high dependency unit co-located with the neonatal unit at Glangwili Hospital*"

**5.5.1 Comment:** Paediatric services are out-with the scope of this report. The implications of co-locating paediatric high dependency and neonatal care would depend upon the volume of paediatric need, the decision regarding the level and volume of neonatal care, and the ability to recruit and retain an appropriately skilled workforce.

**5.5.2 Recommendation:** The decision regarding the development of a co-located paediatric high dependency unit should be made in conjunction with final decisions around neonatal services.

**5.6 Proposal:** To develop "*a service specification for high dependency neonatal care in Hywel Dda with clear pathways to Level 2 and Level 3 units*"

**5.6.1 Comment:** Babies that require high dependency care and intensive care are currently transferred between Hywel Dda hospitals (for example from Bronglais to Withybush, and from Withybush to Glangwili) and to other hospitals in South Wales (for example to Singleton and University Hospital of Wales. These are inconsistent and sometimes inappropriate patient flows, and indicate the need for a service specification defining clear, consistent pathways to Level 2 and Level 3 neonatal units.

**5.6.2 Recommendation:** Accept, noting that the service specification will be dependent on the outcomes of proposals 5.3, 5.4, 5.5, and 5.7.

**5.7 Proposal:** "*retain obstetric services at Withybush and Bronglais Hospitals*"

**5.7.1 Comment**: Obstetric and midwifery services are outside the scope of this report. It must be noted, however, that retention of a full consultant obstetric service would necessitate retention of neonatal units equipped and staffed to deliver special care at Withybush and Bronglais. NICE Guidance (2007) states that obstetric units must provide direct access to "obstetricians, anaesthetists, neonatologists and other specialist care" hence there are other wider implications. There are approximately 1300 and 500 births per annum at Withybush and Bronglais respectively; the number of days of special care provided per annum is approximately 1000 at Withybush and unknown at Bronglais; in 2011/12 one hundred and fifteen babies received special care at Withybush and two at Bronglais. Given this low patient volume the likelihood of recruiting and retaining appropriately trained and skilled medical staff and maintaining expertise is poor, and would be cause for concern in relation to sustained delivery of a safe service.

**5.7.2 Recommendation:** The nature of the proposed "obstetric services" requires clarification.

## 6 Hywel Dda Community Health Council concerns and proposals

### 6.1 Meeting with members of the Community Health Council

The genuine anxiety of members of the Hywel Dda Community Health Council was evident and appeared to relate to a perception of down-grading of services as a consequence of the service reconfiguration. They acknowledged the planning blight that has ensued as a consequence of the referral and they recognise the difficulties in staff recruitment with the deskilling that arises from insufficient patient contact that forms part of the Health Board's justification for service reconfiguration. They expressed major concern regarding patient transport

between hospitals, drawing attention to roads that are often closed by accidents or poor weather conditions.

Members of the Community Health Council referred to a need for an "enhanced rural model", an "opportunity to be innovative" and acceptance of the need for alternative models of working, recommending closer working with specialist staff at tertiary centres and consideration of, for example, General Practitioner Specialists. They acknowledged that the population expressed a distinct preference to deliver in Swansea, i.e. that travelling this distance in non-emergency situations was not an issue. Medically qualified members of the Community Health Council expressed preferences for retention of traditional organisational models.

## 6.2 Community Health Council proposals

The Community Health Council does not support the proposal to develop a Level 2 neonatal unit at Glangwili Hospital stating "*we remain of the opinion that such a development and large capital investment is unjustified given the statistics which reveal that only a very small volume of patients would require such a facility. We also believe that inadequate recognition has been given to the close proximity of ABMU LHB's Morriston Hospital*". *"The CHC would seek a strengthening and enhancement of the existing service model across all four hospitals in the Hywel Dda area and the Special Care Baby Units therein and recommend that this should be the preferred model for the LHB; this is not the status quo but a bolstering and a much improved networking of the existing separate facilities at each hospital."*

# 7 Comment and recommendations relating to the Community Health Council proposals

## 7.1 Interdependencies

### 7.1.1 Obstetric services

Obstetric services are outside the scope of this report and it is noted that the proposal to establish a "complex obstetric unit" in Glangwili was not referred to the Minister. However healthcare for mothers and babies is self-evidently closely inter-related. The low number of less than 3500 deliveries across Bronglais (~500), Withybush (~1200) and Glangwili Hospitals (~1600) is particularly relevant to newborn care. From a neonatal perspective the provision of a full consultant maternity service brings with it the requirement for a fully staffed and equipped neonatal unit. Newborn needs can be accommodated, without need for a neonatal unit, if a low-risk maternity service provided through a midwifery led unit, is accompanied by emergency medical obstetric cover, staff trained in newborn resuscitation and stabilisation, and clearly defined pathways for in-utero and postnatal transfers. There is consistent evidence from around the world that the regionalisation of services for low-risk deliveries and the centralisation of high risk deliveries are effective in reducing neonatal deaths (Moster et al 2001; Heller et al 2002; Merlo et al 2005; Hallsworth et al 2007; de Jonge et al, 2009). From a neonatal perspective centralisation of consultant maternity services in a single centre in Hywel Dda would provide improved patient throughput, enable centralisation of neonatal services, facilitate stable and improved staffing,

maintenance of staff skills, more efficient resource utilisation, and would benefit infant care and outcomes.

### 7.1.2 Other specialist services

The proposal to develop a "two-site" model for paediatrics was not referred to the Minister. However there are other important dependencies in health care; preterm or sick infants frequently require specialist multidisciplinary follow-up care and a mother considered to have a high risk pregnancy may require specialised care herself. Clearly a full range of specialist services for mothers, babies and children, cannot be delivered at every location where babies are born. We agree with the Community Health Council's desire to see a strengthening and enhancement of services across all hospitals with much improved networking in Hywel Dda. We note an innovative approach implemented for some paediatric specialities that involves collaborative working in a unified model of service delivery across the Hywel Dda Health Board. We commend this model for delivery of consultant level obstetric and neonatal on-call and day-time cover through a shared rota across the Health Board. Further development of such models to include for example, "consultant of the week" responsibilities for neonatal care located at a single site, would have multiple benefits. The establishment of the Welsh Neonatal Network offers further opportunity for collaborative working across neonatal and obstetric units in Wales.

### 7.1.3 Recommendation

Decisions regarding neonatal services cannot be made without clarity in relation to obstetric and midwifery services, and pathways of care to specialised services; we suggest that the appointment of obstetric and midwifery leads to work with the Hywel Dda paediatric lead would facilitate clear and effective decision making and strengthened collaborative service delivery.

## 7.2 Safety and sustainability

### 7.2.1 Staffing

Specialist care is provided by doctors, nurses, and "professions allied to medicine" that have had expert training. They are few in number, highly skilled, and require continued use of these skills to maintain them. Even if funds were available to establish teams of specialists at every site where babies are born, it is unlikely that there would be sufficient numbers of skilled, trained staff available to recruit, and even if recruitment were possible, their skills would inevitably rapidly be compromised through lack of sufficient patient throughput.

### 7.2.2 Equipment

Specialist equipment is expensive, requires skilled maintenance, and defined replacement programmes. Even if funds were available to fully equip multiple neonatal units across Hywel Dda, the costs of replacement and maintenance by skilled personnel would be unsustainable.

### 7.2.3 Recommendation

Strong justification for the centralisation of neonatal care is provided by the need for equitable access to care delivered by trained specialists with up-to-date skills in appropriately equipped centres; the provision of neonatal special care facilities across all Hywel Dda hospitals is neither safe nor sustainable.

## 7.3 A network model

### 7.3.1 Equity, co-ordination, and collaboration

In the vast majority of cases, pregnancy and birth are normal physiological processes, requiring skilled midwifery care, but not necessarily medical care. Mothers at high risk of delivering a baby with "over and above" needs should do so at a location with appropriate on-site facilities. However predicting pregnancy outcome can be extremely difficult and obstetric and neonatal emergencies may occur rapidly and without warning. There is no universally accepted definition of "low risk", though guidance from NICE is available (2007) and every mother is entitled to a positive birth experience, care at or as close to home as possible and confidence that she and her baby will have rapid access to specialist care should this be needed. These aims may at first sight involve tensions but the benefits of a network model of care have been acknowledged in Wales and around the world as the most effective and efficient means of providing every mother and baby with equitable access to highly specialised care in an appropriately staffed and equipped facility when needed, with care close to home when not needed. Without defined pathways of care, the delivery of care for a sick baby all too often becomes a lottery.

### 7.3.2 Neonatal transfer service

Integral to a networked arrangement is an appropriately resourced system for 24 hour ambulance transfers for mothers and babies, and good general transport links. The Welsh Neonatal Network was asked to undertake a costed appraisal exercise for 24 hour neonatal transport services across Wales, but the outcome of this is unknown. Given the rurality of Hywel Dda, the reliable availability of immediate advice and support for a local paediatrician faced with the unexpected emergency delivery of a critically ill newborn baby would be an important advance.

### 7.3.3 Recommendation

A 24 hour neonatal transport service would strengthen neonatal care and should be established without further delay. We recommend also that consideration is given to establishing other consistent support for rural paediatricians through the Welsh Neonatal Network; for example emergency telephone consultation with a consultant at a Level 3/Neonatal Intensive Care Unit, and a rapid response team able to travel in advance of an ambulance team to provide immediate on-site assistance.

## 7.4 Volume of neonatal care requirement

### 7.4.1 Special Care and High Dependency Care

The number of Special Care days provided by each of Withybush and Glangwili Hospitals is in the region of 1000 per annum; this is about half the average provided by Special Care Units (Level 1 Neonatal Units) nationally. In 2012 Singleton provided 475 days of Special Care to babies born to mother's resident in Hywel Dda (Carmarthenshire 409; Pembrokeshire 35; Ceredigion 31).

Withybush and Glangwili provide approximately 120 and 180 days of High Dependency Care per annum respectively. In 2012 Singleton provided 274 days of High Dependency Care to babies born to mothers' resident in Hywel Dda (Carmarthenshire 174; Pembrokeshire 74; Ceredigion 26). Taking into account that the number of High Dependency Care days delivered to Hywel Dda mothers elsewhere in Wales is unknown and that unmet high dependency need cannot readily be quantified (e.g. babies that might have benefited from parenteral nutrition or non-invasive respiratory support but did not receive this), a **conservative** estimate is that babies born to Hywel Dda residents have a total High Dependency Care requirement of around 600 days per annum. This approximates to the average number of High Dependency Care days provided by Local Neonatal Units (Level 2 Neonatal Units/High Dependency Units) nationally.

### 7.4.2 The case for development of a Level 2 Neonatal Unit at Glangwili

The volume of Special Care provided at each of Withybush and Glangwili is half the national average provided by Level 1 neonatal units. Clinical expertise, a key determinant of quality of care and outcomes, is maintained by high volume patient throughput. High patient volume is associated with better outcomes across a wide range of health care procedures and conditions, including neonatal care (Halm et al, 2002). Providing neonatal Special Care at one site would better enable staff to retain skills and grow experience and would ensure more efficient use of resources. There is also sufficient requirement for neonatal High Dependency Care among Hywel Dda residents to justify the development of a Level 2 neonatal unit. Neonatal Intensive Care is South Wales is provided in Swansea, Cardiff, and Newport. Bristol provides neonatal cardiac/surgical care. Hence the flow of increasing intensity of care is from west to east. This, in conjunction with the close proximity of Singleton (and Morriston Hospital), are arguments in favour of developing a neonatal unit able to provide the Special Care and High Dependency Care needs of the Hywel Dda population at Glangwili Hospital.

**7.4.3 Recommendation:** The development of a Level 2 Neonatal Unit at Glangwili, if accompanied by appropriate changes in obstetric services, and a collaborative approach to deliver medical cover across the Health Board, offers opportunity for improved efficiency, safety, sustainability, and equity in the delivery of neonatal services.

## 7.5 Strengthening newborn services

### 7.5.1 The need for change

Healthcare has always evolved to better meet the needs of patients, and improve outcomes and patient experience; for example rapid discharge within a few days

of Caesarean section delivery is now the norm, in contrast to hospital stays of a week or more previously. The introduction of managed clinical networks in England has been accompanied by measurable benefit (Gale et al 2012). There is compelling evidence of the benefits to patients of concentrating specialised services in fewer centres (Academy of Medical Royal Colleges 2013; Royal College of Physicians 2012; Royal College of Obstetricians and Gynaecologists 2011); for example the London Stroke Strategy involving replacing 32 stroke units with 8 highly specialised units, has led to a reduction in deaths and costs. All neonatal units in Wales now utilise a common electronic patient management system that offers opportunity to make avail of up-to-date information on patient volume, care requirements, and evaluate the impact of change upon patient outcomes so that services may continue to evolve.

### 7.5.2 Communicating the rationale for change

Change is often unsettling and it is recognised that communities often view alterations in the way in which healthcare is delivered with suspicion. The personal concerns of professionals at the perceived loss of a service are also powerful obstacles to change. This is reflected in public protest and clinical dissent at aspects of the Hywel Dda Health Board proposals. Though sometimes difficult to communicate that a sick patient needs to get to the hospital that can provide the best care, not to the hospital that it is closest, it is crucial that this is achieved. It is also essential that achieving integrated, networked care for mothers and babies is neither presented nor viewed as a downgrading of services, and is recognised as a modernisation of services.

### 7.5.3 Recommendation

Community Health Councils and others representing the public interest would benefit from access to independent professional advice, up-to-date evidence, and reliable health data.

## 8 Concluding remarks

The Welsh Neonatal Standards (2008) were developed following recognition that previously *"these services were being delivered in an ad hoc and fragmented way".* The Standards, the CHANTS neonatal transport service, the establishment of a Welsh Neonatal Network, and the introduction of a real-time electronic patient management system for use in day-to-day clinical care, have been major improvements to neonatal care in Wales. Elements of fragmentation persist; for example it is noted that Level 2 neonatal care (High Dependency Care) provided out-with a NICU, does not fall within the remit of the Welsh Specialised Services Committee, nor does responsibility for neonatal Special Care. However the progress made demonstrates that with clinical leadership, effective public engagement, political will, and honesty in conveying to the public the benefits of change to improved patient care, outcomes and experience, reconfiguration can deliver modern, effective, efficient neonatal services for the people of South Wales.

## Appendix 1

## Scrutiny Panel Terms of Reference

1. Taking account of relevant national standards, sustainability, best practice and the Welsh Government policy context set out above, to examine the proposals for service change put forward by Hywel Dda Health Board; and the objections and alternative proposals put forward by Hywel Dda Community Health Council for:

    - A&E services at Prince Philip Hospital in Llanelli; and
    - Neonatal services, specifically in relation to Glangwili (Carmarthen) and Withybush (Haverfordwest) Hospitals.

2. To provide detailed advice and recommendations to the Minister for Health and Social Services on whether the Health Board's proposals should proceed, or be modified to take account of the Community Health Council's objections and alternative proposals.

## Appendix 2

### Meeting with Hywel Dda Health Board, 14th August 2013

| | |
|---|---|
| Trevor Purt | CEO |
| Sian-Marie James | Vice Chair |
| Kathryn Davies | Director of Planning, Strategic Integration, Therapies and Health Sciences |
| Paul Williams | Assistant Director of Strategic Planning |
| Sian Lewis | Consultant Haematologist & Assistant Director of Clinical Services |

### Meeting with Community Health Council 15th August 2013

| | |
|---|---|
| Tony Wales | Chair |
| Gabrielle Heathcoat | Deputy Chair |
| Ashley Warlow | Chief Officer |
| Sam Dentten | Deputy Chief Officer |
| Helen Pinnell-Williams | Secretary |
| Ray Hine | |
| Paul Hinge | |
| Ruth Howells | Retired Consultant Obstetrician |
| Peter Milewski | |
| Pamela Parsons | |
| John Philips | |
| Chris Slader | |
| Janet Waymont | |

### Additional face-to-face meetings, telephone discussions, and written submissions

| | |
|---|---|
| Daniel Phillips | Director of Planning, Welsh Health Specialised Services Committee |
| Siddartha Sen | Consultant Neonatologist, Welsh Neonatal Network |
| Heather Payne | Maternal and Child Health Lead, Welsh Government |
| Jean Mathes | Consultant Neonatologist, Singleton Hospital |
| Simon Fountain-Polley | Consultant Paediatrician, Bronglais Hospital and Clinical Programme Director for Women's and Children's Health, Hywel Dda Local Health Board |
| Martin Simmonds | Consultant Paediatrician Withybush Hospital, |
| Kevin Tribble | General Manager, Child and Adolescent Health, Withybush Hospital |
| Julie Wall | Assistant Head of Midwifery, Pembrokeshire |
| Annette John | Staff Nurse, Withybush Hospital |
| Gustavo vas Falco | Consultant Paediatrician, Withybush Hospital |
| Danniela Secan | Consultant Paediatrician, Glangwili Hospital |
| Julie Young | Sister Glangwili Hospital, |
| Margaret Hood | Midwife Glangwili Hospital, |
| Meinir Davies | Staff Nurse Glangwili Hospital |

## Appendix 3

## Documents received or referenced


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## Appendix 4

## Definitions (British Association of Perinatal Medicine, 2011)

### Intensive Care Day

- Any day where a baby receives any form of mechanical respiratory support via a tracheal tube
- BOTH non-invasive ventilation (e.g. nasal CPAP, SIPAP, BIPAP, vapotherm) and Parenteral Nutrition
- Day of surgery (including laser therapy for ROP)
- Day of death
- Any day receiving any of the following
- umbilical arterial line
- umbilical venous line
- peripheral arterial line
- insulin infusion
- chest drain
- exchange transfusion
- therapeutic hypothermia
- prostaglandin infusion
- replogle tube
- epidural catheter
- silo for gastroschisis
- external ventricular drain
- dialysis (any type)

### High Dependency Care Day

Any day where a baby does not fulfil the criteria for intensive care where any of the following apply:

- any day where a baby receives any form of non-invasive respiratory support
- (eg nasal CPAP, SIPAP, BIPAP, HHFNC)
- any day receiving any of the following:
    - parenteral nutrition
    - continuous infusion of drugs (except prostaglandin &/or insulin)
    - presence of a central venous or percutaneous long line
    - presence of a tracheostomy
    - presence of a urethral or suprapubic catheter
    - presence of trans-anastomotic tube following oesophageal atresia repair
    - presence of a nasopharyngeal airway/nasal stent
    - observation of seizures/cerebral function monitoring
    - barrier nursing
    - ventricular tap

### Special Care Day

Any day where a baby does not fulfil the criteria for intensive or high dependency care and requires any of the following:

- oxygen by nasal cannula
- feeding by nasogastric, jejunal tube or gastrostomy

- continuous physiological monitoring (excluding apnoea monitors only)
- care of a stoma
- presence of intravenous cannula
- receiving phototherapy
- special observation of physiological variables at least 4 hourly

**Transitional Care Day**

This can be delivered in two service models, within a dedicated transitional care ward or within a postnatal ward. In either case the mother must be resident with her baby and providing care. Care above that needed normally is provided by the mother with support from a midwife/healthcare professional who needs no specialist neonatal training. Examples include low birth-weight babies, babies who are on a stable reducing programme of opiate withdrawal for Neonatal Abstinence Syndrome and babies requiring a specific treatment that can be administered on a post-natal ward, such as antibiotics or phototherapy.