ANNEX 5

Alternative Models Project

Introduction

This document has been prepared as information for the East Sussex, Downs & Weald and Hastings & Rother PCT boards to inform their decision-making following the *Fit for the future* public consultation.

Summarising work conducted by the project team, the document provides evidence that considerable effort has gone into identifying all possible alternatives and therefore that the list of options which the Boards will be appraising is as comprehensive as possible.

1. Background

During the formal public consultation on Maternity, Gynaecology and Special Care for East Sussex, a number of respondents have highlighted examples of other units which could have learning applicable to the East Sussex situation.

These have been of two main types:

- Consultant led obstetric services with modest delivery numbers, apparently sustainable in the face of similar challenges to those facing East Sussex
- Consultant led services that have merged or are in the process of merging in the face of similar challenges to those facing East Sussex

An example would be the views expressed by the East Sussex MSLC User Group which has stated that 'before a single site option is proposed it is essential that every other option to retain two-town obstetric services is properly explored' and that 'models for effective small obstetric units do exist within the UK'. In evidence to the East Sussex HOSC a representative of the MSLC User Group stated that 'other safe options do exist' and the presentation cited the ways of working in North Devon and North Lincolnshire as possible options. More recently campaigners highlighted the decision of Cambridgeshire PCT to continue to commission consultant led obstetric services from Hinchingbrooke Hospital and recommended that unit's approach to the East Sussex PCTs.

The PCTs proposals were based on clinical advice about realistic and viable configurations for future obstetric services. While clinicians involved in this work took account of their knowledge of approaches adopted elsewhere in the country, including both units that have

reconfigured services and those that have not, a formal review was not undertaken. In order to provide an assurance that all practicable steps have been taken to identify potential alternative approaches, the PCTs commissioned this formal review of the approaches adopted in other units.

Purpose
To identify health communities with similar challenges to East Sussex, both other health communities where the approach being adopted is similar to the approach proposed for East Sussex and health communities that have adopted alternative approaches to maintaining small obstetric units (below 2 500 deliveries annually). 1. To understand the factors that led to the decision to use that approach 2. To seek learning that would be applicable within East Sussex 3. To determine whether current ways of working are 'future proof' – specifically considering MMC, EWTD and RCOG Guidance.

2. Approach

The initial list of units to be contacted and the list of questions to be put were agreed with the Alternative Models Reference Group. Telephone interviews were undertaken with Heads of Midwifery, Clinical Directors and Lead Commissioners as appropriate. Following this visits were arranged to four Trusts to investigate particular aspects of their ways of working:

- Hinchingbrooke Hospital, Huntingdon: Consultant delivered care
- North Devon Hospital, Barnstaple: Medical staffing for a small isolated unit
- North Lincolnshire and Goole Hospitals (Scunthorpe): Advanced midwifery practitioners
- East Kent Hospitals (Canterbury and Ashford): Midwifery led care

All telephone interviews and visits were undertaken by the same individual for consistency. Members of the reference group, other senior staff in the Clinical Directorate and PCT non-executive directors were invited to participate in the visits or to identify areas for investigation.

3. Results

Telephone interviews have been conducted as noted below.

Acute Trust	Head of Midwifery	Clinical Director / Lead Consultant	Commissioner	SHA
N Devon	✓	✓	✓	
N Lincolnshire and Goole	✓		✓	
United Lincolnshire		✓	✓	
Hinchingbrooke	✓	✓	✓	✓
Oxford Radcliffe	✓			
East Kent	✓			
Buckinghamshire	✓			
North Cumbria		✓		
Calderdale and Huddersfield	✓	✓		
United Bristol, St Michaels	Assistant divisional manager for O&G			
Weston	✓			
Yeovil		✓		
IoW	✓			
Dr Grays Hospital, Elgin		✓		
Borders General Hospital		✓		
Rotherham				
Southampton		✓		

Visits have been undertaken to Scunthorpe, Barnstaple, Hinchingbrooke, Ashford and Canterbury.

4. Findings

4.1 Meeting the challenge of increasing consultant presence on labour ward

4.1.1 Guidance

The joint Royal College report, *Safer Childbirth*, places great importance on increasing the level of consultant involvement, both through direct involvement through an increased presence on labour wards and through increased supervision of their junior doctors. All consultants who work on the labour ward should:

- provide clinical leadership and lead by example
- train and educate staff in a multidisciplinary team
- ensure effective teamwork
- develop and implement standards of obstetric practice and have a major role in risk management
- bring experience to clinical diagnosis and opinion
- audit the effectiveness of practice and modify it as required.

Maternity Matters agrees that there is a particular need to provide more senior cover on labour wards stating that 'increasing the presence of consultant obstetricians on the delivery suite improves safety by reducing caesarean section rates & complications of operative vaginal delivery'

Towards Safer Childbirth recommended that units should have a minimum 40 hours consultant obstetrician cover a week, with exceptions for units with less than 1000 births a year and those with low complication rates.

A survey carried out for the Joint Colleges showed that as few as 30% of units claiming 40 hours of labour ward cover actually have a consultant present on the labour ward for that number of hours. This finding is reflected locally and in the findings of the review of other units, which commonly reported either consultant cover rather than presence, or consultant presence only when no consultants were away.

Existing national guidance set out a timetable for increasing consultant presence, but this is modified in draft national guidance, still in development with ratification expected late 2007, which expects all but the smallest obstetric units to achieve 60 hours consultant presence by 2009 at the latest, with higher levels in bigger units, with an immediate application of 40 hours of consultant presence in all units with over 2 500 births and ALL units accepting high risk births.

NHSLA standards for maternity services are usually closely aligned to RCOG recommendations. Just as RCOG guidance is under review, the NHSLA are also reviewing their standards for maternity services, with an expectation that revised 'pilot standards' will be issued at the end of June 2008, tested and revised with final standards to be issued and implemented on April 1st 2009. There has been no announcement about what the changes to NHSLA standards will be, but ***Maternity Matters*** indicates that *'there is a strong possibility the CNST will increase the standard to 60 hours'* (of consultant presence).

Can smaller units opt out?

The evidence for increased consultant input is independent of unit size, so that opting out would be hard to justify if high risk deliveries were still undertaken. Where adequate staffing cannot be provided, the level of risk accepted should be reduced accordingly.

For units below 2 500 births the draft report *Safer Childbirth* states that 40 hours of consultant presence is mandatory if the unit accepts high risk pregnancies, but *Acute health care services*, published in September 2007 by the Academy of Medical Royal Colleges indicates that 'units delivering less than 2 500 babies per year will be regarded to a great extent as low risk units'.

Safer Childbirth suggests that the level of risk and labour ward presence should be aligned. Where high risk pregnancies are not accepted, smaller units can, if a local risk assessment supports this, plan a lower level of labour ward presence 'compatible with the needs of the unit'.

Although there is currently no requirement for smaller units to increase consultant presence on the labour ward beyond 40 hours, such units are required to continually review their arrangements for consultant presence to ensure that it is adequate based on local needs. If as *Maternity Matters* suggests, the NHSLA increases their standard to 60 hours this seems likely to apply to all units accepting high risk cases.

4.1.2 Evidence

Before describing the findings of this project, it is worth reviewing the evidence that underpins the push for increased consultant involvement on labour ward.

a. Northwick Park Hospital NHS Trust

Special measures were imposed by the Secretary of State at Northwick Park Hospitals NHS Trust in April 2005 following the Healthcare Commission's investigation into maternity services. This was triggered by unexpectedly high maternal mortality figures (there were ten maternal deaths in a three year period).

As part of a package of measures, safety standards were improved by increasing the consultant obstetrician presence on the delivery suite from 40 to 60 hours per week.

b. Poor outcomes are the result of sub-optimal care

There is a body of evidence accumulating which suggests that the quality of care that women receive is substandard and seriously affecting the outcomes for them and their babies. This combined with a cohort of less experienced middle grade staff demands the presence of a consultant obstetrician for increasing periods of time to supervise and teach trainees and to be available for the very acute and life threatening emergency.

CESDI found most intrapartum deaths had sub-standard care and in over half alternative management would have made a difference.

- '*Additional skilled and experienced staff may need to be available to ensure safe births over 24 hours*'.
- '*In order to improve outcomes there needs to be increased supervision of trainee medical staff*'.
- '*Less experienced and unsupervised trainees had much higher rates of neonatal and maternal morbidity*'

c. Obstetrics is a 24/7 specialty and needs to be staffed accordingly

New data from the NPSA suggest that severe foetal compromise events are more likely to occur between midnight and 08.00, i.e. outside the hours of consultant obstetrician cover for most units.

- changes in staffing levels
- delayed or inadequately performed caesarean section

Additional skilled and experienced staff may need to be available to ensure safe births over 24 hours

This is not surprising because The *Hospital at Night* study showed that in obstetrics the level of activity is the same throughout the 24-hour period and therefore the cover required should be the same 24 hours a day, seven days a week. Intensive specialties such as obstetrics will need to address the need for 24 hour a day experienced obstetric cover.

d. Improved supervision is needed

The cost of litigation payments each year arising from obstetric complications is very high. The birth of a brain-damaged baby is not always the result of clinical error, but a number of consistent factors contribute to those cases, which do involve negligence. Evidence

suggests that the following actions would substantially reduce risk in this area:

- Improved staff supervision and training
- Proper use of equipment to monitor labour
- Better technique and diagnostic skills at birth

Reliance on middle grades without enough supervision is resulting in '*care that is substandard and seriously affecting the outcomes for women and their babies*'.

4.1.3 Consultant presence in practice

All units studied claimed to achieve 40 hours of labour ward cover. In line with national audit findings reported by RCOG in Safer Childbirth, the amount of time consultants were actually present on labour ward was variable, as were the other duties that were undertaken by consultants whilst covering labour ward.

How many consultants?

40 hours presence
RCOG guidance suggests that 40 hour cover is likely to require a minimum of five consultants.
Local calculations show that five consultants (each with two labour ward sessions per week) can only provide 40 hour cover when none of the consultants are away and in order to provide prospective cover 6.2 consultants are needed.

60 hours presence
RCOG guidance suggests that 60 hour cover is likely to require a minimum of eight consultants.
Local calculations show that five consultants (each with two labour ward sessions per week) can only provide 60 hour cover when none of the consultants are away and in order to provide prospective cover 10 consultants are needed.

Some units were achieving 40 hours of consultant presence on the labour ward. No unit achieved this with fewer than five consultants. Not all units had plans to achieve 40 hours of consultant presence. Consultants in some units did not regard this as a good use of their time. Consultants in some units believed that RCOG guidance would allow local arrangements (with 40 hours of consultant cover but without the consultant present on labour ward) to continue for smaller units (below 2 500 births).

Few units were achieving 60 hours of consultant presence on the labour ward. No unit achieved this with fewer than eight consultants. Few units had plans to achieve 60 hours of consultant presence. Consultants in some units believed that RCOG guidance would allow local arrangements (with 40 hours of consultant cover but without the consultant present on labour ward) to continue for smaller units (below 2 500 births).

That the increasing presence of consultants on labour ward has a real benefit was confirmed during interviews undertaken as part of the 'Alternative Models Project'. In Grimsby, the associate clinical director reported to us that 'Moving to 40 hour ***presence*** had a very beneficial effect' allowing more of the labour ward interventions to be undertaken as scheduled/ planned work, with the facilities and staff available to support this. Everything is in place.

4.2 Meeting the challenge of MMC

4.2.1 Background

Modernising Medical Careers (DH 2002) is a programme that has fundamentally changed the way in which doctors are trained after graduation. This programme has been gradually rolling out and from August 2007, doctors in early specialist training posts will no longer be sufficiently experienced to have the skills described by RCOG in 'Acute Basic Skills for the Resident Obstetrician', and cannot therefore work as middle grade doctors, but rather will need to be part of the second more junior tier. For some units, such as our own this will result in a need to employ more non-consultant career grade (NCCG) doctors to support the middle tier. There will also be a requirement for increased consultant availability for supervision and training.

4.2.2 Impact and responses in practice

Most units had not anticipated a significant impact from MMC. In some cases this was clearly reasonable, for example services with no middle grades or none who were trainees. In other cases little thought appeared to have been given to this change. For some units there was uncertainty about the immediate impact of MMC (in August 2007) because at the time of the project they did not know how many trainees would be allocated to units, or what level of experience they would have.

Only one unit had clearly identified the likely impact of MMC and none had well developed plans to respond to this change.

4.3 Meeting the challenge of EWTD (2009)

4.3.1 Background

The minimum number of doctors required to form a 24/7 rota, with provision for internal cover, and to support educational requirements depends on the mix of trainee and non-trainee doctors forming that rota. Actual rotas also need to take account of the workload requirements that may exceed the capacity of a single doctor, so that 'doubling up' may be required for some periods. In addition to limiting the maximum number of hours that may be worked each week (currently 56 hours, but reducing to 48 hours in 2009) the working time directive also specifies the requirements for breaks and rest periods and these also influence the number of doctors needed to deliver a 24/7 rota.

Work undertaken for the Royal College of Physicians concluded that 'in order to devise a junior doctor rota that covers a responsibility 24/7, a cell of eight to ten doctors is required. Whilst a rota could be constructed for a cell of eight junior doctors, it is sub-optimal, and it will prove extremely inflexible. The optimal number of doctors is ten, if they are working a 56-h week, and will be even more when they are limited to a 48-h week.'

4.3.2 EWTD compliance in practice

Units had differing expectations of the number or doctors needed to form a rota compliant with current regulations, varying from six to eight.

Not all units stated that they were compliant with current requirements: in all cases these were small units (under 1 500 births) and did not meet the requirement to have 24/7 resident cover by an experienced obstetric doctor. In one case middle grade doctors had 'opted out' of the provisions of the EWTD.

Some but not all units had plans aimed at achieving compliance with the 2009 requirement, which was believed to require eight or nine doctors.

Measures being adopted to ensure compliance included:

- Increasing the number of medical staff

- Using trainees only for a limited number of hours rather than 24/7
- Reducing the requirement for junior level trainees by the use of midwives in extended roles and the development of midwifery care assistant roles, both covering some of the duties traditionally performed by junior doctors.

Many units reported the development of extended roles for midwives. Many units also reported the development of midwifery care assistant roles, some of which provided backfill for midwives adopting extended roles, some directly covering traditional junior trainee doctor duties. Similarly extended nurse roles have been developed in gynaecology and neonatal care. No unit reported complete replacement of the junior trainee tier by other staff.

In North Lincolnshire the role of Advanced Midwifery Practitioner had been established because 5-6 years ago a serious shortage of junior doctors was anticipated (though in practice this has never materialised). In Grimsby this is seen as a very successful development, covering 40% of the first on-call rota in place of junior doctors. In Scunthorpe the role is seen as less successful, with AMPs working alongside junior doctors rather than replacing them, and seen as something of an expensive anomaly, having not replaced doctors but not really being midwifery either.

Advanced midwifery practitioners: Grimsby experience

Introduced 6-7 years ago, both to develop midwife role, aiding staff retention and also to cover EWTD, when a shortfall in junior doctors was expected.

Training
Linked with Hull University A33 Autonomous Practitioner course. This is not ideal as it is designed for nurses rather than midwives. Midwives are already autonomous practitioners, so some of the course was superfluous: - they had already dealt with some of the issues that nurses needed to think through.
Entry requirements to the course depend on previous academic experience / qualifications.
The Grimsby programme includes 200 hours mentored practical clinical training, with at least 96 hours working alongside the consultant. Practical assessments of competency in key extended roles have to be completed, then gradually the midwives move into the role.

Understanding limits of competence is an important part of the role.

AMPs work 10 of the slots on the junior doctor rota. 10 sessions (40% of the rota) was always the plan.

Roles
First assistant at Caesarian
Ventouse
Clerking patients

Discharge patients
Refer direct to registrar
Decision making is improved compared with before (as ordinary midwives)
Don't 'prescribe' but use PGDs. Could do prescriber training but isn't felt necessary.
Did training to do foetal blood sampling but doesn't arise often enough to maintain competence, so don't do this in practice.

'Midwives taking part on the medical rota are not working as doctors. They are still midwives working as midwives. The midwifery approach is distinctive and they take this into the role. They have a better understanding of what's needed without being told. They are midwives with additional competencies. That's well liked by the other midwives.'

Could AMPs completely replace SHOs?
Couldn't currently because there are not enough of them in Grimsby who are trained. Can't combine SHO role with other midwifery roles (e.g. labour ward coordinator) Would need 8-10 midwives to construct a complete rota.
Advantage is that AMPs always carry on working on the ward even of not needed for 'medical' role whereas junior doctors disappear – sleep, academic work etc.
Very helpful at time of rota change, so can cover this with AMPs and maintain stability.

Recruitment
AMPs were H grades in the old system. Under AFC they are banded as 7s just like any co-ordinators, so no premium is being paid.
Might not be able to attract enough suitable midwives to maintain an entire rota. Last recruitment round suggested not enough midwives were finding the role attractive. The pay is probably a factor in this: - no more pay for more responsibility.

Gynaecology
Gynae part of the rota is covered by SHOs and ANPs therefore can be two on rather than one. Doesn't save money but improves quality and avoids blockages. ANPs in Gynae cover 4-6 sessions.

Summing Up
'The AMPs are a real asset. Senior clinical midwives are given career opportunity. Much more experienced than SHOs. Give stability. Better clinical assessment than SHOs. Give continuity: mentor new SHOs.
Rota is easy because SHOs have little day time work commitment.
Because need ANP and AMP, need two to replace one. In daytime would have been using 2 SHOs anyway. At night it's quieter so use SHO who can cover both.' Having this mixed economy is a good thing.

Some units were in the process of configuration change which would affect the requirements for medical staffing (where units expected to change from obstetric to midwife led) or concentrate available resources (where units were merging).

4.4 Meeting the challenge of financial viability

4.4.1 Background

It was widely thought that there were problems with maternity funding inherent in the current systems of funding. Two components to this were identified:

- Payment by results: PbR does not cover the full range of maternity services (focussing on inpatient admissions and births). For those elements of the pathway of care where PbR does apply, it was widely thought that the PbR 'price' was set too low.
- Local contracts: Most units had block contracts for the provision of antenatal and postnatal care. Funding was usually historically based, and widely thought not to reflect the true cost of providing such services.

The review of PbR currently underway was expected to help with the financial challenge. It was expected that prices would rise, that PbR would be expanded to cover all parts of the pathway, and that income for antenatal and postnatal care would rise (and therefore that PCT expenditure on maternity care would inevitably rise) and that there would be some form of incentivisation for normal deliveries.

4.4.2 Achieving financial viability in practice

Not all units were aware of the income and expenditure position of the women's health directorate.

Several units had known shortfalls in income compared to costs in maternity care (though gynaecology was said to generate an off-setting surplus).

The degree to which this was seen as a pressing problem varied. Some localities have taken a decision to sustain a unit that they recognise would under other circumstances seem non-viable, in order to serve the local community. Isolation is the most common reason, but in one case this was because of lack of capacity in alternative units. Such units have not necessarily resolved all of the challenges that this presents.

Where financial balance was seen as important a variety of approaches were being adopted to managing financial imbalance. These included:

Cost reduction programmes

- Reducing theatre utilisation
- Other examples

Plans to increase income

- Expanding catchment
- Improved counting and coding
- Expectation that PbR/Tariff review would help
- PCT subsidy
- Funding formula uplift recognising higher costs of isolated unit

Hinchingbrooke

Responding to a £1.7M 'gap' in maternity services: gynaecology makes money.

The way in which fixed costs were apportioned was found to be an issue, and reviewing this has made a significant difference to the directorate.

£600k of cost has been eliminated through closing wards, staffing changes, reducing theatre usage.

Following formal consultation the next phase of work aims to address the shortfall in income rather than cutting costs. This is to be achieved by a planned expansion in catchment to attract more lower risk deliveries from further afield (higher risk deliveries are likely to continue to go to the nearby Addenbrookes Hospital).

<u>Successful cost saving measures</u>

Reducing the footprint

- Pooling medical secretaries
- Consultants share offices
- Closed 20 bed gynae ward and now have 5 gynae beds on another ward (treatment centre and co gynae)

Review of apportionment of fixed charges: made a lot of difference
Review of grading of community midwives (from band 7 to band 6)
Trust reducing number of Clinical Directors
Reduced number if senior midwifery manager posts
Do bookings in GP surgeries etc not in the home to reduce midwife travelling, similarly they do post natal clinics rather than in the home.

Reduced obstetric (planned) lists. Reasonably successful – occasionally need on extra list

<u>Unsuccessful cost saving measures</u>

Tried reducing gynae lists by 2 week based on calculated need – wasn't practical so reverted.

North Lincolnshire

Responding to a £2.8M shortfall in maternity services: gynaecology makes £900k profit.

In the past the PCT had subsidised the service but this ended when PbR was introduced.

An indicative local tariff for antenatal and postnatal care (directly based on the block contract divided by historic activity) allows scaling of payments if activity changes, but doesn't fundamentally change Trust income (or PCT expenditure).

Within the Directorate there were differing views on the causes of this problem and of what was expected of them by Trust management:-

- '2/3 directly attributable to having three sites and team midwifery which adds to cost having separate units' HoM Scunthorpe
- 'We balanced our budgets every year until PbR. Since then the situation had completely reversed. This is common across many units. Just can't undertake a normal delivery for £700.' Consultant Grimsby
- 'We were fine until tariff came in: an asset now we're a milestone. It would be even worse without Gynae. Caesarean rate is less than 20% so less income and less profit.' Consultant Scunthorpe
- 'The directorate is expected to make a profit. Don't feel that they will be able to break even while operating 3 sites and these models.' HoM Scunthorpe
- 'We're struggling terribly but the Trust understands we're in an impossible position. To break even under tariff we would have to merge, offer a less good service and cut standards.'

Proposed money saving approaches

- Negotiating local tariff for Community Midwifery
- Capturing all activity
- Reduced managerial posts
- Fewer medical secretaries
- Reconfigured midwifery structure (caused a riot) from team midwifery – good service but lots of home visits, lots of travelling – draw back in terms of skills because have to be involved in everything and will not be very experienced in deliveries.
- Don't operate for Gynae at night except in emergencies so may not need to have SHOs on overnight
- Make more use of juniors during the day (less sitting around watching)
- Looking to market hospital to juniors to make it attractive (because gaps requires employment of locums)
- Expect tariff review to help because provide ANC/ PNC for women who deliver at other Trusts.
- Increase capacity and draw in activity from outside their traditional catchment with outreach clinics
- Do a lot of STOPs for a wider catchment which is expanding. Looking to increase capacity for this by opening weekends.
- Grimsby sends out foetal medicine to Sheffield. Scunthorpe have a consultant who could do these and reduce tertiary referrals.
- Pushing private unit/ amenity beds

- Considering passing some service back to PCT – e.g. family planning
- Ensuring OP procedures properly counted
- Looking at prescribing costs.

4.5 Configuration Change?

Several areas reported that configuration change had been under discussion for many years without ever reaching the point of resolution.

Some localities have taken a decision to sustain a unit that they recognise would under other circumstances seem non-viable, in order to serve the local community. Isolation is the most common reason, but in one case this was because of lack of capacity in alternative units. Such units have not necessarily resolved all of the challenges that this presents, and indeed some reported that compromises were needed in order to retain services that would otherwise be unsustainable.

St Mary's on the Isle of Wight with 1 200 deliveries is an example of a unit where the distance to the next nearest consultant led obstetric unit is judged to be unacceptable, and so the service is being sustained. There was a feeling that the unit would otherwise by now have become a midwife led unit, but getting off the island requires a long ferry journey, and that would make an MLU unsafe. At night ferries only run every two hours, and in bad weather not at all. The result is that costs are 'inevitably high', but there is a special funding mechanism for the island to provide additional resources.

In other areas, units seeking to respond to similar pressures to those noted in East Sussex had undergone or were undergoing changes to service configuration, with a reduction in the number of consultant led units and an increasing number of birthing centres. Examples included East Kent, Buckinghamshire, Horton (Banbury) and Calderdale and Halifax.

Calderdale and Huddersfield NHS Trust

Currently their two CLUs deliver 4 500 babies between them, but with 5 consultants on each site they were only achieving 20-26 hours labour ward presence. They reported that they looked at all the other possible approaches. '*We looked and looked, and painful though it is, there is no solution to maintaining two small units unless you want to divert millions of pounds worth of investment. Even then there would be an issue with maintaining skills for experienced obstetricians and for training middle grades and juniors'.*

Halifax and Huddersfield have taken the view at least 4000 births are needed to give critical mass for training and skills maintenance, and they plan to single site the consultant led obstetric service, and establish a midwife led unit in the other town, and invest the savings in community midwives to tackle the issues associated with deprivation.

'Current services are not safe and sustainable, if we don't do this now, we will have to do it in a couple of years. It's hard to explain that existing units are not safe and will become less so, unless there's change. It's not about taking something away. It's about putting in place a better service in the unit and better access in the community, especially antenatal midwifery.'

4.6 Midwife Led Care

A number of units interviewed had experience of running stand alone birthing centres, with distances from their consultant led unit ranging from 5 miles (12 minutes travel time) to 32 miles (54 minutes travel time). No clear view emerged as to the 'maximum safe distance' for operating a stand alone midwife led birthing centre. Clinical staff repeatedly pointed out that distance was not the only factor in managing safe care. Examples of the views given were:

'It's not the distance, it's being organised and responding quickly and appropriately. Must avoid pushing the limits or blurring the boundaries in selection of women and in operational processes.'

'Good management will depend on active, live risk assessment in labour and early transfer.'

'The key to safe transfer is trained experienced midwives who are very aware of guidelines.'

'Safe transfers depend on good paramedic response (this applies to both home deliveries and MLUs)' 'Need to look at ambulance availability not just journey times (and monitor all the time)'.

Several units also wanted to make the point that *'it's not the distance or time, it's what sort of incident it is…For those who need a crash C-Section any distance is too far; for almost everything else distance is not really the issue, it's about skills and systems'.*

Interestingly, even in Halifax and Huddersfield where the distance between the proposed MLU and the consultant unit was only 5 miles, there was still a big debate about the safety of MLUs and transfers of women in labour.

They felt that there was a belief in society that childbirth is dangerous and needs doctors, which was perhaps perpetuated by obstetricians. But they felt that if the right assessment and observation are done throughout pregnancy and labour the risk can be managed and women transferred in time. They pulled records of their emergency caesareans and showed that in practice, when things start to go wrong women don't go to theatre instantly. Those who needed a crash caesarean are women in whom things started to go wrong much earlier, and a crash caesarian only therefore results where the earlier signs were missed or not responded to.

Several units also noted that there could be a perception that journey times in labour were a problem, even where there was no evidence to support this. '*When things go wrong…distance will be blamed whether it's a factor or not.'*

In North Devon there are 10% home deliveries, some at considerable distance from the unit (up to 35 miles away). There are very robust risk management systems, and very strict criteria, jointly developed by midwives and consultants. Midwives dial 999 and get a blue light ambulance to CLU.
Maybe one SUI where distance was an issue, resulting from a communication breakdown where the woman was taken to Exeter.

Their view was that there is '*no evidence that women who are assessed as low risk are at risk under midwifery led care'*. Would not see our plans for distance as a problem but would want to see a system that maintains skills in managing high risk mums.

5. Conclusions

No two situations are identical. History, geography, staffing, politics, money: all these combine to produce a unique situation. Nevertheless there is learning that can be transferred providing our own local issues are understood and taken into account.

In line with findings reported by RCOG, few of the alternative models we looked at are achieving 40 hours of consultant presence. Many of them did not have clear plans for achieving an increased level of consultant presence, and some units simply had not yet recognised that this would become an issue for them. In some cases it was clear that staff did not believe that the requirement would or should apply to them, or felt that they would be allowed to be an exception. None of the units had identified a 'magic solution' for achieving increased consultant presence without also increasing the number of consultants (in line with national expectations).

Not all units around the country will be affected by Modernising Medical Careers in the same way as East Sussex Hospitals Trust, with much less impact in units using NCCGs to deliver middle grade rotas, units with two full tiers allowing flexible deployment of trainees. Other units, in common with East Sussex have identified a need for additional NCCGs to cover middle grade slots formerly covered by trainees who in future will be too inexperienced for these duties.

The number of doctors needed to deliver an EWTD compliant 24/7 rota is variable depending on a number of factors referred to above. Most organisations were found to have rotas of seven or eight doctors and these were thought to be compliant with the current requirements. Few organisations appeared to have given serious thought to the need to reduce to a 48 hour working week. The only organisation with a clear plan to achieve 2009 compliance was instituting rotas of nine doctors.

Not all units had a clear understanding of their financial position expressed as income against costs, however a number of units reported a shortfall in income compared with costs, and no unit reported a surplus. A variety of approaches to achieving balance were reported, some of which may also be applicable in East Sussex.

Useful advice was given on the issue of running safe midwife led deliveries (whether in a birthing centre or the woman's home) at some distance from the obstetric unit. Comparable journey times to those proposed in East Sussex were found to be operating elsewhere in the country, and respondents identified a number of key elements to achieving safe care.

Some small units were continuing to operate with no plans to change. Isolation was the most common reason given. It was clear that these units had not found solutions to all the challenges that this posed, indeed some had not yet even recognised these challenges. Costs were often reported to be high, and in some cases it was clear that compromises were being made. No transferable solutions to the challenge of maintaining small obstetric units were found.

Health Community	East Sussex		Hinchingbrooke	North Devon	North Lincolnshire	
	East Sussex Downs and Weald	Hastings and Rother	Huntingdon	Barnstaple	Scunthorpe	Grimsby
Provider Catchment	Rural with urban coastal strip	Rural with urban coastal strip	Largely rural but with significant housing developments	150 000 Rural	V Rural	V rural
Units	Eastbourne DGH CLU 1762 deliveries Crowborough MLU 341 deliveries	Conquest CLU 1587 deliveries	Hinchingbrooke Hospital CLU 2222 deliveries	North Devon District Hospital: Integrated CLU/MLU 1403 deliveries	Scunthorpe General CLU 1958 deliveries Goole Delivery Room MLU c. 60 deliveries (local data) 27 miles, 33 minutes (local intel: up to 45 minutes)	Grimsby Maternity Hospital CLU 2414 deliveries
Neighbouring units						
	RSCH CLU c. 3 400 26 miles, 45 minutes	William Harvey, Ashford CLU c 3 100 deliveries 32 miles, 53 minutes	Addenbrookes c. 5 100 deliveries 26 miles, 42 minutes (local intel: road access is poor - bad traffic rather than bad roads – can take well over an hour)	Exeter CLU c. 3000 deliveries 43 miles, 70 minutes (local intel: up to 90	Grimsby CLU 35 miles, 47 minutes (local intel: min. 30 minutes)	Scunthorpe CLU 35 miles, 47 minutes (local intel: min. 30 minutes)

				minutes)		
	Pembury CLU c 2 300 deliveries 37 miles, 59 minutes	Pembury CLU c 2 300 deliveries 25 miles, 39 minutes	Peterborough c. 3 500 deliveries, 24 miles, 34 minutes	Taunton CLU c. 2 700 deliveries 50 miles, 77 minutes	Hull CLU c 4 800 deliveries 34 miles, 49 minutes	Hull CLU c 4 800 deliveries 34 miles, 58 minutes
	Princess Royal Haywards Heath CLU c 2 100 deliveries 30 miles, 48 minutes			Plymouth CLU c. 4 000 deliveries 65 miles, 103 minutes	Doncaster CLU c. 3 500 deliveries 25 miles, 34 minutes	Lincoln CLU c. 3 300 deliveries 35 miles, 58 minutes
Level of risk managed	All maternity risks (except highest risk problems). Transfer out some deliveries with neonatal risks: • under 32 weeks • Babies who will need perinatal surgery would be delivered where the surgery is planned		All maternity risks (except very rare morbidly obese or very rare medical conditions). Transfer out some deliveries with neonatal risks: • under 26 weeks • multiple births under 34 weeks • Babies who will need perinatal surgery would be delivered where the surgery is planned	All maternity risks Transfer out some deliveries with neonatal risks: • under 28 weeks • twins under 32 weeks	All maternity risks (except highest risk problems eg. cardiac and liver). Transfer out some deliveries with neonatal risks: • under 26 weeks	
Neonatal care	SCBU level 1	SCBU level 1 + CPAP	SCBU level 2+ HDU EoESHA review has recommended downgrading to SCBU level 1.	SCBU level 1 + CPAP	SCBU level 2	SCBU level 2

			PCT awaiting network decision			
Medical staffing						
Consultant	4.5 Consultants (11PAs)	3.5 Consultants (11PAs)	7 consultants (10PAs) 1 Assoc Sp (10PAs)	4 Consultants (12PAs) 1 Consultant (9 PAs) providing holiday cover	5 Consultants (+ 1 temp currently) Additionally one consultant obstetric oncologist works cross-site but does not participate on rota	5 Consultants Additionally one consultant obstetric oncologist works cross-site but does not participate on rota
Labour ward cover						
40 hour cover	Yes	Yes	Yes	Yes	Yes	Yes
40 hour presence	No	No	Yes Consultant presence on the delivery suite 8.30 to 5 weekdays 9 - 12 on Saturdays 9 - 5 on Sundays (No middle grade cover for these hours)	Would need another consultant	No Job plan cover only works in 'perfect week'. Leave is covered but job plans do not give prospective cover, so cover not presence.	No Job plan cover only works in 'perfect week'. Leave is covered but job plans do not give prospective cover, so cover not presence.

60 hour presence	No	No	No	No plans	No 'Would need more consultants' but feel that size of unit may allow some negotiation about requirements	No
Middle Grade	4 Staff Grades 2 SpRs	2 Staff Grade 2 Trust Grade 2 SpR	4.4 SpRs (1xST5; 2xST4;1xST3) providing weekday cover from 5pm	1 Ass Specialist (13 PAs) 3 Staff Grades (13PAs)	3 Staff Grades 4 SpRs Creating an 8th post	2 Staff Grades 5 SpRs
Junior	4 SHOs	4 SHOs	6 SHOs Support from hospital at night team.	6 SHOs: (1xF2; 2xVTS; 2xST1) 1 Trust Dr	5 SHOs above F2 1 F2 1 F1 Potential cover from advanced midwifery practitioners	3 SHOs 2 VTS 1 F2 5 AMPs (don't do nights) 3 Gynae ANPs (don't do nights)
EWTD compliant						
Current	Yes (single tier)	Yes (single tier)		No Middle grades have opted out & are non-compliant SHOs	Yes	Yes

				compliant		
2009	No	No	No: Middle grade rota breaches protected rest requirement so now recruiting 2 more – that will then be 2009 compliant.	No Opting out will not be allowed from 2009 Current SHO rota may be too few to provide 24/7 cover and training	No - middle grade will be compliant with 8th post	They believe so, but numbers seem insufficient.
MMC	Under MMC some doctors not experienced enough to work unsupervised	Under MMC some doctors not experienced enough to work unsupervised	From August 2007 two Trust Grade doctors have been recruited. They and the new SpR will all be junior and inexperienced in O&G. From August 2007 all SHOs will be GP trainees, and inexperienced in O&G. The consultants are anticipating many more attendances out of hours.	Level of experience expected to be sufficient to meet service requirement. Current SHO rota may be too few to meet training requirement	No problem anticipated	No problem anticipated
Midwife Staffing						
Ratio			Would have 1:30 if fully staffed up to establishment but they are not recruiting to this level	1:28	Re-organising to increase ratio from 1:25 to 1:27	1:27 ?
Vs Birthrate Plus			Below birth rate plus numbers – 1:28 is BRT. 'Most units in EofESHA are at 1:35.'	'About right'		

1:1 care in labour	4%	4%	59%	86%	N/K	100%
Home Births	81	75	56	106	42	25
Finances						
Contract	Hospital OPA, admissions and deliveries under PbR. Local block contract for community.		tbc	Hospital OPA, admissions and deliveries under PbR. Local block contract for community.	PbR with local indicative tariff for ANC/PNC based on historic spend divided by historic activity (allows scaling)	
Breaking even vs income	Obstetrics £3.3M loss vs income Gynaecology n/k Paediatrics £1.3M profit vs. income		In February 2007 Cambridgeshire PCT launched a consultation 'Seeking Sustainable Health Services for the People of Huntingdonshire' in response to financial pressures (£29.9M deficit in year 2006/7 with an additional £10M accumulated debt) at Hinchingbrooke Healthcare. Cambridgeshire PCT also had a projected end of year deficit of £50M. The costs of the current maternity services at Hinchingbrooke Hospital are £1.1 million in excess of the funds available for such services.	Not known	Women's Health £2.8M 'adrift'	

			While the PCT has agreed to carry this cost in the short term, other solutions will be sought to cover this deficit. To avoid any reduction in these services, we will be offering women from further afield the choice of giving birth at Hinchingbrooke i.e. from Cambourne and/or the west of Cambridge. Because the number of births taking place at the hospital will increase, the level of income will increase as well.			
Hours the unit was closed 2006/06	145	102	0	0	0	0
Service Reviews			1. 'Seeking Sustainable Health Services for the People of Huntingdonshire': Cambridgeshire PCT consultation document 2007. (Decision announced June 27th 2007) 2. East of England Maternity Review (SHA) This is separate from Hinchingbrooke review. • Maternity sub-group	1. Towards a sustainable future for acute services in and for north devon Durrow for NDDH, September 2006 2. Midwifery review, internal NDDH, ongoing	1. 'A Proposal To Change The Current Model Of Midwifery Care At Scunthorpe General Hospital And At Goole And District Hospital', June 2006 2. Several previous reviews have considered single siting but have rejected because of impact on catchment (would expect to lose	

			• In conjunction with neonatal network • Completes end of September		significant catchment so that merged unit might be little bigger) geography (distances for those at edges of catchment) and 'politics'.	

Sources (unless otherwise stated)

Deliveries:	Dr Foster, 2005/06
Distances:	RAC
Travel times:	RAC, private car, medium traffic
1:1 care in labour:	Dr Foster
Hours closed:	Dr Foster, 2005/06