

**West Midlands Children's, Young People and
Maternity Services Configuration Group**

**Ensuring Sustainability of Maternity and Children's Services in
the West Midlands**

West Midlands Overview

June 2009

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Executive Summary

This report is the result of a review of all the Consultant led Obstetric Units and Inpatient Paediatric Units in the West Midland Region which was initiated in 2007 to appraise critically the safety and sustainability of these units for the foreseeable future.

The review focused on whether current and future services met the needs of mothers, children and families in the West Midlands. These needs included equitable access to safe, appropriately staffed services which fulfilled the recommendations of *Maternity Matters* (DH) and the later published *Safer Childbirth (Joint Royal Colleges)* and *Modelling the Future II* (RCPCH). The West Midlands strategy *Investing for Health* has been taken into account, as has the work undertaken by the 'Darzi' pathway groups (*Our NHS ,Our Future*), and the *Workforce Deanery*. These have all influenced and helped in the development and outcome of this report.

The key matters reviewed were service quality, the choice agenda, volume of patient care to maintain expertise, configurations that support high quality training and financial viability. However the main drivers for this report has been the ability to meet the recommended staffing requirements for the impending implementation of the European Working Time Directive (EWTB) in August 2009 and for safe staffing of labour wards contained in *Safer Childbirth*.

The inter-relationship of relevant services was recognised, in particular: the need to have an effective assessment and triage system to recognise sick and injured children and mothers and babies who need urgent intervention; an efficient, safe and responsive transport system; the presence of a safe and skilled resuscitation service for newborn wherever they are born; the availability of specialist and critical care services and the presence of quality local services which will continue to deal with the vast majority of mothers, children and families.

During recent years the number of children requiring hospital overnight stays has fallen dramatically in spite of the increased attendance at A&E. Most children now are cared for in outpatients, emergency departments, assessment & short stay observation units, walk-in centres and in primary care. The choice agenda for place of birth (*The Next Stage Review*) and the greater emphasis on normalising the birth process has encouraged the development of more Midwife led units and has increased home births. The recent increase in birth rate is unlikely to make the West Midlands a special case for a bigger share of workforce resources.

Since starting this work in 2007 further developments to meet standards have been:

- More obstetric and paediatric consultants have been appointed.
- Paediatric consultants are providing resident cover where there is a shortfall in the middle grade rotas.
- Reconfiguration has occurred in one locality.
- The Medical Training Initiative (MTI) has been launched to enable international doctors to take up training posts for up to two years.
- An investment in paediatric nurse training for triage and assessment, a re-launch of the Advanced Neonatal Nurse Practitioner training, and an increase in Midwifery training.

The principal conclusions of the review are the requirement for:

- consideration of distributing the limited numbers of middle grade staff (both trainee and other career grades) who are critical for the safe delivery of both children's and maternity

services in units large enough to justify the EWTD rota size required to train and maintain expertise.

- meeting the need of direct consultant care in labour wards and level 3 neonatal units
- appropriately trained and skill maintained staff in all localities where children are seen
- reduction of unnecessary gate keeping for children
- safer services achieved by concentration of expertise for the sick and injured child despite being further from home
- improved outreach in both maternity and specialist children's services
- effective transport systems

These issues are discussed fully in this report and although there have been some innovative changes in staffing and training to address the shortfall of clinical staff many of these concerns could be overcome by the reconfiguration of a number of services. Active leadership, a culture of accountability, a *close* audit of patient care and a system of continuous learning needs to be further fostered.

This review has highlighted many examples of excellent practice and service delivery. However despite progress there is difficulty in achieving the desired standards in all units in the current configuration of obstetric and paediatric services in the West Midlands.

In resource-poor settings, mothers and children are at risk.

This review was undertaken by the WMCG team comprising:

Dr Janet Anderson, Honorary Consultant Paediatrician

Jonathan Cook, Programme Consultant: Market Management, NHS West Midlands

Mr Simon Jenkinson, Clinical Lead in Obstetrics for Shropshire, Staffordshire and Black Country Newborn Network, Obstetric Advisor to WMCG Group

Professor Ed Peile, Chair – WMCG, Associate Dean of Warwick Medical School

Mr Peter Thompson, Clinical Lead in Obstetrics for Southern West Midlands Newborn Network, Obstetric Advisor to WMCG Group

Diane White, Project Co-ordinator WMCG Group, Children's and Maternity Network Manager Coventry & Warwickshire NHS Trusts

The WM Configuration Group have continued to offer help to PCTs in reaching agreement on local models of care and in moving into an implementation phase, and will support the SHA appointed Clinical Pathway Group leads in Children's and Maternity services in taking up their continuing responsibility for service improvement.

We gratefully acknowledge the help that we have had from NHS West Midlands Workforce Deanery, and the Postgraduate Dean in formulating our report and this Executive Summary which we hope will inform the agenda for the Clinical Leads, and local commissioners and providers in developing services for Children, Young People and Maternity across the West Midlands.

We would like to stress that across the West Midlands there are many examples of excellent paediatric and maternity services, both in terms of clinical care and organisation/management of the services. We would like to thank everyone who took the time to meet with us and to help us in conducting this review.

1. **WMCG Review**

1.1 **Purpose of report**

This paper forms part of the NHS West Midlands work on ensuring sustainability of maternity and children's services. It summarises the key issues of compliance and sustainability in the context of the principles and recommendations of the SHA strategy *Investing for Health*. It aims to help PCTs in finalising plans for the development of maternity and children's services and to form the agenda for the work of the new NHS West Midlands clinical leads for Maternity and Children's services.

1.2 **National and West Midlands Context**

The West Midlands has an area of over 5,000 square miles and a population of 5.3 million people of which almost 21% are under 16. There are approximately 68,000 babies born each year and the region has a significantly higher uncorrected perinatal mortality rate than the national average.

National guidance on maternity and neonatal services has been plentiful in recent years. Most important of these for ensuring sustainability of services are the *National Service Framework for Children, Young People and Maternity Services (2004)*, *Every Child Matters (2004)*, *Maternity Matters (2007)* and *Safer Childbirth (2007)*. These lay down the principles on which all services should be based and the quality standards to which they should be provided. Full references and other relevant guidance are listed in *Appendix 1*.

Advice on handling service improvement proposals was issued on 28th February 2007 (DH Gateway Ref. 7857). This stressed a) that services should be local wherever possible and specialist only when necessary and b) that any changes should be about saving lives not saving money. Lord Darzi's strategic review of the NHS, *Our NHS, Our Future*, has also emphasised the vision of an NHS that is:

“Fair – equally available to all, taking full account of personal circumstances and diversity

Personalised – tailored to the needs and wants of each individual, especially the most vulnerable and those in greatest need, providing access to services at the time and place of their choice

Effective – focused on delivering outcomes for patients that are among the best in the world

Safe – as safe as it possibly can be, giving patients and the public the confidence they need in the care they receive.”

The Operating Framework for the NHS in England 2008/09 specifically requires PCTs to “take preparatory action to improve access to, and choice of, maternity services.”

David Nicholson, NHS Chief Executive, pointed out at the launch of ‘*The Next Stage Review*’ that the driver for service development must not be the interests of individual trusts, but rather the optimal services for a population. Thus there needs to be collaborative working between Acute Trusts and local health economies thinking imaginatively about the development of local services, and the West Midlands SHA who have a responsibility to ensure that local plans take account of the needs of the wider population for sustainable Children's and Maternity Services.

As part of this oversight, there needs to be a sharp focus on medical manpower resources in particular and staffing plans in general across the skills-mix needed for Children and Maternity Services. The work-force resources are finite, and it would not be responsible for the SHA to endorse local plans or to support applications for Foundation Trust status which

are deploying disproportionate workforce resources to local areas and imperilling sustainable workforce ecology across region.

The developments envisaged in NHS *The Next Stage Review* at national level involve 'whole system thinking' and reconfiguration is a necessary component of the approach to achieve modern and sustainable services

Services are facing the challenge of meeting the European Working Time Directive (EWTD) requirement of a 48 hour week by August 2009 in the context of a finite number of doctors in training in paediatrics and obstetrics at all levels, which is not expected to increase, and a small pool of medical non-training grades with appropriate experience and uncertainty around the appointment of non-EU doctors.

In January 2008 the Health Care Commission (HCC) published its national review of maternity services. The review covered clinical focus, women centred care and efficiency and capability. Indicator 17 on staffing levels measured 3 components: midwives per 1000 deliveries, consultant presence on delivery suite and consultant anaesthetic PAs ≥ 10 . Trusts were given a composite score. The majority of West Midlands Trusts scored 3 or 4 (average/good) two trusts scored 2 (least well performing). It should be noted that the composite score can mask the ratio of midwifery staffing to births therefore locally it is helpful to study the individual Trust reports on the HCC website.

Of great importance to trusts is the Clinical Negligence Scheme (CNST), (a risk pooling scheme providing indemnity cover for the NHS bodies) because they can save on their financial contributions by demonstrating compliance with the CNST maternity clinical risk management standards. The NHSLA have revised these maternity standards following 2008 consultation and these were issued in April 2009.

Currently, Standard 8 covers staffing levels and includes midwifery, anaesthetic and obstetric staffing levels. This includes labour ward cover:

"The labour ward has sufficient medical leadership and experience to provide a reasonable standard of care at all times"

This is currently (07/08) measured against the *"Towards Safer Childbirth"* (1999) recommendations. It is very likely that the revised standards will reflect the *2007 Safer Childbirth* publication as referenced in this report. The West Midlands Configuration Group (WMCG) have adopted the recommendations of *'Safer childbirth 2007'* namely: **(see Table 1 below)**.

The West Midlands Darzi Clinical Pathway Group (CPG) for maternity and the newborn reported that the group felt strongly that the underpinning philosophy when providing maternity services should be that pregnancy is a normal, physiological process. It should be designed around the needs of the woman, not for the convenience of services providers or educational programmes. Whilst the group recognised the need for the normality philosophy when planning services, it was important not to lose sight of the need for high quality obstetric and neonatal services. Careful risk assessment should mean that women are only transferred to these after careful assessment and returned locally as soon as possible.

The group recognised that it was a challenge to provide and maintain skills in neonatal units, in line with national guidance, whilst meeting the demand from women for local delivery in a 'low tech' setting. The appropriate and evidence based move to support specialist neonatal care for the sickest babies, had created an unintentional pressure on smaller delivery and neonatal units.

Investment in neonatal services will need to continue to ensure national guidance is fully implemented. The challenge facing maternity care provision is to recognise the need to balance the relative benefits and risks in providing services closer to home and support safe delivery with an appropriately skilled workforce in all locations.

The West Midlands Darzi CPG for Children produced a report which in terms of proposals for new models of care is broadly in line with the views expressed in this report.

Table 1. Proposed Obstetric Staffing Targets, 2007 – 2010 (adapted from The Future Role of the Consultant)

Category	Definition	Consultant Presence (year of adoption)			Specialist trainees
		60 hour	98 hour	168 hour	
A	< 2500	Units to continually review staffing to ensure adequate based on local needs			1
B	2500 - 4000	2009	-	-	2
C1	4000 – 5000	2008	2009	-	3
C2	5000- 6000	Immediate	2008	2010	
C3	>6000	Immediate	Immediate if possible	2008	

1.3. Critical Drivers for Maternity and Children’s services

The fundamental changes in children’s services over the past 20 years are well reviewed in *Modelling the Future II* and the reduced importance of inpatient provision for children with infectious diseases has seen many units running half-empty. Paediatricians in training are therefore lacking the experience they need, whilst specialist and intensivist services for children are stretched, and many services offered at acute sites could easily be offered closer to home, achieving a better service for children.

The challenges in *Maternity Matters* to offer more choice to mothers is likewise a driver for change. Compliance with *European Working Time Directive* invokes change in working patterns which does not *per se* invoke reconfiguration, but this is an opportunity to reconsider how the service can be improved. Our remit is to consider **sustainability and service improvement**.

The key factors for sustainability are service quality, service volume, workforce, training, and financial viability.

1.4 Key design principles for Maternity and Children’s Services.

Our key design principles for Children and Maternity Services are that they should be:

- driven by the needs of the population
- outcome oriented

- evidence-based
- delivered by competent staff
- accessible and child- and family-friendly
- well co-ordinated with other agencies/services
- subject to continuous critical evaluation and improvement
- sustainable both in terms of workforce and finance
- reducing inequity of outcomes

Reconfiguration of services should be based on the premise that services need to be sustainable and meet Care Quality Commission standards. The importance of **maintaining appropriate staffing levels** to enable the provision of safe and effective care is paramount, and the importance of **configurations that support high-quality workforce training** also needs emphasising if safety and quality of care are to continually improve in future.

1.5 Inter-relationship of relevant services

From the outset we identified a critical inter-relationship of relevant services:

- Maternity services
- Neonatology
- Paediatric services
- Emergency departments
- Critical Care Units
- Surgery on children
- Specialist referral services
- Transport services
- Primary Care

We have tried to consider the implications of service change in one service on another. The critical implications for change in the West Midlands that we need to highlight are:

- The impact on neonatal services of reconfiguring a small number of paediatric units to become assessment and short stay observation units rather than inpatient units requiring 24 hour junior and middle grade senior on site presence.
- The impact on gynaecological services and anaesthetic/theatre services of any changes to midwife-led units from consultant obstetric units
- The mainly beneficial impact on emergency departments and on primary care services of single points of access to paediatric services for urgent care
- The mainly beneficial impact on GP training of creating posts in integrated healthcare for children.
- The mainly beneficial impact on critical care services, surgery on children and anaesthetic services of concentrating paediatric admissions in centres with higher case volumes, where high-dependency units can offer adequate experience for skills maintenance and training.
- The impact on transport services (emergency transport and public transport as well as car parking) of reconfiguration. We envisage that some of the more high dependency services and inpatient units for children and mothers will be further from home. Individual families usually require these services infrequently, but when they need them in emergency they need safe rapid access, and convenience for visiting. Travelling further to such units should be more than balanced by offering many more of the frequently accessed services closer to home in integrated children's services and midwife-led units.
- Safeguarding children and other patients is an important consideration for all service configurations and for transport services.

1.6 'Investing for Health' and Process followed by West Midlands Configuration Group

The NHS West Midlands Strategy *Investing for Health* includes strategic priorities of full engagement; quality and safety; care closer to home; sustainable services; and organisations fit for purpose. Appendix 6 of *Investing for Health* describes in more detail the principles on which paediatric and maternity services provision should be based under the headings:

- Assessment of the unwell child
- Primary care based services in children and maternity services
- Rota compliance
- Clinical safety and clinical effectiveness
- Availability of skill mix and education and training for a multi-professional workforce
- Choice of service models

NHS West Midlands, as part of the work on sustainability, established a Children's, Young People and Maternity Services Configuration Group (WMCG) to help and support PCTs in meeting the national challenges while responding to local needs and views. The WMCG has produced *Pathways for the Acutely Ill Child or Young Person* and worked with the National Collaborative on Integrated Child Healthcare developing new models for *Integrated Children's Healthcare*. Patient flows for paediatric emergency admissions and births have also been mapped by PCT and Trust.

The work of the WMCG has been in four phases:

- Phase 1 comprised visits to all acute trusts in the region to construct a validated picture of service provision (2007)
- Phase 2 (late 2007) consisted of discussing the emergent picture with commissioners in each of the local health economies, informing their planning process.
- Phase 3 (2008) involved discussions at regional level within the West Midlands involving the 'Darzi' pathway groups for maternity services and children's services, as well as working with the Workforce Deanery to reconcile staffing projections
- Phase 4 (most recent) is the contextualising of the regional picture within emergent national policy and strategy.

NHS West Midlands also commissioned Durrow management consultancy to provide an overview of maternity and children's services across the region. Comparative data and reports for each Trust have been produced. These include a scoring system to assess the risk in relation to sustainability of different services.

Members of the WMCG have visited all Trusts providing maternity services and acute care for children. One objective of the visit to the Trust was to carry out a final validation of the information submitted by the Trust to Durrow for its analysis. The main purpose of the meeting was to establish from the Trust's perspective what were the critical issues for both of these services in relation to long term sustainability and what were their plans to address any concerns. The paediatricians, obstetricians, and project managers who formed the visiting team questioned the Trust taking into account the initial analysis undertaken by Durrow and based on the principles and recommendations from the IfH and national/regional evidence and guidance.

1.7 Key Challenges for Local Health Economies

Following the meeting between the Trust representatives, WMCG and a representative of Durrow, a report of the meeting and the final draft of the Durrow report were sent to the Trust for final validation. It was agreed with the Trust that following final validation of both reports these would be issued to the PCTs and other provider Trusts in the local health economy. These visits were followed by meetings with PCTs to discuss the visit findings and Durrow risk assessments.

The main issues identified in the Durrow and WMCG assessments were in relation to the key challenges for each Local Health Economy (LHE) as outlined below.

Box 1 Key Challenges

For each service to which families and ambulances are advised to take a woman in labour or a seriously unwell child¹:

- 1 Does the service meet minimum staffing requirements at all times²?
- 2 Will this staffing meet 2009 EWTD and *Safer Childbirth* requirements with minimal reliance on locum, bank and agency staff?
- 3 Do any plans for reconfiguration of services take into account the discussions that need to occur with the workforce deanery for the training posts for trusts
- 4 For 'low volume' services⁴, are arrangements in place for the maintenance of skills of all staff other than doctors in training⁵?

Notes:

- 1 Hospital Trusts and PCTs should ensure that the public and health care professionals in the locality are clear about the services offered and under what circumstances patients should be taken directly to other units. The key challenges do not apply to low risk mothers already booked for care in a midwife led unit and children with minor illnesses and minor injuries.
- 2 Different levels of urgent and emergency service (i.e. not scheduled care) should not be offered at different times. Minimum staffing requirements are described in *Safer Childbirth* Chapter 4.
- 3 If services are to be reconfigured the number of trainees available may not be equivalent to the sum of the existing numbers of trainees in the hospitals and this would be something for the deanery to consider, therefore workforce plans would need to take this into account.
- 4 Less than 2500 births or identified by Durrow / WMCG as a low volume paediatric service.
- 5 Doctors in training will gain these skills during other placements of their rotation. In the view of WMCG it is important that initial placements are not to 'low volume' services

Box 2 Additional Key Challenge

5 For each service with an A and E Dept but without on-site 24 hour paediatrics and / or consultant-led maternity services:

- Are there arrangements for A&E staff to maintain their skills in the assessment and care of children?
- Is there regular local publicity and clear arrangements with ambulance services to ensure that seriously unwell children and mothers in labour are not brought to the service?

The analysis identified **significant increases in the staffing needed across the West Midlands**. The WMCG assessment is that in all LHE's within the West Midlands there are some challenges to sustaining paediatric and maternity services although the specific workforce issues vary. The trusts with the most significant challenges are those with relatively small volumes of activity (number of deliveries and /or paediatric attendances or admissions) combined with difficulties in recruiting and retaining key staff.

PCTs submitted to the SHA (December 2007) their approach to planning the development of these services (as part of the Overarching Plans for the Health Economy in 2012/13). And this was followed by a more detailed submission in May 2008. This report takes account of these. A major concern for the group was that developing locality plans indicated a serious resource problem for the West Midlands overall: there is unlikely to be enough trained specialist staff in the short term to accommodate expansion of the middle grade staff at every site.

We adopted and adapted the principles in the recent RCPCD Discussion Paper, "The future of emergency and urgent care services for children" which states:

"It is clear that for any service location, population size and density, population demography and workforce will determine the best design for each type of service. Hence there is no one solution or model that will fulfil all the requirements for an ideal service for children and local, innovative solutions will often be needed."

1.8 Emerging themes from the WMCG review:

▪ Integrated Workforce Planning

NHS West Midlands workforce deanery is committed to strengthening workforce planning, capacity and capability, both within the SHA and in all NHS organisations in the region. Traditionally workforce plans have been developed separately for medical and non-medical staff, however this does not reflect the way in which the service is delivered today. The growing demand for healthcare, coupled with changes to regulation and working hours present additional challenges to service providers and many are now exploring non-traditional and alternative staffing strategies to ensure delivery. The contemporary workforce is diverse, with a far wider range of staff delivering care and the introduction of new clinical roles has started to challenge the traditional model of care in many areas. Robust and integrated planning at both SHA and service level is critical to ensure that a cost effective model of high quality care is delivered by a competent workforce.

Workforce planning, modelling and development across the West Midlands now encompasses the whole workforce and focuses on the skills and competencies required as the fundamental unit of analysis, rather than traditional professional or occupational groupings. The challenges currently facing obstetric and paediatric services as detailed within this report must be considered within this context.

Some Trusts have taken the view that if there are changes in their local service configuration, specialty training posts (ST) will remain within their area. This assumption may not necessarily be correct, and it is recommended that Trusts engage with the Deanery in this planning.

▪ Paediatric Nursing workforce issues

Advanced Nurse Practitioners (ANPs) have not been developed as much in paediatrics as in neonatal care. Although ANPs in paediatrics have been developed in community based services (which is essential for the integrated child health model) they are also needed in acute care. To date a significant obstacle to acute trusts taking up opportunities for training ANPs has been the resourcing of back fill for the nurses released.

It is important to ensure that paediatric nurses working across a range of services where children present have the skills and competences to assess the unwell child. This is important in primary and community based services including children's community nursing teams dealing with both acute and long term conditions (LTC's) as well as in the hospital environment.

- **Midwifery workforce issues**

To ensure delivery of "Maternity Matters" local health economies in the region have produced their maternity workforce plans. The forecast growth in midwives to both 2009 and 2012 indicate that the growth required measured by headcount will be achieved. However given the current working patterns of midwives the whole time equivalent growth needed by 2012 will require the creation of a significant number of additional posts in Trusts, skill mix changes and increasing return to practice programmes. It should also be noted that working patterns of midwives have impacted on skills maintenance and skills development and staff who are accustomed to working on consultant obstetric units may not be ready to convert to working on midwife-led units.

- **Estimation of obstetric staffing requirement in relation to volume of births/case mix**

The question of whether or not births in midwife led units should be counted in the numbers used for obstetric staffing needed to meet *Safer Childbirth* recommendations has significant implications for some sites. It will become more important as Trusts consider establishing MLUs (alongside consultant units or on separate sites) in order to offer further choice to women. It particularly affects Trusts which are considering changes to the configuration of services that may take them into a different category of staffing requirement. The WMCG advice is that only those births which take place in the consultant-led unit should be counted but that the complexity of the case mix will need to be taken into account in determining appropriate staffing levels:

The number of births in a unit does not necessarily reflect the number of complex cases requiring consultant input. Further, reconfiguration of maternity care with the development of maternity networks may reduce the numbers of normal births within a unit whilst leaving the same number of complicated cases which will maintain a similar demand for consultant time. For these reasons, the calculations need to be interpreted carefully and with full regard to the local situation." (Safer Childbirth. 4.2.5)

- **Data Issues**

Both Durrow and WMCG highlight significant variations in patient pathways and related different approaches to counting admissions. This particularly applies to attendances (obstetric and paediatric) which are triaged or short stays for assessment. This clouds workload and funding comparisons between units and is linked with PBR issues. West Midlands-wide work to clarify the counting of triage and assessment may be helpful.

- **Anaesthetic Support**

Difficulties with anaesthetic support for maternity and paediatric services are identified in some Durrow risk assessments or WMCG visits but this area was not systematically reviewed. Further work is needed to clarify anaesthetic-related issues.

- **Caveats and assumptions**

There are some discrepancies between the Durrow and WMCG assessments of the available staffing, possibly because of differences between the date of data submission and visit.

The number of staff needed to run an EWTD compliant rota now and from August 2009 depends on many factors. It is assumed that minimum cells of 7 are needed now – and a minimum of 8 if a significant proportion of the posts are doctors in training. From August

2009 the minimum cell has been taken as 9, assuming a significant proportion of the posts are doctors in training. Some publications consider that cells of 10 to 12 will be needed especially if most posts are occupied by doctors in training.

Both Durrow and WMCG assessments commented on the availability of midwife led care but do not specifically look at the issue of choice of birth settings for mothers. Comments on the staffing required to achieve EWTD compliance will need to be reviewed if Trusts establish new MLUs which have a significant impact on the number of births in the consultant-led units.

Some midwifery staffing requirements produced by *Birthrate Plus* appear high and, where applicable, the shortage of midwives was reported in our feedback to trusts.

1.9 Key Challenges identified from the WMCG review for commissioning:

▪ Maternity Matters

There are clear imperatives to consider equitable specialist paediatric service provision in terms of modern inpatient units capable of providing a sustainable high-dependency and specialist service (i.e. well-equipped, well-staffed, safe units with adequate patient throughput to maintain skills and training) and we found that this case is well-supported by clinicians across region.

We fully support the drive to offer more choice to mothers in line with '*Maternity Matters*' and believe this can best be achieved by developing in West Midlands a number of new midwife-led maternity units either at new sites or alongside existing consultant led units. Closing some consultant units we believe may lead to better services for mothers, as there is adequate capacity in West Midlands overall to support reconfiguration in the interests of optimal patient numbers for service and training at a few consultant units. This may require some capital investment in both the expansion of the larger units and investment in new MLU's. We believe there then would be sufficient capacity and in turn would also improve choice.

We need to share with commissioners our concerns about locality planning which centre on a seeming **lack of perception of potential adverse effects of constructing local solutions which take no account of the workforce picture across region.**

▪ Critical Staffing Considerations

Having looked at all aspects of sustainability in the course of our work, we focus particularly here on workforce, particularly the all-important middle grade medical workforce, which we see as a regional priority.

▪ **EWTD compliance in 2009.** It is clear now that rota cells of less than 9 will not generally be sustainable as training rotas offering the required level of experience. Rotas of 10 or 11 are seen as desirable. Our concern from discussions with commissioners and providers is that many supposedly 'compliant' rotas are proposed at less than that level and will not prove sustainable as training rotas, nor in busy units will they provide adequate cover during the daytime. The following link: <http://qjmed.oxfordjournals.org/cgi/reprint/hcp004?ijkey=Y9sJzZt4ylukzfy&keytype=ref> takes you to a paper published in Quarterly Journal of Medicine on work carried out at UHCW Coventry on acute medical rotas by a group that included Ed Peile. The principal findings are that:

- There are less medical errors on a rota with 9 doctors per cell than on the previous rota (with less doctors per cell). Doctors working shorter, more effectively planned hours, tend to sleep better and be more rested.

However

- There are less educational opportunities for the junior doctors on the EWTD compliant rota at this level (more doctors are needed if training standards are to be maintained).

These findings are likely to be reproduced if the same study was carried out on obstetrics or paediatrics. The co-authors from Harvard have already carried out similar studies in ITU and acute surgery and the findings are remarkably similar.

West Midlands is no different from many other regions in this respect. NHS West Midlands has not supported any requests for derogation. The current SHA monitoring programme reports in terms of number of non-compliant posts, which is financially crucial, but we also emphasise the importance of rotas compatible with training approval and in hours cover.

- **Learning from reviews.** We find helpful the recent report on 'Learning from Reviews' produced by the Independent Review Panel, particularly the focus on workforce and Maternity and Children, included at *Appendix 4*. In considering all options to address sustainability issues we support consideration of new configurations for maternity and children's services, not simply to achieve EWTD compliance, but because **we believe it is possible to offer a better service to mothers and children and better training for the clinicians.**
- **Shortfalls and sustainable rotas.** WMCG work across all acute trusts in the West Midlands revealed that although current medical staffing levels for Obstetrics and Paediatrics are in line with national figures and deficits appear relatively small and indeed remediable at local level, the cumulative predictive shortfall in medical staffing across the region to achieve EWTD compliance from 2009 in middle-grade rotas is such that **sustainability cannot be assured for Children and Maternity Services in the present configuration.** The medical workforce shortfalls revealed on our visits have been reconciled with the data from West Midlands Workforce Deanery. **Sustainable rotas need not only enough clinicians but also the doctors or clinicians must have enough experience to undertake their roles and the workplace must offer adequate case-mix to ensure skills maintenance.** We have for immediate planning purposes, and in consultation with the Workforce Deanery calculated 2009 shortfalls to achieve rotas of 9 doctors in the middle-grade rota. (See *Appendix 3*) As previously stated this may be inadequate for the larger units. **Sustainable rotas must have built-in provision for training time, and continuing professional development, including rotations with other units as needed to maintain skills at the required level.**

Sustainability is more than EWTD compliance.

2. **Maternity Services**

Following discussions at Royal College of Obstetricians and Gynaecologists, we are endorsing the Royal Colleges' recommendations in 'Safer Childbirth' and 'Standards for Maternity Care 2008'. The view at the centre is that consultant presence on labour ward is crucial for patient safety and the standards are achievable rather than aspirational. We accept, however, that in view of the financial penalties for non-compliance, trusts are likely to prioritise EWTD compliance over achieving *Safer Childbirth* levels in the short term. There is no scope for prolonged inaction as it is likely that the National Health Service Liability Agency (NHSLA) will eventually make these changes mandatory (as they did eventually with 40 hr labour ward cover first recommended in *Toward Safer Childbirth 1999*).

Target levels for 2009 (and for 2010 for the larger units) are included in our calculations in *Appendix 3*, and it should be noted that units with up to 2500 births a year are strongly recommended to have 40 hours of consultant obstetric presence but should conduct a risk assessment exercise to determine their individual requirements for the tiers of staffing bearing in mind both the number and the complexity of the births there. Our visits unmasked the impossibility of gauging labour ward cover from aggregate statistics regarding total numbers of Obstetric and Gynaecology consultants, as the proportion of workload devoted to labour ward varies extensively. At consultant level, we found in West Midlands similar shortfalls to those reported elsewhere in meeting the minimum current standards outlined in *The Future Role of the Consultant*².

We draw particular attention to the recommendations for the tiers for middle-grade cover. As recommended in 'Safer Childbirth' the need is for a single middle-grade rota for units up to 4000 deliveries and for 2 rotas over this activity level. When the number of deliveries exceeds 6,000 per year three middle grade rotas are needed.

We focus particularly on the middle tier. Historically this has been staffed by obstetric registrars in training and staff grade doctors, but now there are a variety of skill-mix configurations including CCT holders and advanced nursing and midwifery practitioners. **However this tier is staffed, it is crucial to delivery of safe, compliant services, and in our opinion it is the greatest challenge to sustainability across the region.** Consultant staffing and junior level staffing are, of course, also critical, but in our opinion local solutions are less likely to imperil the regional workforce ecology than in the all-important middle grade, where the shortfall on rotas was 35 at the time of our visits.

The middle-grade deficit from a notional 8 per rota was 11wtes at the time of our 2007 visits, and a further 24 posts were then required for 3 larger units needing an extra middle-grade rota to achieve *Safer Childbirth* standards. The total shortfall (including *Safer Childbirth* compliance needs) rises to 59 if 2009 EWTD compliance is calculated on 9 middle-grades per cell or to 83 posts to achieve 10 middle-grade clinicians per cell. Bearing in mind the contribution of non-training grades, 9 per cell seems reasonable for short-term 2009 planning. **This is the order of magnitude of the critical shortfall in middle-grade cover for sustainable consultant-led obstetric services across the West Midlands: the need is to address a shortfall of nearly 60 posts.** Some progress has been made since we visited in 2007, but a lot remains to be done, and in the short to medium term there needs to be some very constructive thinking to achieve optimal obstetric services.

We endorse the recommendations of the regional Maternity Services Clinical Pathway Group that there should be maximal coverage in the West Midlands by consultant-led

obstetric units, however we are not convinced that this can be achieved by continuing with the present configuration of 19 consultant-led units.

- 2.1 Service priorities** There are two priorities for staffing obstetric units. The first, immediate need is to achieve legal compliance with EWTD. The second, equally important requirement is to achieve the staffing standards recommended in Safer Childbirth.
- 2.2 Middle-grade rotas.** Reference to *Appendix 3* shows that working from the baseline of our 2007 visits, the middle-grade rotas across West Midlands were 11 clinicians short of the number needed to offer 8 per rota. In order to achieve the recommended standards of Safer Childbirth in the present configuration, a further 24 middle-grade personnel would be needed. **However this tier is staffed, it is crucial to the delivery of safe, compliant services, and in our opinion it is the greatest challenge to maternity service sustainability across region.** 24 more posts would be needed to achieve 2009 compliance at 9 doctors per cell, and the same number again if 10 doctors/cell is to be achieved.

Increasing the number of staff-grade posts is not a solution which should be depended upon. There is not an influx of these doctors into region and there is long experience of failure to recruit to advertised posts in this grade, as in paediatrics.

- 2.3 Consultants.** Consultant presence on labour ward is a further standard in 'Safer Childbirth' and 'Standards for Maternity Care 2008', and *Appendix 3* shows the numbers of consultant staff at the time of our visit. In view of the different ways of achieving consultant presence on labour wards, we have not calculated shortfalls, but we urge commissioners to ensure that the provider database distinguishes between obstetric and gynaecological time commitments for all consultants, as this was not the case in 2007. Tariff at this time does not include the cost of funding higher levels of consultant cover.
- 2.4 Junior rotas.** Work within region on Modernising Medical Careers (MMC) has contributed more to junior level staffing than to middle-grade, and other important innovations at junior level include imaginative use of foundation posts, of hospital at night staffing and of nursing and midwifery practitioners as well as trust posts.
- 2.5 Components of a strategy to achieve sustainability in maternity services.** We suggest a strategy of multiple components to address sustainability issues in obstetric and maternity services. No one solution can apply across region, but all of the following should be considered:

- **Managed maternity networks achieving a redistribution of workload across maternity and obstetric units to achieve optimal workforce utilisation and training.** We would like to engage creative thinking within the Maternity Networks. If maternity units could set aside ambitions to achieve maximal service load for their Trust, and instead look together at optimal levels of delivery at each unit in terms of the workforce required, there could be a saving of a whole middle grade staff rota. The *Safer Childbirth* tiers of medical and non-medical staff required for labour suite cover at 2,500, 4,000 & 6,000 annual deliveries predicate that if one unit was prepared to cap at under 2,500 and another increase to under 4,000 (for example) there are potential gains.

If a unit has just crossed a threshold for the number of middle-grade tiers (i.e. over 4000 births or over 6000 births) then consideration should be given to capping the bookings and referring pregnancies to neighbouring units who are not near the threshold. This concept could be developed within managed maternity clinical networks, and the new Clinical Leads for Maternity Services are keen to explore this potential. For this to work networks would need to consider encouraging mothers from localities at the geographical watershed

to go in the preferred direction, but of course this has implications for patient choice. Collaborations between service providers to optimally meet the needs of populations were emphasised at the launch of the NHS 'Next Stage Review.'

- **Development of Midwifery-Led Units (MLUs) alongside Consultant-Led Units** not only addresses the choice agenda as emphasised in *The Next Stage Review*, but also has potential to reduce requirements for medically qualified workforce. Expansion of the midwifery workforce is addressed in '*The Next Stage Review – a High Quality Workforce*' (also see *Choice Agenda in the Maternity Services*). Such expansion is limited by midwifery recruitment which is a priority in NHS West Midlands, where there is emphasis on normality skills training. A further consideration here is that increasing low complexity delivery numbers in midwife-led units may increase the concentration of complex cases in consultant units and thereby have staffing implications. Nonetheless we encourage an expansion in the number of MLUs and we would prioritise this as the means of addressing any local increases in delivery numbers.
- **Development of more stand-alone Midwifery Led Units (MLUs)** The advantage of such units is that they can be located in districts not served by consultant units and thereby increase the choice for mothers of services close to home, in line with *Maternity Matters* and the findings of the NHS West Midlands Maternity Pathway Group. In considering MLUs several critical issues need to be addressed. These include the creation of posts within organisations as opposed to the simple recruitment to posts. In addition, opportunities for skill mix changes, such as the introduction of Maternity Support Workers needs to be considered alongside other non-medical solutions. The Workforce Deanery can commission education and training relatively freely but jobs need to be created and funded for this to be viable. We explored the differences between on site MLU and off site MLU birth units.

ON-SITE UNITS

- Can accept higher risk pregnancies as shorter transfer time if problems arise
- Greater numbers can be booked in these units
- Greater numbers gain access to low tech care (increasing patient choice)
- Greater number eventually **DELIVER** in the MLU (the figure that really counts to reduce medical births)
- There is a possible safety advantage of location close by medical unit
- However, there is also an increased chance of transfer out (e.g. low threshold for requesting epidural if facility close by).

OFF-SITE UNITS

- Low transfer rate to medical unit
 - Very low complication rates reported (Shropshire and Lichfield units have particularly good outcomes)
 - Need stringent selection of low risk pregnancies
 - Small numbers delivering in a stand-alone MLU give rise to cost issues
 - No medical back up if major problems occur unexpectedly
- **New skills-mix and up-skilling of workforce to achieve advanced neonatal life support (ANLS) at obstetric units where neonatal paediatricians are not on site.** Training programmes and maintaining competencies supported by West Midlands SHA can support this objective. Once trained these practitioners must have a programme CPD to maintain their competencies in an acute setting. As local health economies explore the implications of modernising paediatric provision, it seems certain that some areas will experience challenges in the neonatal provision alongside paediatric short stay assessment units where no admission ward for children is planned (see Table 2). The need for advanced neonatal life support (ANLS) at obstetric units must be considered in

terms of different workforce models, training to safer practice. NHS West Midlands has been prioritising ANLS and APLS training.

- **Employment of specialist doctors holding Certificates of Completed Training (CCT-holders) in short-term posts other than at consultant level.** Early West Midlands experience in other medical disciplines suggests potential for perhaps 10-15 posts supporting middle-grade rotas. In view of the limited options of increasing the number of trained doctors across West Midlands, the possibility of employing CCT holders should be actively explored. There is a commitment to national levels of CCT holders and training grades in the relevant specialities, and West Midlands Workforce Deanery is considering how to influence the number of trainees available. University Hospital Birmingham has launched a 5-year contract for CCT holders, and this model is seen to have potential for temporarily buttressing the medical workforce, pending the gradual expansion of consultant grades.

The impact of Article 14 on the availability of Staff and Associate Specialists (SAS) capable of obtaining a CCT needs to be explored. The availability of SAS doctors is limited and therefore, will not be available to support these rotas in any great volume. In addition, it may not be possible to increase training numbers which needs to be clarified /reviewed. Under article 14 of the General and Specialist Medical Practice (Medical Education, Training and Qualifications) Order 2003, doctors who have not completed a UK specialist training programme may apply for a statement that they are eligible for entry to the Specialist Register.

- **Limited use of doctors trained outside UK/EU** The supply of non-training grades is also restricted by regulations affecting doctors trained outside the UK. NHS West Midlands workforce Deanery is actively exploring the potential for non-exploitative recruitment of overseas doctors into training grades, following successful experience in a Sri Lankan scheme. The Medical Training Initiative (a derivative of double-ended sponsorship) involves very close liaison with the educational supervisor in the country of origin, but enables innovative Trusts to recruit at junior (SHO) level and promote to middle-grade, with full normal UK educational supervision, doctors who are employed by the Trust for 2 years. These training posts (usually called International Training Fellow) must have deanery approval and be a minimum of 6 months and not exceeding 24 months duration. Trainees must return to their home country with their newly acquired skills. There is thought to be potential for increasing the obstetric workforce in West Midlands by some 5-10 doctors in the medium term.
- **Imaginative deployment of workforce skills-mix in obstetric and maternity services,** bearing in mind the RCPCH/RCOG caveat that units should be careful not to draw staff for role substitution or enhanced and extended roles from staff groups that are already challenged in terms of shortages, retention and recruitment. Although RCOG has not yet produced a modelling document similar to that produced by RCPCH, it is apparent that there is much scope for skills mix exploration.
As we are encouraging the spread of MLUs to meet the demands of patient choice, and local health economies are focussing much of the CPD training on normalising childbirth, it would seem contrary to actively deplete the midwifery workforce. We remain fully supportive of a wide skills-mix across the middle-grade rota, and we encourage the up-skilling of those who are keen to extend their roles, but we are cautious about the additional number which skills-mix solutions can contribute to the middle-grade rota in the short to medium term.
- **Taking account of local trends in birth numbers, service complexity and local development plans.** It is unlikely that West Midlands can be considered a 'special case'

demographically in order to obtain a bigger share of workforce resources. What is possible is to take account of birth predictions in the local configurations. We are mindful of the claim made in many (if not all) localities about the need for sustainability planning to take account of local population increases, and we are grateful for the NHS West Midlands analysis of trends. Whilst there have been local increases in births reported in PCTs the overall projected increase in numbers of births across West Midlands is scarcely large enough to justify special pleading for this region. The workforce pressures come more from factors which affect the country as a whole (eg EWTD compliance and increasing patient choice) than from birth increases.

- **Reconfiguration of some consultant led units as MLUs.**

Alongside the development of local birthing units, local health economies can contribute to optimising the maternity services across West Midlands by considering the potential for reconfiguration of consultant led units. Redistribution of the obstetric and neonatal workforce resulting from some of the smaller units in the West Midlands ceasing consultant-led status would make a very important contribution towards sustainability of service.

Where other units are in reasonable proximity, commissioners have to consider if the benefits to mothers and babies of having the local consultant service (bearing in mind the need to maintain all the theatre services and neonatal services which require complex training rotations if modern high-quality clinical service is to be provided at low volumes) outweigh the benefits to service users of ensuring that larger units can be staffed to *Safer Childbirth* levels and mount rotas that permit optimal education in the training grades. Maintenance of skills and competences within maternity units where there are low volumes of births should be addressed both in the context of patient safety and CPD / revalidation.

If reconfiguring a small number of low-volume consultant-led units as MLUs is seen as part of the sustainability package, then consideration has to be given to which units could most benefit from reconfiguring, and it is likely that such units will not only be units with lower delivery numbers but also ones which have reasonable proximity to other consultant units and where the paediatric workforce is also stretched to provide neonatal care. The impact of a small consultant-led unit becoming a midwifery-led service would release 9 of the vital middle-grade clinicians into the notional regional pool, helping to bring this medical workforce across West Midlands within sustainable predications.

However, the main driver for considering such reconfiguration of services is the premise that services need to be sustainable and meet Care Quality Commission standards. It is difficult to see how staffing levels can be raised to the recommended levels to enable the provision of safe and effective care without some reconfiguration.

3. Children's Services

'Modelling the Future II' explores the benefit of concentrating expertise in larger in-patient units by reconfiguration and developing improved urgent and emergency care services with short stay paediatric assessment units (SSPAU's) as alternatives to inpatient units, especially in smaller services where these services are proximal to larger units. In that document, RCPCH has shown that under current configurations (non-EWTD compliant) there are important savings in paediatric workforce deployment where short-stay paediatric assessment units (SSPAU's) are utilised for units within 10 miles of an inpatient unit (See Table 2, configuration 2), or where a consultant-delivered service is offered for remote units (See Table 2, configuration 3) against DGH units that offer inpatient services with middle-grade rotas (See Table 2, configuration 4).

Filling existing paediatric training posts in the West Midlands over recent years has been difficult, although there are some signs this is improving. However the long term future is still uncertain. At the time of our visits there were nearly 20 of the existing middle-grade posts either vacant or filled by locums. The national picture is similar and will remain difficult in the longer term as the number of training posts will reduce – any failure to reduce the output of CCT holders will lead to over-supply as there cannot be a matched increase in the number of consultant posts. Thus increasing the number of training grade doctors cannot be seen as a solution.

We would encourage further consideration of service configuration in local health economies suitable for configuration 2. An appropriate locality for configuration 3 is Hereford.

Table 2 Unit configurations (adapted from *Modelling the Future II* RCPCH).

Configuration 2: Small and proximal				
Configuration description		Services	Medical staffing (grade)	Number (WTE)
Teams	1 combined	Acute and Level 1 Neonate LTC	Consultants	4
Beds	SSPAU only		Staff grades	2
Neonates	Level 1		MG Trainees	0
			SHO grade	3.5
Configuration 3: Small and Remote				
Configuration description		Services	Medical staffing (grade)	Number (WTE)
Teams	1 combined	Acute and Level 1-2 Neonate LTC	Consultants	6-8
Beds	Yes		Staff grades	3.5
Neonates	Level 2 max		MG Trainees	0
			SHO grade	7
Configuration 4: Medium/Level 1 or 2 neonates				
Configuration description		Services	Medical staffing (grade)	Number (WTE)
Teams	2	Team 1 Acute and Neonates	Consultants	8
Beds	yes		Staff grades/MG Trainees	8
Neonates	Level 1-2		SHO grade	8
		LTC	Consultants	8
			Staff grades	8
			Trainees	Shared

The importance of experience for the middle-grade rota clinicians is illustrated in a survey of night calls to middle grade paediatricians conducted by RCPCH and Department of

Health. This involved 10 units over 6 weeks. This survey highlighted the need for experience in the middle-grade rota:

- 1 in 3 calls are to review children <1 year old
- 2 in 3 calls are to review children < 5yrs old
- many calls were to:
 - resuscitation
 - assess new admissions
 - vascular access
- 1 in 5 calls were to severe or life-threatening emergencies

Of the other steps in reconfiguring services to reduce rotas which are explored in 'Modelling the Future II', we see scope in:

- a) Increasing the size of some inpatient units to make maximum use of a medical middle-grade rota, which will in turn offer trainees maximum patient contact.
- b) Reducing the number of Level 2A neonatal units with separate rotas, by developing the capacity of Level 3 units and promoting neonatal networks.
- c) Co-locating specialist services into larger units (which will also improve the quality of patient care).

Thus the essence of reconfiguration of children's services is a move to fewer, larger inpatient units, with greater throughput which make full use of a full middle-grade rota, accompanied by the development of better urgent or emergency care centres in surrounding hospitals without inpatient beds.

As the RCPCH document emphasises,

"The number of centres per Strategic Health Authority (SHA)/region would need to be decided on a regional basis, but there could be a substantial reduction in the current provision of inpatient beds."

'Modelling the Future II' goes on to describe potential impact of reconfiguration:

This would reduce the number of middle-grade rotas required - a national reduction of 50 middle-grade rotas would represent a potential reduction of 400 middle-grade trainees if working in an eight cell rota. This option could present opportunities for expanding GP trainee experience in urgent/emergency care centres. In the longer term, the role of the GP with special expertise in urgent care could be developed.

Advantages:

- Better quality of care for children.
- Better training experience.
- Disinvestment in inpatient services would allow investment in out-of-hospital care.

Disadvantages:

- More travel for inpatient care.
- Better transport systems would be needed.
- Impact on neonatal services

But reconfiguration is by no means the whole picture, and we also endorse exploration of other possibilities which are being explored at national level:

3.1 Using alternative staff groups to cover middle-grade rotas, for example by:

- a) Consultants providing more hands-on acute care especially during evenings & weekends.
- b) Specialist nurses and nurse consultants covering part or all of the middle-grade rota.
- c) Providing more training opportunities for International Medical Graduates (IMGs).
- d) Expanding the staff-grade workforce by making the posts more attractive.
- e) Involving GPs in the provision of urgent / emergency care for children.

Valuable work in the West Midlands region on MMC has contributed more to junior rotas than middle-grade rotas. Twenty new posts have been established for GPS in training on paediatrics, and a focus on integrated healthcare for children will increase the relevance of more such posts in future.

Modelling the Future II goes on to look at Consultant staffing.

3.2 Increasing the role of consultants to provide jobs for trainees with CCTs, by:

- a) Increasing the number of consultants and reducing the hours they individually work.
- b) Developing and expanding the roles of paediatricians in:
 - i) Long-term condition work in community settings.
 - ii) Child mental health.
 - iii) Emergency and urgent care.
 - iv) Child public health work.

To this last list we would add safeguarding.

In addition to the constraints of EWTD, there is a very important longer-term planning consideration. RCPCH envisages reducing the number of trainees at middle-grade level to rectify the imbalance between trainees and consultants and covering middle-grade rotas in alternative ways including skill-mix solutions and increasing the number of services that are consultant delivered rather than consultant led.

At consultant neonatologist and consultant paediatrician level there is both interest and concern in the West Midlands around the changes in Manchester and elsewhere blurring the boundaries between consultant and middle grade in a more consultant-delivered service. We see some benefits to the patient service in redefining the consultant role in some centres, and we endorse the use of CCT holders on medium term contracts, but we also encourage the continued use of consultants as consultants.

The RCPCH vision is to match the reduction in the number of trainees by an expansion in the number of consultants, and potentially also staff-grades, enabling significant improvements in the quality of care delivered at the front-line. In ten years time in the RCPCH model 6000 paediatric consultants would be equally deployed with 2000 providing acute care, 2000 providing community-based care of long-term conditions, and 2000 specialist care, but the roles would need to be flexible and the career pathways would have to allow consultants to progress away from hospital-based acute care.

The current activity picture as illustrated in the table (Table 3) would suggest that for rough-and-ready calculations it is reasonable to work on 10% of the England and Wales paediatric workforce in the West Midlands. Thus we could plan for some 200 consultants in acute care, 200 providing community-based care of long-term conditions, and 200 providing specialist care.

Table 3. West Midlands activity compared to national figures (source RCPCH 2008)

UK child populations inpatient capacity and general paediatrics activity							
Population	Pop <15 years (2006)	Pop <19 years (2006)	Inpatient units (RCPCH Census 2007)	Total beds (excl. intensive care)**	Beds per 1000 Child pop 0-15	FCE in patient (HES 2006/07)	FCE/ pop (FCEs per 1000 pop. 0-15)
UNITED KINGDOM	11,537.1	14,733.6	230	9994	0.87		
GREAT BRITAIN	11,157.0	14,249.1	222	9690.2	0.87		
ENGLAND & WALES	10,235.2	13,064.3	206	9009.2	0.88		
ENGLAND	9,674.0	12,341.2	192	8460	0.87	843,124	87.2
West Midlands	1,057.5	1,350.6	19	977	0.92	98,358	93.0

** Average daily no. of available beds – other general acute and neonates (excludes intensive care) – DH definition

UK births, neonatal capacity and neonatal activity				
Population	Births 2006	Neonatal units	Neonatal I.C. cots*	NICU cots/1000 Births
UNITED KINGDOM	748,600	215	910	1.2
GREAT BRITAIN	725,300	207	886	1.2
ENGLAND AND WALES	669,600	192	792	1.2
ENGLAND	618,918	179	1039	1.7
West Midlands	70,792	18	91	1.3

Source for NIC Cots – Directory of Critical Care 2007 for Wales, Scotland and NI, Child Health Mapping for England 2008

Birth figures – National data from National Statistics, England and SHAs from Child Health Mapping totals may not match

3.3 Service Priorities There is widespread clinical support for modernisation of children's health services to provide both better services closer to home and also better concentration of resources for acutely sick children. Thus the essence of reconfiguration of children's services is a move to fewer, larger inpatient units, to achieve a concentration of expertise leading to safer more effective services and making full use of a full middle-grade rota. This would be accompanied by the development of better urgent assessment centres in surrounding hospitals without inpatient beds.

3.4 Middle-grade rotas. Reference to *Appendix 3* shows that working from the baseline of our 2007 visits, the middle-grade rotas across West Midlands were 53 clinicians short of the number needed to offer 9 per rota. **However this tier is staffed, it is crucial to delivery of safe, compliant services, and in our opinion were there to be no change in the configuration of children's services, they would not prove sustainable across region.** RCPCH envisages reducing the number of trainees at middle-grade level to rectify the imbalance between trainees and consultants. As in Obstetrics, increasing the number of staff-grade posts is not a solution which should be depended upon alone. With the increased professionalization of Specialty and Associate Specialist (SAS) doctors means that many more from the former staff grades may now aim at consultant posts under Article 14.

- 3.5 Consultants.** The national strategy recommended by RCPCH in *Modelling the Future II* is to increase the consultant workforce almost threefold. An equal number of consultants are envisaged in acute care, specialist services, and community services. Planning for an increase in consultant-delivered services, and increasing paediatric services delivered in the community are important aspects of future deployment of consultant workforce.
- 3.6 Junior rotas.** Work within region on Modernising Medical Careers (MMC) has contributed to improved junior level staffing. Important innovations at junior level include imaginative use of foundation posts, of nursing practitioners as well as trust posts. *Hospital at Night* staffing recommendations only exceptionally apply to paediatric and obstetric units.
- 3.7 Components of a strategy to achieve sustainability in children's services**
The RCPCH document '*Modelling the Future II*' explores the benefit of reconfiguration by developing improved urgent and emergency care services with SSPAUs, as alternatives to inpatient units, especially where these services are proximal to larger units. As *Modelling the Future II* emphasises, "The number of centres per Strategic Health Authority (SHA)/region would need to be decided on a regional basis, but there could be a substantial reduction in the current provision of inpatient beds."
- **Developing short-stay paediatric assessment units (SSPAUs) in place of paediatric inpatient services for units within 10 miles of an inpatient unit.** There are important paediatric workforce savings to be made, compatible with offering a service close to home for minor childhood illness, and improved services for the more seriously ill child if high-dependency resources are concentrated at fewer units. The training benefits have long-term safety implications for children, as GP trainees may benefit more from staffing SSPAUs than working in specialist units, whereas specialist trainees need higher proportions of complex cases and higher admission case-load volume than currently achieved in some small units. Again the valuable work in region on MMC has contributed more to junior rotas than middle-grade rotas. Twenty new posts have been established for GPS in training on paediatrics. A focus on integrated healthcare for children will increase the relevance of more such posts in future.
 - **Supporting a consultant-delivered service for remote units.** This option is particularly recommended for Hereford.
 - **Maximising the potential for skills-mix in middle-grade rotas.** '*Modelling the Future II*' recommends consideration of using alternative staff groups to cover, for example by:
 - Consultants providing more hands-on acute care especially during evenings & weekends.
 - Specialist nurses and nurse consultants covering part or all of the middle-grade rota.
 - Providing more training opportunities for International Medical Graduates (IMGs).
 - Involving GPs in the provision of urgent / emergency care for children.
 - **Increasing the size of some inpatient units.** This will make maximum use of a medical middle-grade rota, which will in turn offer trainees maximum patient contact.
 - **Reducing the number of designated or implicit Level 2A neonatal units, by developing the capacity of Level 3 units and promoting neonatal networks.** Concentrating resources in this manner is supported both by *Modelling the Future II* and by local networks as the need for separate neonatal rotas is reduced.
 - **Co-locating specialist services into larger units** will also improve the quality of patient care.

- **Offering specialist services closer to home for continuing and complex illness.**
This component of integrated healthcare for children currently has much more scope for development in West Midlands, including exploration of the potential of Children's Centres
- **Increasing the role of consultants and providing jobs for trainees with CCTs,** by developing and expanding the roles of paediatricians in:
 - Long-term condition work in community settings.
 - Child mental health.
 - Emergency and urgent care.
 - Child public health work.
 - Safeguarding

4. Conclusion

There are many challenges to be overcome in ensuring that high quality maternity and children's services are available for local people, including development of primary care and community services, choice of care during birth, support for children with long term conditions and improving quality of all aspects of hospital-based services.

Key challenges to the sustainability of hospital based services relate to meeting the requirement of direct consultant care in the labour wards and neonatal units. Also of great importance is the need to be compliant with the EWTD requirements for junior doctors particularly in the middle grades, for August 2009. This is a fundamental driver for this report. Compliance appears to be difficult to achieve in all of the current services, as there is an agreement that training rotas of less than 8 are unsustainable and rotas of 11 junior doctors is described as the ideal model. However for immediate planning purposes the calculation of the 2009 middle grade shortfall is based on rotas of 9 doctors (as presented in this report). This figure is the one adopted in general by the SHA and in practical terms work is being undertaken with trusts by the Workforce Deanery Action Team.

The picture presented is not unique to the West Midlands and there is a need to explore multi dimensional changes as is emphasised by RCPCH in '*Modelling the Future II*' (2008) and in '*Children And Maternity Services in 2009: Working Time Solutions*' (2008), jointly produced by RCOG, RCPCH & National Workforce Projects.

In terms of safety and sustainable solutions there needs to be investment in emergency transport services for children in 'outreach' services. Admission diversion for children in the form of ambulatory models of care, which include the *Integrated Children's Healthcare Model*, offers the potential for improving the integration of acute, primary and community services for children, avoiding the need for hospital admission and reducing length of stay in hospital. It also has the potential to improve training opportunities and make better use of available staff. A particular aspect of relevance to this report is the single route of entry for children with acute problems through co-location of primary care out of hours, A&E and paediatric assessment services which may reduce the staffing required.

Given the trend in decreasing OBD's for paediatrics it is desirable on clinical quality grounds for LHE's to consider some centralisation of paediatric in-patient services alongside the ambulatory models of care. This recommendation is made in geographically appropriate sites together with attempts to retain the current configuration of maternity services.

There are similar workforce challenges in maternity services.

Safe resuscitation services for the newborn remains an issue and demands investment in training to ensure that clinicians with appropriate competences are available. If at all possible Consultant Obstetric units should work only where there is in-patient paediatric service. It is recognised that there may be compelling arguments for Maternity units to be more widely distributed than inpatient paediatric units, although the two will continue to be co-located wherever possible. Operative interventions at the time of birth, and the increased complexity of deliveries in obstetric units predicates appropriate on-site skills for resuscitation and support of neonates, over and above those available at all birthing units. The overriding requirement is that all obstetric units should meet the requirements of *Safer*

Childbirth. There is no single model to achieve this in units without inpatient paediatrics, and proposed solutions include:

- Maintaining a consultant led neonatal service in the absence of a paediatric inpatient unit.
- Investing in a neonatal service delivered by advanced neonatal nursing practitioners capable of fulfilling the role of middle grade doctors
- Up-skilling midwives to ensure that at all times there are two midwives capable of advanced neonatal resuscitation (including intubation) and support until the timely arrival of a senior clinician trained in advanced neonatal life support and who can attend within TEN minutes.

The development of appropriate services is a priority for modernising the care of mothers and babies in the West Midlands, in order to offer safe choice to mothers.

Service development in both maternity and paediatric services will involve collaborative thinking across the region and requires active leadership to achieve the best possible solutions.

Commissioners' plans for Maternity and Children's services should have LHE wide agreement and should address the key challenges identified in this report. Plans should include timescales for addressing the challenges and, if required, for implementation of new service models.

In preparing their responses to these challenges, LHE's should be aware that:

- a Any A&E unit without on site paediatrics will need to meet the applicable *West Midlands Standards for the Care of Critically Ill and Critically Injured Children*, including arrangements for maintaining skills in the assessment and care of children.
- b In addition to staffing requirements for the care of the mother, any consultant-led maternity service will need to meet at least the minimum *Safer Childbirth* staffing requirements for the care of newborn babies:
 - A designated link paediatrician for the labour ward and neonatal service, responsible for clinical standards of care of newborn babies
 - 24 hour consultant paediatrician (or equivalent non-consultant career grade doctor) trained in advanced neonatal resuscitation who can attend within 30 minutes.
 - 24 hour availability of a senior clinician (doctor holding MRCPH or equivalent¹ who has completed general professional training, or consultant) trained in advanced neonatal life support and who can attend within TEN minutes.
 - 24 hour cover by a ST1 or 2, ANNP or clinician with equivalent competence who is trained and assessed as competent in neonatal life support.
 - Neonatal unit nurse staffing required for the level of neonatal care provided (to ensure neonatal nurses skills/competencies are maintained through rotation to units with different levels of designation).

Units providing level 2 or 3 neonatal care will need to meet the minimum staffing requirements described in *Safer Childbirth* (as interpreted by their newborn network). These requirements are described in *Safer Childbirth* Chapter 4.

- c Units where the proposed staffing model relies on anaesthetists to support the transfer of children with 'time critical' conditions must confirm that appropriately trained anaesthetists are available at all times².

¹ ST3 will either have or are striving to achieve MRCPCH during their ST3 year of training. ST4s can be appointed without part 2 MRCPCH but must pass this in the first sitting of the examination after taking up post.

² Further information on requirements for 'time critical' transfers and anaesthetic services for children are given in the *Standards for the Care of Critically Ill and Critically Injured Children in the West Midlands Version 2*).

Any PCT / LHE plans which do not show that the key challenges will be met should be accompanied by an assessment of risk which covers selection of mothers for delivery in the unit; advice to mothers who think they may be in preterm labour; advice to ambulance services; staff and competences immediately available; staff who will come in to support and speed of availability; and impact on the staffing of other units (if applicable).

West Midlands SHA has appointed Clinical Leads in Maternity and an interim Clinical Lead for Children's Health. The clinical leads and the teams working with them will take forward the work of supporting local health economies in service configuration and service improvement, following this report. Updated rota information and information on training posts obtained by NHS West Midlands Deanery will feed in to this work.

**West Midlands Children's, Young People and
Maternity Services Configuration Group**

**Ensuring Sustainability of Maternity and Children's Services in
the West Midlands**

APPENDICES

June 2009

Appendix 1 Relevant Guidance and Publications

Choice in the Maternity Services – A Review of the NHS West Midlands. Coventry University and University Hospitals Coventry & Warwickshire NHS Trust. November 2008.

Every Child Matters. Change for Children in Health Services. Department for Education and Skills. December 2004

Integrated Children's Healthcare – A new model for cooperative service provision. Hilary Cass & Ingrid Wolfe. January 2008

Investing for Health. NHS West Midlands. 2007.

Making it Better: For Mother and Baby. Department of Health. February 2007

Making it Better: For Children and Young People. Department of Health. February 2007

Maternity Matters: Choice, access and continuity of care in a safe service. Department of Health. April 2007

Maternity Workforce resource pack. National Workforce Projects. 2007

Modelling the Future. A consultation paper on the future of children's health services. Royal College of Paediatrics and Child Health. September 2007

Modelling the Future II Royal College of Paediatrics and Child Health. September 2008

National Service Framework for Children, Young People and Maternity Services. Department of Health. 2004

Perinatal Mortality 2005. Confidential Enquiry into Maternal and Child Health. April 2007.

Quality of Care by neonatal nurse practitioners: A review of the Ashington experiment. Hall D, Wilkinson AR. *Arch Dis Child Fetal Neonatal Ed* 2005;90:F195–200.

Report from the Children's Clinical Pathway Group. NHS West Midlands. December 2007.

Report from the Maternity and Newborn Clinical Pathway Group. NHS West Midlands. December 2007.

Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Anaesthetists, Royal College of Paediatrics and Child Health. October 2007

Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer – 2003-2005. Confidential Enquiry into Maternal and Child Health. December 2007

Services for Children in Emergency Departments. Report of the Intercollegiate Committee for Services for Children in Emergency Departments. April 2007.

Standards for Hospitals Providing Neonatal Intensive and High Dependency Care. British Association of Perinatal Medicine. 2001

Standards for the Care of Critically Ill & Critically Injured Children in the West Midlands. W. Midlands Strategic Commissioning Group. May 2004.

Standards for Hospitals providing Neonatal Care. Southern West Midlands Newborn Network. April 2006

Stillbirth and infant mortality, West Midlands 1997 – 2005: Trends, Factors, Inequalities. West Midlands Perinatal Institute. 2007

The acutely or critically sick or injured child in the district general hospital. A team response. Department of Health. October 2006

The Operating Framework for the NHS in England. Department of Health. December 2007.