A REVIEW OF CONSULTANT-LED OBSTETRICS IN STAFFORD

October 2016

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Version number: 3.6

First published:

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Classification: Official

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Executive Summary

As requested by the Secretary of State in 2014, NHS England commissioned a review to provide an overall recommendation as to whether a consultant-led Obstetrics Unit could be recreated and sustained clinically and financially in a safe way at County Hospital (former Stafford Hospital) in the future.

An independent panel was identified and the panel was requested to consider the former Mid-Staffordshire Foundation Trust's Special Administrators' (TSA) report and recommendations and findings from the recently published National Maternity Review. As part of the review the panel considered a range of evidence, engaged with a variety of stakeholders, and encouraged the public to share their views. It was recognised at an early stage that any possible re-introduction of an Obstetric Unit at County Hospital would not be straightforward.

The panel identified that recruitment and retention of staffing in accordance with national recommendations would be the single most difficult challenge. Financial viability and sustainability is the second most serious challenge to the re-introduction of an Obstetric Unit at County Hospital. In a challenging financial climate, the level of investment required bringing buildings and equipment up to standard, to commission obstetric theatres and to employ teams of consultants and support staff, without the projected numbers of births to provide anything approaching sufficient income, makes the project financially unviable.

The panel concluded the review and recommended that a consultant-led obstetric unit could not be reinstated and staffed in a safe way at County Hospital with respect to clinical and financial constraints at the present time. The panel further recommended that the Freestanding Midwife-led Birth Unit (FMBU) at County Hospital should continue and should be subject of further promotion, development and enhancement, as part of an integrated service for Staffordshire.

The panel found that there was a full range of choices currently available between the two hospital sites and community. It hopes that some reassurance is provided to

members of the public about the small number of transfers and the absence of harmful outcomes relating to babies born on journeys.

An Obstetric Unit at County Hospital is very much missed and its re-establishment would fulfil the aspiration for greater choice for women. Women and their families shared an overwhelmingly positive birth experience at the FMBU. The panel considers that with a ‘re-launch’ in terms of promotion and publicity, including GPs and all relevant professionals as well as the public, together with some investment in refurbishment and equipment at the County Hospital, the current FMBU could be expanded further and could become a popular and valuable option for women across the whole of Staffordshire.

1 Introduction

1.1 NHS England has commissioned this review as requested by the Secretary of State in 2014 and following the publication in February 2016 of the National Maternity Review, 'Better Births' [1], led by Baroness Cumberlege. Its recommendations are considered within this report. The former Mid-Staffordshire Foundation Trust's Special Administrators' (TSA) report and recommendations[2], insofar as they pertain to maternity services, are also taken into account.

1.2 The panel recognises that there is still a strength of public opinion amongst Stafford residents, and some of the previous obstetric unit staff, about maternity service provision in Staffordshire. This formed part of a more general concern about hospital services in Stafford. As a result of reconfiguration of services in 2014 the obstetric unit at Stafford was closed, at a time when much work had been done to improve governance and procedures.

1.3 The public are concerned about safety when complications arise unexpectedly. Concerns such as travelling distances; dangers of giving birth before arrival; and the anxiety engendered by the absence of specialised doctors and consultants who could provide immediate emergency obstetric care at County Hospital. There is a public perception that some of these issues contribute to an increased risk of harmful outcomes without an Obstetric Unit (OU) being present at County Hospital. The public interviewed still feel that an Obstetric Unit should still be returned to the local hospital however there was some understanding of the evidence that midwife-led units could offer very safe care - as safe as an OU.

1.4 The maternity service provided at University Hospitals North Midlands comprises a Freestanding Midwife-led Birth Unit (FMBU) at the re-named County Hospital at Stafford and a consultant-led Obstetrics Unit (OU) at the

[1] National Maternity Review – 'Better Births' (2016)
[2] The Office of the Trust Special Administrator of Mid Staffordshire NHS Foundation Trust Final Report, December 2013

Royal Stoke University Hospital which operates alongside a Midwife-led Birthing Centre (MBC) in the same building.

1.5 The panel have asked the public, as well as staff at both sites, for their views and have listened carefully to those views. It was recognised at an early stage that any possible re-introduction of an OU at County Hospital would not be straightforward, on account of the number and specialisation of the various consultants and other staff which would be required, even for what would be a small unit compared with that at Royal Stoke University Hospital.
First and foremost, recruitment was quickly identified as a major difficulty, with a national shortage of obstetric, neonatal and specialist anaesthetic consultants, midwives and neonatal nurses. Some of these clinicians need and choose to work in large-scale, busy, centralised units to preserve their expertise. Secondly, enquiry into the financial viability of restoring a full spread of supporting services and infrastructure for an OU at County Hospital identified further major challenges.

1.6 As part of the review, the panel identified the valuable resource that the FMBU offered the local community in its own right. It was universally appreciated by those parents who had experienced its services, but they felt it had more potential.

2 Panel Members

Panel Member	Organisation	Role
Mrs Kara Dent	Royal Derby Hospital	Obstetrician (Co-Chair)
Jenny Bailey	University of Nottingham	Midwife (Co-Chair)
Dr Chris Elton	University Hospitals Leicester	Anaesthetist
Dr Jane Williams	Nottingham University Hospitals & East Midlands Maternity & Children Network	Network Clinical Director & Paediatrician
Nathalya Kennedy	Sands (Stillbirth and Neonatal Death Charity)	Lay Representative

3 Independent Authors

3.1 The independent authors of this report assisted the panel in accessing evidence and drew together its combined views and recommendations. Neither has any connection to or interest in the matters which are subject of this review.

3.2 Penny Nicholson has a background in child protection in the police service and at national level in the voluntary sector and has practised as a child care lawyer in the private and public sectors.

3.3 Paul Jays is a health and social care consultant who has fulfilled contracts for various clients including the Department of Health, both at home and abroad, and the Northern Ireland Government. His background is in senior management in social care. He currently sits on a guidance committee for the National Institute of Health and Care Excellence (NICE).

4 Acknowledgements

4.1 The panel would like to thank those who attended the public listening event on 13th September 2016. They greatly appreciated the time taken by them to pass on their views and the views of others and this appreciation extends to all those who communicated their views at other times in writing, the staff of the University Hospitals North Midlands, at County Hospital and at the Royal Stoke University Hospital for making time to speak to the panel and the new mothers and fathers who spared time to talk about their experiences during the site visits.

5 Terms of Reference

5.1 The Terms of Reference ask the Panel:

'to provide an overall recommendation as to whether a consultant-led obstetrics unit could be recreated and sustained clinically and financially in a safe way at County Hospital (former Stafford Hospital) in the future'.

5.2 In doing so, the Panel is to review and consider:

a) The Trust Special Administrator Service Model & Recommendations and

b) Recommendations from the National Maternity Review

5.3 Further, it should consider and confirm the following specific information:

i. The prospective number of births that would take place at County Hospital if the current service was supplemented by an obstetric service, to include the actual and projected birth rates, patient choice and acuity of women and babies;

ii. The additional medical obstetric and non-medical obstetric staff that would be required to re-introduce an obstetric service at County Hospital, taking into account the need to meet any relevant national standards on staffing cover;

iii. Any extension that would be required to paediatric and anaesthetic/critical care services currently provided at County Hospital in order to re-introduce an obstetric service. This should include quantifying any additional medical and non-medical staff that would be required;

iv. The Panel's view on whether and how these additional staff could be recruited, including through a rotation with the Royal Stoke University Hospital;

v. The cost required to re-introduce a consultant-led obstetric service, including the effect of additional staffing requirements described in ii) and iii). This should include a sensitivity analysis around projected numbers

of births and whether or not the provider could deliver the service within tariff;

vi. Any other issues the Panel feel are relevant.

6 Background

6.1 A public inquiry into serious failings at the Mid-Staffordshire NHS Foundation Trust (MSFT), chaired by Robert Francis QC[3], reported in February 2013. Following this inquiry, the Office for the Trust Special Administrator (TSA) took on accountability for the day to day running of the Trust. The administrators were required to develop a plan for ensuring that clinically and financially sustainable services could be delivered for the local population then being served by MSFT over a period of up to ten years.

6.2 The TSA reported to parliament in July 2013. There followed a public consultation between 6th August and 1st October 2013 and final recommendations were made in an amended report in December 2013.

6.3 The TSA recommendations for maternity services in Stafford were that the consultant-led obstetric unit should be de-commissioned, once capacity was established elsewhere, and that a midwife-led unit should be established, but should be kept under review 'to ensure that the number of births is adequate to support … financial sustainability'.

6.4 The Secretary of State for Health requested that NHS England consider whether consultant-led obstetrics could be sustained clinically and financially at County Hospital (formerly Stafford Hospital) in a safe way in the future.

6.5 NHS England committed to undertaking this review in the light of the recommendations of the TSA and the National Maternity Review, to ensure the safety and sustainability of obstetric services at County Hospital in Stafford.

[3] Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry (The Francis Report) 2013

NHS England declared its intention to await the publication of the National Maternity Review before commencing this work.

7 Consideration of the Final Report of the Trust Special Administrator

7.1 The panel have considered the report of the TSA, which included the following:

- A midwife-led unit should be managed in a maternity network with other units/providers and should be kept under review to ensure that the number of births is adequate to support its financial viability.

- There should be continuing patient choice across multiple providers within Staffordshire. In accordance with NICE guidance, Cumberlege report and RCOG recommendations patient choice should include: obstetric units, alongside maternity units, free standing birth units and a home birth service.

- The previous consultant-led obstetric unit at Stafford was one of the smallest in the country, ranked 127th out of 139 in 2012-13.

- Patients who have complications pre-23 weeks will be seen in an Early Pregnancy Assessment Unit (EPAU), operating at Stafford during the day, Monday to Friday.

- The view of the Clinical Advisory Group is that a unit managing fewer than 2,500 births per annum is unlikely to be able to support training and keep the skills of the staff up to date as a standalone OU unit.

- Births were predicted to rise in the Borough of Stafford to 2,050 in 2015, but to decrease in the longer term.

- Networking obstetric births in Stafford with another provider could produce clinical viability, but at a significant cost.

- The range of support services required to support an OU (including Caesarean section theatre, Special Care Baby Unit, paediatric consultant rota) would cost ca. £10.1m per year, as compared with income associated with low numbers of births of ca. £6.6m. This would be significantly challenging.

- For the free-standing midwife-led birth unit at County Hospital to be financially viable it needs to manage at least 350 births per year, which was not thought unrealistic.

- Evidence presented to the TSA during its consultation demonstrated that there would be sufficient demand for the service to be financially viable.

7.2 This review does not seek to duplicate the work carried out by the TSA, but has taken an independent approach, seeking evidence from a wide range of sources.

8 Policy context

'Better Births' – the National Maternity Review

8.1 Following identified failings at Morecambe Bay NHS Trust in Cumbria[4], a review of maternity services in England was commissioned by the Chief Executive of NHS England, to embed learning and explore how maternity services needed to change to meet the needs of the population. The National Maternity Review, led by Baroness Cumberlege[5], reported in February 2016 and set out a vision for maternity services across England, as follows:

'Our vision for maternity services across England is for them to become safer, more personalised, kinder, professional and more family friendly; where every woman has access to information to enable her to make decisions about her

[4] Reconfiguration of Obstetric and Maternity Services in Cumbria, Royal College of Obstetricians and Gynaecologists (2014)
[5] National Maternity Review – 'Better Births' (2016)

care; and where she and her baby can access support that is centred around their individual needs and circumstances' (p. 8)

8.2 The review does not seek to dictate how services are structured, but provides the following key tenets:

- Personalised care, centred on the woman, her baby and her family, based around their needs and their decisions, where they have genuine choice, informed by unbiased information.

- Continuity of carer, to ensure safe care based on a relationship of mutual trust and respect in line with the woman's decisions.

- Safer care, with professionals working together across boundaries to ensure rapid referral, and access to the right care in the right place; leadership for a safety culture within and across organisations; and investigation, honesty and learning when things go wrong.

- Better postnatal and perinatal mental health care, to address the historic underfunding and provision in these two vital areas, which can have a significant impact on the life changes and wellbeing of the woman, baby and family.

- Multi-professional working, breaking down barriers between midwives, obstetricians and other professionals to deliver safe and personalised care for women and their babies.

- Working across boundaries to provide and commission maternity services to support personalisation, safety and choice, with access to specialist care whenever needed.

- A payment system that fairly and efficiently compensates providers for delivering high quality care to all women, whilst supporting commissioners to commission for personalisation, safety and choice.

8.3 The Cumberlege report[6] also comments on the principles that should underlie future local maternity systems. Paragraph 4.96 (page 81) states:

'Local maternity systems should have as their central principle the concept of 'defaulting to the community' ….. by which women can receive clinically appropriate care as close to home as possible. This will mean that they need to promote and support the establishment of community hubs across their network, connecting them with obstetric and specialist services'

8.4 Under 'Planning for transformation' at paragraph 5.19 (page 88), the Review comments further on the implications of the 'default to the community' concept:

'This report envisages more births taking place in the community, i.e. in midwifery care and at home ….. As a result, there may be lower demand for obstetric services, which must nevertheless remain easily accessible to those who need them. Obstetric Units will require appropriate local configuration to satisfy demands for safety as well as access.'

8.5 The panel has reviewed and weighed the findings and recommendations of the National Maternity Review in reaching its conclusions.

9 Description of the current service

9.1 When the OU at Stafford, along with its supporting services, was de-commissioned and the hospital was re-named County Hospital, services such as anaesthetics and surgery were significantly reduced. Paediatrics, radiology, neonatology, pathology and blood banks were removed. A&E services were reduced to 8a.m. to 10p.m. There are currently 4 adult high dependency unit

[6] National Maternity Review – 'Better Births' (2016)

beds but no level 3 ITU beds. There is now no special care baby unit or neonatal unit available.

9.2 Following the closure of the obstetric unit at Stafford the obstetric anaesthetists relocated to other hospitals; the lead clinician and trainer to Wolverhampton. A significant proportion of the remaining consultant anaesthetists at Stafford County hospital are close to retirement and do not have recent training and competencies in Obstetric Anaesthesia. There are 8 obstetric anaesthetists within UHNM, supplying services to Royal Stoke University Hospital's approximately 7,200 deliveries. With this level of service, there is no capacity to transfer any of these anaesthetists to County Hospital.

9.3 In anaesthetics, there has been a reduction in resident consultant cover from two tiers to one tier. There is now a resident (non-trainee) anaesthetist who provides emergency cover to the wards and to critical care. There exists a level 2 critical care unit (see: Department of Health for England Comprehensive Critical Care (2000) for levels of care). Should patients require level 3 care they are transferred to the Royal Stoke University Hospital and the consultant is resident there for as long as the patient is being treated.

9.4 The previous OU had been staffed with 6 obstetric consultants, 2 of which were locums. Of the 4 permanent posts, 2 relocated to Royal Stoke University Hospital and 2 to Royal Wolverhampton Trust (RWT).

9.5 A free-standing maternity-led unit, termed the Freestanding Maternity-led Birth Unit (FMBU) was established at County Hospital on 19th January 2015. Based on the figures to date for the year 2016 to 2017, bookings for the whole year are predicted to be up to 400. In line with Royal College of Midwifery guidelines, during the first six months of operation (from January 2015), nulliparous women (women who have never given birth by choice or for any other reason) were not eligible to give birth on the unit. Now all women who meet the low risk criteria may book at County Hospital if they choose, after being fully informed regarding safety, the criteria for a low risk booking and possibility of and reasons for transfer to Royal Stoke University Hospital. With the addition of multiparous low

risk women and good advertisement of their services, this number could rise. Parents felt that they had only been offered the FMBU later in their pregnancy and on request rather than at the initial booking appointment. Parents would have preferred initially to have been booked for the FMBU and only transferred to consultant care at Royal Stoke University Hospital OU if complications arose.

9.6 All maternity units (of whatever type) must provide facilities for the care of unexpectedly sick new-born infants. This is a possibility wherever there are mothers delivering - the larger numbers of mothers, the higher the chance of unexpected problems. At the FMBU, midwives and paramedics have received training in stabilisation of the neonate to allow time for expert help to be accessed and prior to transfer to the Neonatal Unit (NNU) at Royal Stoke University Hospital. There are clearly established arrangements for the prompt, safe and effective resuscitation of babies and for the care of babies who require continuing support, by safe transfer to the Royal Stoke University Hospital.

9.7 In the event of complications occurring at County Hospital FMBU, a transfer between hospitals is made in accordance with robust protocols. The nature of these arrangements, especially as specialised help is not available on site, is made clear to women when they book for delivery. The high level of experience among midwives means that problems are identified early, whether with women or babies, and transfers are arranged in a timely way to avoid further complications. When the pregnancy and/or birth are likely to be high risk, women are booked in to give birth at the Royal Stoke University Hospital or directed to another unit – e.g. New Cross, Wolverhampton.

9.8 Where unplanned complications arise during labour, delivery or soon after birth, the mother-to-be or mother and child are transferred from the FMBU at County Hospital to Royal Stoke University Hospital by ambulance provided on contract by West Midlands Ambulance Service NHS Foundation Trust. These transfers were for a variety of reasons and not all of these were during labour. On many occasions maternity care was subsequently handed back to midwives at County for low risk care to resume. From January 2015 to January 2016 there were 38 transfers- 12 antenatal, 15 during labour and 10 postnatal. A further transfer

was a mother joining her baby. The time taken for each journey from County Hospital to Royal Stoke University Hospital was approximately 15 -55 minutes, the average time taken being 30 minutes. It is acknowledged however that traffic can cause significant delays. No serious incidents have been recorded in the 18 months since the opening of the FMBU.

9.9 Sometimes babies are born unexpectedly and before arrival at the planned destination for the birth (termed BBA – 'born before arrival'). Births can take place in the home whilst awaiting transport as well as in less ordinary settings, such as at the roadside, in an ambulance or whilst en route to hospital. Figures for such unexpected births are recorded and a 'root cause analysis' is undertaken for each incident. Since the new reconfiguration of services, none has resulted in an adverse outcome.

9.10 The Women's Health Centre, operating in the same premises as the FMBU, maximises opportunity for one centre to offer wider maternity and gynaecology services to local women. This service currently provides ante- and postnatal services, ultrasound scans, some gynaecology services including colposcopy and hysteroscopy, day care facilities and ambulatory diagnostic services. Consultant antenatal services have been transferred from the Royal Stoke University Hospital outpatients department to County Hospital, which is working well. The bereavement service has now been extended across both hospitals. The community midwives now have their office within the Women's Health Centre at County Hospital. The Parents Emotional Antenatal Clinic for Health (PEACH mental health service) has been appointed to provide outreach to the centre.

9.11 The Annual Report of the Women's Health Centre at County Hospital[7] covered the period January 2015 to January 2016. Midwives and maternity support workers provided one to one care to 117 women and of these 102 (87%) gave birth at County Hospital. Up until the panel's visit on13th September 2016, 203

[7] Annual Report of the Women's Health Centre at County Hospital, January 2015 – January 2016

births had taken place at the FMBU, County Hospital since it opened on 19th January 2015.

9.12 The TSA report indicated (paragraph 530) that the FMBU would need to deliver 18-20% of mothers-to-be, who would have ordinarily chosen to deliver at the OU in Stafford to break even. These women would need to meet the criteria for birth at the FMBU; however the TSA went on to state that it was not unrealistic to conclude that more than 350 mothers-to-be would choose to use the unit per year. Having delivered only 203 births in 20 months, it is clear that the unit would need to continue its development, with better advertisement of the first class service, to increase numbers of deliveries and move towards financial sustainability. The panel felt this was an achievable goal. Bookings at FMBU for the future do indicate an upward trend.

9.13 The University Hospitals, North Midlands Trust (UHNM) runs a full consultant-led, centralised obstetrics unit at the Royal Stoke University Hospital, with an alongside midwife-led unit (the Midwife-led Birth Centre or MBC). It delivers some 7,200 births per year. It has all the required specialist services to support surgery, a neonatal unit for very early or ill babies, fetal medicine, ultrasound scans, a bereavement service, substance misuse care and access to perinatal mental health ('PEACH'). Previously women at County Hospital have had to travel to Birmingham for fetal medicine and a bereavement service, but these are now provided on the Stoke site.

9.14 The maternity service is run across the two sites as an integrated service. Women have the choice to give birth in the OU at the Royal Stoke University Hospital, in the MBC alongside that unit, or in the FMBU at County Hospital in Stafford. Some women choose to give birth at Wolverhampton, Burton-on-Trent or Walsall for convenience to their place of residence. It is noteworthy that in a rural county such as Staffordshire, women will need to plan to travel from outlying districts such as Leek and Ashbourne to Royal Stoke University Hospital, distances which exceed that between Stafford and Stoke, with the consequence that many women live with the fact that they are not in close proximity to either an OU, an alongside unit or a free-standing midwife-led unit,

restricting their choices. This is not unusual in many parts of the country. The Kings Fund Report[8] shows no evidence of adverse outcomes for travel fewer than 45km.

9.15 The delivery suite at the Royal Stoke University Hospital is working well and provides training and rotation for midwives from the FMBU. There is a dedicated delivery room to receive incoming transfers from the FMBU. The number of births managed by UHNM at the Royal Stoke University Hospital is under 8000 and therefore there are no concerns regarding its ability to deliver personalised care or a need to operate a double rota, though it can feel busy for those women who give birth there.

10 Recruitment and retention of staff

10.1 The panel noted the previous difficulty of the recruitment of obstetric consultants to a unit that had fewer than 2000 deliveries per year and also the question of adequate training for trainees as part of the obstetric structure. The panel also noted that medical student training had ceased at the Stafford Hospital Obstetric Unit prior to the changes, as it was felt they were not receiving enough exposure and opportunities.

10.2 The panel has considered the possibility of rotating obstetric consultants to the Royal Stoke University Hospital, but this does not solve the problem of an on-call rota which cannot be shared, as there is a need for geographic dedication to one hospital to avoid excessive travel times to respond to emergencies. This requires a separate and additional on call rota for the obstetric consultants.

10.3 It would be highly unlikely that suitable consultant obstetric anaesthetists with the required skills (see: AAGBI/RCOA/OAA guidelines[9]) could be attracted to a post at a future OU at County Hospital. Recruitment and retention of resident anaesthetists has been extremely difficult within this and other hospitals and

[8] The Reconfiguration of Clinical Services (King's Fund Report, 2014)
[9] Obstetric Anaesthetists' Association / Association Anaesthetists of Great Britain Guidelines for Obstetric Anaesthetic Services 2013

rotas are often filled by locum doctors and overtime. Suitable doctors are extremely difficult to attract and when in post are usually attempting to gain entry onto training schemes and to gain recognition in respect of previous training in order to achieve specialist registration. It is unlikely whether any consultant obstetrician would apply to work in an OU with no full neonatology service, as would be the case for any future OU at County Hospital.

10.4 There is no prospect of paediatric, neonatal and anaesthetic trainees resuming resident duties at County Hospital, because of reduced numbers of trainees within the West Midlands deanery (which will reduce further in the future) and inadequate numbers and case mix to provide adequate training, even with a re-opened obstetric unit.

10.5 Royal Stoke University Hospital already has 80 whole time equivalent vacancies in trained theatre staff or a total of 120 whole time equivalents across all bands. This is a recognised national shortage. This is before considering the staffing of a separate unit at County Hospital that would be needed for an OU.

10.6 Student midwives working at a small OU at County Hospital would need to go to Royal Stoke University Hospital to achieve their competencies. An OU at County Hospital would serve only as placement space rather than allowing students to obtain the necessary range of clinical experience. There are difficulties in recruitment in many areas of the health service, with, for example, 24 whole time equivalent vacancies in child nursing in the local area, giving rise to attempts to recruit staff from other specialisations.

10.7 The above illustrates how the national position would almost certainly prevent safe staffing of any future OU at County Hospital.

Maternity Data

10.8 Evidence has been gathered from the following sources to seek to ascertain projected birth rates. The production of this data has not been a straightforward

exercise, but it is unlikely that alterations to the data received would change in any significant way the predicted future demand for maternity services. Information has been obtained from two main sources; the Office for National Statistics (ONS)[10] and the TSA report[11].

10.9 The ONS predictions of future births are based on past trends and do not take into account specific planned local population growth such as new housing developments. Even so, an approximate figure of the impact of Ministry of Defence (MOD) and other housing developments on the future birth rate in the Stafford area may be estimated.

10.10 Based on the ONS predicted births against the existing population for Stafford Borough Council, an additional population growth of 13,000 (MOD plus other local housing developments - TSA) may add approximately 90 additional births per year. Discussions with the MOD undertaken as part of the TSA review suggested a lower figure.

10.11 The TSA report, taking the above into account, concluded that a short term rise in births would occur by 2015, but in the medium to long term there is likely to be an overall decrease in birth rates.

10.12 The ONS figures for the Borough of Stafford suggest only a small increase in annual birth rate from 2016 to 2022 of 50 births, followed by a slight decline. The figures for Cannock indicate only a very small increase between 2016 and 2020.

10.13 Based on ONS figures, the predicted birth rate for the County of Staffordshire are:

2016 - 12,080 births

2020 - 11,261 births

[10] Office of National Statistics – Subnational Population Projections

[11] The Office of the Trust Special Administrator of Mid Staffordshire NHS Foundation Trust Final Report, December 2013

10.14 The predicted future birth rates by themselves will not make a material difference to the assessment of the clinical and financial viability of the re-introduction of an OU at County Hospital.

10.15 The figure for births which would be delivered at an OU at County Hospital, if one were re-created, could be estimated on the basis of activity before the transition. In 2013-14 there were 1,743 births. Staff reported that the hospital had been in a negative spotlight for some time before the TSA report and that had affected numbers. Prior to the Mid-Staffordshire Review[12], numbers had been higher in the region of 2,500; ONS indicates 2,504 births during 2007.

11 Consultation

11.1 The panel were aware that there had been significant previous involvement and concern from members of the public and many other interested parties in the issues surrounding the inquiry into standards of care at the previous Stafford Hospital, now County Hospital. Even so, the panel felt it was necessary and appropriate to undertake a further consultation process as part of its review, of the clinical and financial viability of re-establishing a consultant led Obstetric Unit at County Hospital. This was to include the Listening Events with the public and staff, which the panel felt was an important part of the process.

11.2 The consultation process was based on the following;

- A public listening event in Stafford.

- Communicating the review intention and invitation letters to key stakeholders, including health and social care commissioners, providers, regulators and support services, local parishes and the local authority.

- Invitations to share feedback through proactive media releases and twitter feeds. Email submissions received from members of the public.

[12] Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry (The Francis Report) 2013

- Site visits to the MBC and Obstetric Unit at Royal Stoke University Hospital.

- Discussion with individual mothers and fathers at both sites.

- Two site visits to the FMBU at County Hospital including a session with staff at the FMBU led by the panel's midwifery specialist, Jenny Bailey.

- Discussions between the panel consultant specialists and their counterparts.

- Meetings with Executive and Senior Management Team members from the Trust.

- Engagement with West Midlands Clinical Networks, Health Education West Midlands, Healthwatch, Staffordshire University, Public Health England, Royal Colleges of Nursing, Midwives and Obstetrics and Gynaecology and Stoke School of Anaesthesia.

- Engagement with the Staffordshire Sustainability & Transformation Plan programme leads.

11.3 A number of themes emerged in the views from the public, including from parents spoken to in the FMBU at County Hospital, as follows:

- Safety of transfers to Royal Stoke University Hospital.

- Reference was made to the incidence of births taking place before arrival Royal Stoke University Hospital.

- The need to take into account population growth and the growth in the number of births with particular reference to MOD and other housing developments in Stafford.

- Poor communication regarding the services provided at the FMBU. There was felt to be a misunderstanding by the general public, some community midwives, County Hospital staff in other departments and GPs that the FMBU was not in operation or that it was only available for women having their second or subsequent child. As a result, there has been poor promotion of the FMBU by health care professionals.

- The implications of the National Review of Maternity Services[13] in terms of the principles of personalisation, choice, small sizes of OUs and payment systems.

- Concern over the pressure being placed on services at Royal Stoke University Hospital and other surrounding hospitals.

- Very positive experiences of care at the FMBU and a strong desire to see the facility continue and even receive investment, but still a view that an Obstetric Unit should be returned to County Hospital.

- An acknowledgement that it may not be realistic for a new Obstetrics Unit to be re-introduced, in the light of the small number of births and the service at the FMBU being described as akin to a private facility.

- For some parents of Stafford the importance of registering a birth at Stafford rather than Stoke, to reflect where the family belong.

- The timing of the review, that it should have taken place in 2014 or that it should be delayed until the financial implications of the National Review have been embedded.

[13] National Maternity Review – 'Better Births' (2016)

- The fact that no final decision should be taken at this stage. This was countered by the need for certainty, against a background of financial pressure within the health economy locally and nationally.

- Discussions with women and their partners reflected many of the issues raised at the Listening Event and e mail submissions. There was a clear view that County Hospital should have an Obstetric Unit but also very positive views about the care they were receiving at the FMBU. It was felt that the services offered were still not fully understood by other health professionals in the community. One father questioned whether the services were 'being kept quiet for a reason'.

- There was some understanding of the evidence that midwife-led units could offer very safe care - as safe as an OU for low risk pregnancies.

- There was awareness of the perceived pressure at Royal Stoke University Hospital and support for the promotion of and investment in the County site to make best use of the service and relieve pressure elsewhere.

- It was reported by some staff there that there was pressure on the two feeder universities to find suitable placements for student midwives to achieve clinical competencies when they were based at the previous OU at Stafford. This concern was also voiced on behalf of medical student training.

- Feedback was received that the public felt they had been listened to in the listening event.

11.4 Some comments from families, including in the patient satisfaction surveys and the comments book held on the FMBU, were:

"I would stand on a soap box and shout out how good it was"

"Breastfeeding support is amazing"

"Silly that it isn't being used to its full potential and all really sad and upset that the unit is not busy and not being used."

"Ambience is lovely, staff are great."

"Why make more stress for Stoke or other hospitals?"

"Stafford should be offered all the services that have been taken away"

"Stafford was one of the best"

"You gave me the best support and aftercare I could ask for, I felt so safe ….My son was in the best hands"

"Our whole experience has been superb…the care was fantastic"

11.5 The panel undertook a site visit to the FMBU and an additional visit was carried out by the midwifery specialist on the panel. These visits raised the following themes from staff:

- It was clear that many of the staff still regret the loss of the previous service, which was a good, small team with a lead consultant who was pro-normality and achieved a low Lower Segment Caesarean Section (LSCS) rate.

- Many felt that the integration process had been a negative experience and they still felt uncertainty about the future. The present review was said to be unsettling once again for staff, who had only just settled after the previous disruption, and women, some of whom thought it would mean they could now have their Caesarean at County Hospital.

- The staff echoed concerns expressed elsewhere that the new service (FMBU) had not been promoted properly and that they still worked under the shadow of the investigation into the care provided at the former Stafford Hospital.

- Staff felt that the rotational arrangements with Royal Stoke University Hospital were beneficial.

- Staff were positive about the service that is now being developed and were keen to develop the Women's Health Centre and further extend the range of services that can be offered.

- Staff had undertaken some cosmetic improvements to the premises themselves.

- Staff reported that the current model of using 'Band 7' midwives worked well providing experienced and competent midwifes and that the stabilisation training they had received had been 'fantastic'.

- Staff were aware of the pressure on staff at Royal Stoke University Hospital and were keen to increase the number of women using their service.

- Staff were pleased with the very large number of positive comments made by women and their families about the care they had received at the FMBU.

- Staff retention and recruitment have not been a problem to date as most of the staff in the FMBU previously worked in the Stafford OU and are very loyal to the base.

11.6 A site visit was made to the Obstetric Unit and MBC at Royal Stoke University Hospital and tours were provided of the facilities there. Feedback was received as follows:

- The current system is working well. Staff transferred from Stafford and they all work as one team.

- One staff-member who transferred from Stafford said she was content, even though she acknowledged that her former colleagues who stayed at County Hospital may not be.

- Parents spoken to reported 'excellent' care.

- No women from the Stafford area were available to speak to and the panel acknowledges that they may have had different views from those at County Hospital.

- There is a high level of flexibility in transferring to and from the alongside MBC on account of proximity.

- The unit is said to be busy but on the day of the visit appeared quiet and calm.

12 The safety of mothers and babies

12.1 Safety is always the first consideration in reviewing existing service provision and in considering the future arrangements. Safety of transfers in particular was one of the main concerns of parents during the public consultation.

12.2 During the first twelve months, the total transfer rate for women in labour/immediate post-natal period to Royal Stoke University Hospital was 23%, higher than the national average of 14% (NICE 2014 Intrapartum care for healthy women and babies[14])

[14] National Institute for Health and Care Excellence – Intrapartum Care for Healthy Women (2014)

12.3 All emergency transfers are reviewed as part of the Trust's Continuous Audit programme. There were no adverse outcomes or governance concerns relating to the outcomes.

12.4 The rotation and integration of staff across both sites has taken place to support the maintenance of critical skills and the development of integrated working. An example is the training provided by the Royal Stoke University Hospital to midwives at FMBU in the stabilisation of new-born's prior to transfer.

12.5 The panel has had the benefit of being able to consider the results from The Birthplace in England Research Programme [15] conducted by the National Perinatal Epidemiology Unit from Oxford University. The study was designed to answer questions about the risks and benefits of giving birth in different settings, focusing, in particular, on women who were at low risk of complications. The study looked at 64,000 births that took place at home, in Freestanding Midwifery Units, Alongside Midwifery Units and Obstetric Units. The key findings are set out below.

12.6 For 'low risk' women, the incidence of adverse perinatal outcomes was low (4.3 events per 1000 births). For planned births in freestanding midwifery units and alongside midwifery units there were no significant differences in adverse perinatal outcomes, compared with planned birth in an obstetric unit.

12.7 Women who planned birth in a freestanding or alongside midwifery unit had significantly fewer interventions, including substantially fewer intrapartum Caesarean sections and more normal births than women who planned birth in an obstetric unit.

12.8 For women having a second or subsequent baby, there were no significant differences in adverse perinatal outcomes between planned home births or midwifery unit births and planned births in obstetric units.

[15] Birth Place in England Research Programme – National Perinatal Epidemiology Unit, Kings College London, Royal College of Midwives, National Childbirth Trust (2011)

12.9 The Reconfiguration of Women's Services in the UK[16], a good practice guide issued by the Royal College of Obstetricians and Gynaecologists (RCOG 2013) commented on the issue of safety in different birth settings. The guidance suggested that around one third of women can be assessed as being at low risk and can plan to give birth at home or in a Freestanding Midwifery Unit. Fewer than 5% of these women having their second or subsequent birth will require transfer to consultant care. This allows a significant number of women access to a low risk environment of their choice with midwife support.

12.10 The evidence is intended to give an overview of the balance of risk for low risk women in different birth settings and assumes that a consultant-led Obstetric Unit will be a vital part of any configuration of maternity services.

12.11 It should be recognised that by replacing an FMBU with an OU, this may increase unnecessary intervention for women with low risk pregnancies.

12.12 The panel also noted that the BBA ratio (birth before arrival at the planned place of birth) was now at 0.11%, which represents a reduction in the figure prior to integration.

13 Guidance on configuration of maternity services

13.1 The Royal College of Obstetricians and Gynaecologists good practice guide[17] does not give specific advice on the size of an Obstetric Unit in terms of the number of babies delivered. However, the review of Obstetric and Maternity Services in Cumbria undertaken by the RCOG (2014)[18] does identify a number of key factors that need to be taken into account:

- The capacity to provide safe care for mother and baby

[16] Reconfiguration of Women's Services in the UK - Good Practice Guide No. 15 Royal College of Obstetricians and Gynaecologists 2013
[17] Reconfiguration of Women's Services in the UK - Good Practice Guide No. 15 Royal College of Obstetricians and Gynaecologists 2013
[18] Reconfiguration of Obstetric and Maternity Services in Cumbria, Royal College of Obstetricians and Gynaecologists (2014)

- The overall cost of the service and economic efficiencies of scale
- The accessibility of the service
- Sustainability of the service
- The ability to attract and retain the necessary range of medical and midwifery staff
- Consideration of patient choice and convenience

13.2 OUs currently account for 87% of births in the UK but require significant co-location of other specialisms including midwifery, neonatology, anaesthesia, surgery, imaging and mental health services to manage all aspects of childbirth, including severe complication.

13.3 The good practice guide recognises that in smaller units (between 2500 and 4000 births per year), 24-hour presence of consultants may not be cost-effective, but does improve safety. Safer Childbirth[19] suggested a 60-hour-per-week consultant presence as a minimum standard.

13.4 Other circumstances such as geography and location of units must be carefully considered.

13.5 The good practice guide identifies the role of the midwife as the main supporter and guardian of women in labour in any setting, but in an OU there needs to be immediate access to senior medical obstetric staff.

13.6 Currently only 13 Units in the UK deliver fewer than 1,500 babies per year. The former OU at Stafford Hospital delivered approximately 1,720 births per year.

[19] Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour (RCOG, RCM,RCPCH) (2007)

13.7 The RCOG Reconfiguration Good Practice Guidance identifies the need for centralisation of maternity services and the widespread problems of recruitment and cost. Appropriate obstetric cover to provide care for the number of anticipated births should, in theory, be possible with centralisation in units with more than 6,000 births per year, but there would need to be an increase in community-based midwifery led services to allow for this to occur.

14 Additional staff and service extension which would be required to re-introduce an obstetric service at County Hospital

14.1 The questions raised for the future of a conversion of the unit back into an obstetric led unit were:

- The recruitment of Obstetrics & Gynaecology consultants to a unit that has fewer than 2,000 deliveries per year. This would require a re-instatement of gynaecological services onsite in order to attract consultants into a smaller unit. This is evidenced from the inability to recruit previously into the consultant posts.

- The question of adequate training being available to trainees as part of the obstetric structure. Medical student training had already been pulled prior to the changes, as it was felt they were not receiving enough exposure and opportunities.

- Quality and control of a small unit that is relatively isolated, although now under the governance structure of a larger unit.

14.2 Any new OU at County Hospital would be smaller than that at the Royal Stoke University Hospital site and would therefore be unable to offer the complete range of services. With only a Special Care Baby Unit and limited ITU/surgical services being available at County Hospital, a re-instated OU would still need to

transfer out the premature and complicated pregnancies to the Royal Stoke University Hospital.

14.3 The costs section of this report was drawn up as a result of liaison with UHNM and their estimates of what would be required to re-instate the service. The FMBU has replaced the obstetric unit original site with some investment to covert the delivery rooms into functioning clinic rooms. The following changes to buildings and equipment would be required, as a minimum, to bring it up to date and in line with recommendations:

- Provision of 2 new obstetric theatres
- Level 3 intensive care provision
- Refurbishment of the delivery suite
- Additional Equipment for the delivery suite
- An 8-bedded Special Care Baby Unit
- Pathology services and blood banks
- Extension to A&E services to 24 hour

14.4 The following extra staffing would be required, as a minimum:

- New rota for obstetricians/gynaecologists (x6) including on-call rota
- New rota of consultant anaesthetists (x7), including an on-call rota
- New rota of resident anaesthetists

- Resident and on-call theatre team
- New rota of consultant neonatologists (x7), including an on-call rota
- Rotas of junior (Tier 1) and competent clinician (Tier 2) Special Care Baby Unit staff, each with a rota of 8, plus nurses
- Resident radiographer
- Pathology staff
- Medical and nursing staff for 24 hour emergency gynaecology
- Midwifery staff: approximately 80 midwives required to cover 2,617 births at the OU plus home births. (using Birth Rate Plus Tool). There are approximately 26 WTE midwives at FMBU presently which will still leave a shortfall of 54 midwives

Anaesthetic services

Consultants

14.5 A lead consultant with appropriate experience and training would need to be appointed to set up and manage the service. An alternative would be movement from elsewhere within the trust, but the existing numbers of obstetric anaesthetic consultants within the trust are small in comparison to the number of deliveries (8 consultants for approximately 7,000 deliveries). The requirements of a new OU unit at County Hospital would be for a total of 12 anaesthetic sessions, plus additional sessions for 'elective' lists. This could be best met by appointment of 5 additional appropriately trained obstetric anaesthetists (including the lead clinician). It would be anticipated that these

anaesthetists would also cover sessions in other subspecialties at County Hospital and at Royal Stoke University Hospital (funded separately).

14.6 It was reported that many consultants providing services to Royal Stoke University Hospital reside in the north of the region and therefore do not live within the required travelling time/distance of 10 minutes/30 miles from County Hospital to provide emergency on-call services there.

14.7 In order to provide consultant services for a new unit there would need to be recruitment of consultants with the required skills and who would require opportunities for continuous professional development (CPD) training.

Resident anaesthetists

14.8 There would need to be a new tier of resident anaesthetists whose sole duties would be services to the obstetric unit. These would be staff/Trust grade doctors with appropriate experience and training and qualification, capable of providing obstetric anaesthetic services independently.

Theatre Staff

14.9 There is no on-call or resident theatre staff at County Hospital. There is currently one Operating Department Practioner (ODP) resident to assist the resident anaesthetist with resuscitation. A resident theatre team consisting of an anaesthetic ODP, scrub nurse, “runner” and HCA would be the minimum staffing required for obstetric emergencies as well as provision for recovery. Providing 24 hours of cover for an obstetric theatre would require 5.5 whole time equivalent practitioners of each type, i.e. 5.5 anaesthetic ODP, 5.5 scrub practitioners and 5.5 HCAs, 5.5 runners. Provision would need to be made for recovery staff.

Neonatal services

14.10 Where there are obstetric services there need to be appropriate levels of staffing (neonatologists, paediatricians and specialist nurses) and facilities (neonatal intensive care unit (NICU)) to care for preterm or ill babies. In cases of suspected preterm labour, a neonatal consultant should be present.

14.11 Where possible, arrangements should be made for the mother to be with her baby. In units where these services are unavailable, transfers to appropriate care must be planned in advance of birth. The current system to enable quick transfer arrangements exists currently from the FMBU, but if an OU were established at County Hospital, it would need to be supplemented by a neonatal team, as this would mean a higher volume and likelihood of a sick infant being delivered.

14.12 Neonatal Services comprise three types of unit:

i) Special Care Baby Units (SCBU): These provide special care for their own local population. They also provide, by agreement with their neonatal network, some less complex high dependency services.

ii) Local Neonatal Units (LNU): These provide special care and high dependency care and a restricted volume of intensive care (as agreed locally) and would expect to transfer babies who require complex or longer-term intensive care to a Neonatal Intensive Care Unit.

iii) Neonatal Intensive Care Unit (NICU): These are larger intensive care units that provide the whole range of medical (and sometimes surgical) neonatal care for their local population and additional care for babies and their families referred from the neonatal network in which they are based, and also from other networks when necessary to deal with peaks of demand or requests for specialist care not available elsewhere. This is the type of unit available at the Royal Stoke University Hospital.

14.13 A Special Care Baby Unit would be the minimum required to support an obstetric service and would provide special care for the local population. It would only take babies born at 32 weeks gestation and above. This is a limited

service, but would also provide, by agreement with the neonatal network, some high dependency services.

14.14 The panel highlight the national shortage of trained neonatal nursing staff.

Staffing of a Special Care Baby Unit[20]

Tier 1 (junior) Roles

14.15 Rota's should be European Work Time Directive (EWTD) compliant and thus have a minimum of 8 staff and will be supported by and are accountable to the Tier 2 and Tier 3 staff. Staffing can be from paediatric ST1-2, GPST 1 or Foundation Year 2 (FY2), specialty doctors, nurses with enhanced practice skills (ENNPs) or advanced neonatal nurse practitioners, non-training grade doctors.

Tier 2 (competent on site clinician) Roles

14.16 Shared rota often, with paediatrics, comprising a minimum of 8 staff. In some settings tiers 1 and 2 may be able to merge, especially where appropriate skilled nursing support exists.

Tier 3 (expert) Roles

14.17 A minimum of 7 consultants on the on call rota with a minimum of 1consultant with a designated lead interest in neonatology. It is not appropriate for a consultant to provide out of hours cover to two geographically separate sites simultaneously, so any consultant would have to be dedicated exclusively to the County Hospital site. Similarly, where a consultant or clinician of appropriate training and experience is working at Tier 2, another consultant should provide Tier 3 cover.

[20] British Association of Perinatal Medicine (2010) Service Standards for Hospitals Providing Neonatal Care

Other Services

14.18 There are no out of hours blood bank or pathology services at County Hospital. In order to re-open an obstetric unit these services and appropriate staff would need to be provided.

14.19 There is no resident radiographer at County Hospital and therefore no ability to perform essential emergency investigations such as chest x-ray, which would be a minimum requirement. Access to vascular imaging, CT scanning and venous ultrasound would be desirable.

14.20 Pregnant women have morbidity from conditions associated with pregnancy, conditions exacerbated by pregnancy and long standing medical conditions. Some longstanding medical conditions will preclude delivery in a district general hospital but others will require care from physicians (e.g. cardiology, gastroenterology, neurology, rheumatology, and endocrinology), psychiatry and surgery (colorectal, upper gastrointestinal, gynaecology). Some of these services would require emergency attendance out of hours, e.g. colorectal, urology and gynaecology and a robust pathway would be required to deliver this.

15 Financial analysis

15.1 The panel has considered a detailed breakdown of costs associated with the re-establishment of an OU at County Hospital, as well as the running costs of both the current FMBU service and a future OU (see Appendix 1). The analysis shows that the tariff income for each service is unlikely ever to be sufficient to meet running costs.

15.2 The overwhelming problems of recruitment referred in this report are prohibitive in any planning for a future OU, irrespective of such financial constraints.

15.3 In order for an OU to be re-established at the County Hospital a number of investments would be required. Based on information received from UHNM, the equipment required would cost approximately £1.6 million and a breakdown of these costs is shown within Appendices 1-9.

15.4 In addition, refurbishment and other infrastructure costs would need to be incurred.

Summary of the financial analysis

15.5 The cost to UHNM of the current FMBU is not covered by income received through the NHS tariff mechanism and there is currently a recurrent subsidy required for this service. Even if overheads are excluded from the calculation, the income is still not sufficient to cover all the costs.

15.6 If an Obstetrics Unit is introduced then a large, annual subsidy would be required to run this service.

15.7 In addition, UHNM would need to invest approximately £1.6 million in new equipment in order to safely re-establish the service in addition to any building refurbishments and infrastructure costs that would be required.

16 Options appraisal

16.1 Whilst the main responsibility of the panel as set out in the terms of reference was to 'provide an overall recommendation as to whether a consultant led obstetrics could be sustained clinically and financially in a safe way at County hospital in the future', the panel felt it was appropriate also to consider the outcomes and safety of the current arrangements.

16.2 In formulating its recommendations the panel has taken into account the following key factors:

- The safety of women and their babies, which is paramount
- The clinical viability and sustainability of the reintroduction of an obstetric service at County Hospital
- The ability to recruit sufficient specialist medical, midwifery and neonatal staff
- The financial viability and sustainability of the re-introduction of an obstetric service
- Outcomes of the consultation process
- An assessment of the current maternity service provision
- The implications of the National Maternity Review and other published reviews and professional guidance
- The assessment of future demand for maternity services

17 Analysis

17.1 The panel have considered two options:

- Return a consultant-led OU to the County Hospital site
- Maintain the configuration of maternity services in Staffordshire as it is at present, with a spread of services between the Royal Stoke and County Hospitals.

Additionally, it was considered whether any changes could be made to improve the current FMBU service.

17.2 Recruitment and retention of staffing in accordance with national recommendations would be the single most difficult challenge. Existing vacancies and use of locums at the delivery unit at the Royal Stoke University Hospital suggests that even at busy obstetric units, with plenty of interest and scope for training and specialist skills acquisition, there is a recruitment problem. There seem to be too few consultants to fill all vacancies, which is a nationwide challenge. There is also a shortage of trainees coming through the system for the future. These factors represent insurmountable problems in attracting sufficient numbers of consultants to a small obstetrics unit such as may be provided at County Hospital. Rotation with the Royal Stoke University Hospital unit would not solve the problem because of the need for on-call rotas, which must be dedicated to one geographical area. Royal Stoke University Hospital is carrying vacancies on nursing and doctor rotas below consultant level in paediatrics and neonatology, as are neighbouring units. The creation of an OU at County Hospital would mean additional staffing challenges for Royal Stoke University Hospital.

17.3 Financial viability and sustainability is the second most serious challenge to the re-introduction of an OU at County Hospital. In a challenging financial climate, the level of investment required bringing buildings and equipment up to standard, to commission obstetric theatres and to employ teams of consultants and support staff, without the projected numbers of births to provide anything approaching sufficient income, makes the project financially unviable. In order to re-establish the OU there would be a significant capital investment cost. The National Maternity Review indicates that small OUs can be run in remote and rural environments. Stafford is not such an environment and there would be no financial 'sparsity adjustment' as indicated in the Review, to offset the needs of remote communities.

17.4 Safety of women and babies is paramount and it is clear that an OU at County Hospital, if fully resourced, would reduce the travel time for some of the local population who would otherwise have to travel to Stoke. However, based on the consultation process, a review of relevant documents such as the Audit and Annual report of the service at County Hospital and recognised specialist

independent research, the panel was able to consider the safety and effectiveness of the current arrangements and the likely impact on those arrangements of a re-provision of an OU at County Hospital.

17.5 Matters which are of great public concern, such as the suspected high risk of transfers and the dangers of babies being born before arrival at their planned place of birth are shown, based on current statistics and research, not to bring about the harmful outcomes feared. Births before arrival are on the decline. However in the event of an imminent birth, the FMBU remains an option.

17.6 A woman who is low risk and has her baby at the FMBU is more likely to have a normal vaginal delivery and therefore less likely to experience interventions which carry the possibility of adverse consequences, such as Caesarean section and instrument delivery. These aspects are complemented by the overwhelmingly positive birth experiences reported by women and their families at the FMBU. The FMBU is a county-wide resource, not just for the benefit of the people of Stafford itself, which offers important choice, in keeping with the recommendations of the National Review.

17.7 The National Review provides a vision of patient choice, personalised care and continuity of care. These are provided across Staffordshire under the current arrangements, acknowledging that women would prefer a return of an OU to County Hospital. They can access their antenatal and postnatal care at the unit, even when complications mean that they have to give birth at the Royal Stoke University Hospital or elsewhere. If, later, gynaecological problems arise, they can return to the Women's Health Centre for investigations, providing continuity.

17.8 Maternity services across the area are co-ordinated by UHNM and comply with the National Review's vision of multi-professional working, breaking down barriers between professions and for the provision and commissioning of maternity services across boundaries. More flexibility in designing personalised care pathways for women who live close to the boundaries with other counties would be an advantage for those women who could benefit from planning their birth at the FMBU.

17.9 The units at Royal Stoke University and County Hospitals rotate staff to maintain skills, expertise, manage transfers skilfully and work effectively to complement each other in providing a complete service.

17.10 An OU at County Hospital is very much missed and its re-establishment would fulfil the aspiration for greater choice for women. However, the panel considers that a full range of choices are currently available between the two sites. It hopes that some reassurance is provided to members of the public about the small number of transfers and the absence of harmful outcomes relating to babies born on journeys and considers that with a 're-launch' in terms of promotion and publicity, including to GPs and all relevant professionals as well as the public, together with some investment in refurbishment and equipment at the County Hospital, the current FMBU could be expanded further and could become a popular and valuable option for women across Staffordshire .

18 Recommendations

18.1 These recommendations are made within the context of a national shortage of specialist maternity staff and trainees, who are especially difficult to attract to work in smaller units.

18.2 The panel recommends that a consultant led obstetric unit could not be reinstated and staffed in a safe way at County Hospital with respect to clinical and financial constraints at the present time.

18.3 The panel further recommends, in the light of the recommendations of the National Maternity Review, that the Freestanding Midwife-led Birth Unit should continue and should be subject of further promotion, development and enhancement at County Hospital. The FMBU is a valuable and important resource for the integrated service for Staffordshire offering women real choice as outlined in the NICE guidelines.

Glossary

ANNP – Advanced neonatal nurse practitioner

BBA – born before arrival

CNST - Clinical Negligence Scheme for Trusts

CT – computed tomography (scan)

ENNP – Enhanced neonatal nurse practitioner

EPAU – Early pregnancy assessment unit

EWTD – European Working Time Directive

FMBU – Free-standing Midwife-led Birth Unit

HCA – Health Care Assistant

LNU – Local Neonatal Unit

MBC – Midwife-led Birthing Centre (the 'alongside' unit at Royal Stoke University Hospital)

MSFT – the former Mid-Staffordshire NHS Foundation Trust

MOD – Ministry of Defence

NICE – National Institute for Health and Care Excellence

NICU – Neonatal Intensive Care Unit

Neonate – new-born baby, especially under 4 weeks old

NNU – Neonatal Unit

ODP – Operating Department Practitioner

ONS – Office of National Statistics

OU – Obstetric Unit

RCOG – Royal College of Obstetricians and Gynaecologists

SCBU – Special Care Baby Unit

TSA – Trust Special Administrator

UHNM – University Hospitals, North Midlands Trust

WTE – whole time equivalents

Appendix 1 – Financial Information

Cost of the Current FMBU Service

Information regarding the cost of the current service has been obtained from University Hospitals North Midlands finance department. Total cost of providing this service is shown in the table below:

	£'s
Direct Costs (Staffing and non-pay)	1,740,358
Medical Insurance	83,082
Overheads	426,107
Total	**2,249,547**

Current Tariff Income Received

The income received by the Trust for the work undertaken by the maternity led unit has been identified within the UHNM Women's Health Annual Report dated April 2016. This reports the income received by the unit as follows:

Tariff Category	Income generated £'s
Antenatal	1,164,978
Intrapartum	179,010
Postnatal	25,500
Total	**1,369,488**

This is based on the following activity:

	Standard	Intermediate	Intensive	No tariff recorded	Total
Antenatal Bookings	918	72	9	45	**1,044**
Intrapartum	102				**102**
Post-natal	102				**102**

Current Financial Position

Based on the information provided above it is clear that the current cost of the services exceeds the tariff income received as follows:

Cost of Current Service	£2,249,547
Income Received	£1,369,488
Net subsidy required	**£880,059**

In addition, even if the overhead cost is removed from the calculation, so that only the direct and indirect costs of providing the service are considered, the service would still require a net subsidy, which can be calculated as follows:

Cost of Current Service (Excluding overheads)	£1,823,440
Income Received	£1,369,488
Net subsidy required	**£453,952**

Sensitivity Analysis

However, the level of income that is received for the service is directly related to activity, i.e. the Trust is paid for all activity undertaken.

Similarly, the cost of providing the service would increase with an increase in activity, but this would be restricted to areas where actual costs were incurred i.e. CNST, direct staffing and non-pay costs, and not to areas where additional costs would not be incurred with an increase in activity i.e. overhead costs. As the direct costs are higher than the income, any increases in activity would lead to an increase in the contribution required to provide the service.

If it is assumed, for the purposes of modelling, that additional staff was not required if activity was increased then the following increases in activity would have the following impact on the level of subsidy required or the extent to which the service would provide a contribution to the Trust:

Level of increase	Revised Income	Revised Cost	Revised Contribution/ (Subsidy required)
0% - current level	£1,369,488	£2,249,547	(£880,059)
20% (1253 women)	£1,642,893	£2,277,395	(£634,502)
50% (1566 women)	£2,056,168	£2,319,166	(£262,998)
67% (1743 women)	£2,285,651	£2,342,836	(£57,185)
72% (1791 women)	£2,349,198	£2,349,174	£24

It can be seen from the table above that even if activity going through the FMBU were to increase to the 2013-14 activity level, with no additional staffing, then still it would not be financially sustainable without further funding. The FMBU would need to see 1,791 women (an increase of 72% on the current workload) with no additional staff for the income received to be greater than the costs incurred.

Operational Costs of Obstetrics Led Unit

Using this information, the likely cost of running an OU, such as the one described within this report, has been assessed by UHNM as £13,142,266. This can be analysed into categories as follows:

Midwifery Staff	£4,955,741
Obstetrics Staff	£2,086,314
Non-Pay costs	£514,695
Theatre staff	£2,958,883
CNST Costs	£1,384,697
Overheads	£1,241,936
Total Costs	**£13,142,266**

This excludes the operational costs of a neonatal unit as there is no tariff price for these services and therefore it is assumed that this service will be funded at cost.

Income from an OU

The income that would be available from the tariff prices to UHNM if there were an OU has been calculated using the tariff prices for 2016-17 as published by Monitor in March 2016. The activity is assumed to be 1743 women in line with this report and the complexity is assumed to be proportional to the current ante-natal booking. Activity is therefore assumed as follows:

	Standard	Intermediate	Intensive	Total
Antenatal Bookings	1,608	120	15	1,743
Intrapartum	1,608	120	15	1,743
Post-natal	1,608	120	15	1,743

Based on these assumptions, the level of income that the OU would generate would be as follows:

Tariff Category	Income generated
Antenatal	£1,944,801
Intrapartum	£3,170,610
Postnatal	£452,520
Total	**£5,567,931**

Financial Projection for an OU

Based on the assumptions described in this section, it is clear that the cost of running an OU would be greater than the tariff income received as follows:

Projected Cost	£13,142,266
Projected Income	£5,567,931
Net subsidy required	**£7,574,335**

In addition, even if the overhead cost is removed from the calculation so that only the direct and indirect costs of providing the service are considered, the service still would require a net subsidy as follows:

Cost of Current Service (Excluding overheads)	£11,900,290
Income Received	£5,567,931
Net subsidy required	**£6,323,359**

Sensitivity Analysis

If a similar analysis is carried out for the projected income and expenditure for the OU as that of the current service, including the assumption that increases in activity will be met without any increases in staffing, the impact on the financial viability of the OU for increases in activity can be shown as follows:

Level of increase	Revised Income	Revised Cost	Revised Contribution (Subsidy required)
0% (1,743 women)	£5,567,931	£13,142,266	(£7,574,335)

50%	(2,614 women) £8,355,109	£14,091,902	(£5,736,883)
100%	(3486 women) £11,135,862	£15,041,578	(£3,905,716)
200%	(5229 women) £16,703,793	£16,940,930	(£237,137)
206%	(5342 women) £17,056,254	£17,054,18	£1,363

Therefore it can be seen that activity (the number of women receiving maternity care at the OU) would need to more than double before the unit would cease to require a subsidy.

Capital Costs

In order for an OU to be re-established at the County Hospital a number of investments would be required. Based on the information received from UHNM, the equipment required would cost approximately £1.6 million and a breakdown of these costs is shown below.

Equipment of 2 Obstetrics Theatres	£152,994
Equipment required for Delivery Suite	£557,360
An 8 bedded Special Care Baby Unit	£938,807
Total Equipment Requirement	**£1,649,115**

In addition, refurbishment and other infrastructure costs would need to be incurred.

Appendix 2

Cost type	Current cost of County Midwifery Service Pay	Cost
Direct Pay	Consultant	£0
Direct Pay	Midwives	£1,408,369
Direct Pay	Support workers	£226,324
Direct Pay	Clerical	£49,509
Direct Non pay	Non Pay	£56,156
Insurance	CNST	£83,082
	Total cost before overhead	**£1,823,440**
Overhead	Overhead	£426,107
	Total cost	**£2,249,547**

CNST = Clinical Negligence Scheme for Trusts

Appendix 3

ACTIVITY	Intermediate	Complex	Standard	TOTAL
Pre-natal	72	9	963	1,044
Intrapartum			102	102
Post-natal			102	102
TARIFF	**Intermediate**	**Complex**	**Standard**	**TOTAL**
2016-17	£'s	£'s	£'s	£'s
Pre-natal	1,691	2,815	1,057	
Intrapartum	2,582	2,582	1,755	
Post-natal	315	848	250	
TOTAL INCOME	**Intermediate**	**Complex**	**Standard**	**TOTAL**
	£'s	£'s	£'s	£'s
Pre-natal	121,752	25,335	1,017,891	1,164,978
Intrapartum			179,010	179,010
Post-natal			25,500	25,500
TOTAL				**1,369,488**

Appendix 4

Cost type	Current cost of County Midwifery service	Cost				
Activity		1,044	1,253	1,566	1,743	1,791
			20%	50%	67%	72%
Direct Pay	Consultant	£0				
Direct Pay	Midwives	£1,408,369	£1,408,369	£1,408,369	£1,408,369	£1,408,369
Direct Pay	Support workers	£226,324	£226,324	£226,324	£226,324	£226,324
Direct Pay	Clerical	£49,509	£49,509	£49,509	£49,509	£49,509
Direct Non pay	Non Pay	£56,156	£67,387	£84,234	£93,781	£96,337
Insurance	CNST	£83,082	£99,698	£124,623	£138,747	£142,528
	Total cost before overhead	**£1,823,440**	**£1,851,288**	**£1,893,059**	**£1,916,729**	**£1,923,067**
Overhead	Overhead	£426,107	£426,107	£426,107	£426,107	£426,107
	Total cost	**£2,249,547**	**£2,277,395**	**£2,319,166**	**£2,342,836**	**£2,349,174**

CNST = Clinical Negligence scheme for Trusts

Appendix 5

ACTIVITY +20%	Intermediate	Complex	Standard	TOTAL
Pre-natal	86	11	1,156	1,253
Intrapartum	-		122	122
Post-natal	-		122	122

TARIFF 2016-17	Intermediate £'s	Complex £'s	Standard £'s	TOTAL £'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-

TOTAL INCOME	Intermediate £'s	High Risk £'s	Standard £'s	TOTAL £'s
Pre-natal	145,426	30,965	1,221,892	1,398,283
Intrapartum	-	-	214,110	214,110
Post-natal	-	-	30,500	30,500
TOTAL				**1,642,893**

ACTIVITY +50%	Intermediate	Complex	Standard	TOTAL
Pre-natal	108	14	1,445	1,567
Intrapartum	-		153	153
Post-natal	-		153	153

TARIFF 2016-17	Intermediate £'s	Complex £'s	Standard £'s	TOTAL £'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-

TOTAL INCOME	Intermediate £'s	High Risk £'s	Standard £'s	TOTAL £'s
Pre-natal	182,628	39,410	1,527,365	1,749,403
Intrapartum	-	-	268,515	268,515
Post-natal	-	-	38,250	38,250
TOTAL				**2,056,168**

Appendix 6

	Obstetrics service	
Direct Pay	Community Midwifery -Nursing B2	£86,312
Direct Pay	Community Midwifery -Nursing B6	£1,446,810
Direct Pay	Community Midwifery -Nursing B7	£296,886
Direct Pay	Delivery -Admin. And Clerical B2	£101,618
Direct Pay	Delivery -Admin. And Clerical B4	£21,488
Direct Pay	Delivery -Nursing B2	£291,886
Direct Pay	Delivery -Nursing B5	£17,156
Direct Pay	Delivery -Nursing B6	£1,754,674
Direct Pay	Delivery -Nursing B7	£706,589
Direct Pay	Delivery -Nursing B8a	£68,936
Direct Pay	Midwifery Tr'G School -Nursing B5	£163,387
	Midwifery Staff[21]	**£4,955,741**
Direct Pay	Obstetrics/Gynaecology –Consultant	£858,000
Direct Pay	Obstetrics/Gynaecology -Fy1	£88,000
Direct Pay	Obstetrics/Gynaecology -Fy2	£44,000
Direct Pay	Obstetrics/Gynaecology -Nursing B7	£59,377
Direct Pay	Obstetrics/Gynaecology -Nursing B8a	£68,936
Direct Pay	Obstetrics/Gynaecology -Specialty Doctor	£60,500
Direct Pay	Obstetrics/Gynaecology -Str L1/L2	£330,000
Direct Pay	Obstetrics/Gynaecology -Str L3+	£577,500
	Obstetrics Staff	**£2,086,314**
Direct Non pay	Non Pay	£322,908
Direct Non pay	Equipment	£191,747
	Non-Pay Costs	**£514,655**
Insurance	CNST	£1,384,697
	Maternity Theatres*2	
Direct Non pay	Maternity theatre Non pay	£104,283
Direct pay	recovery nurse band 6	£550,393
Direct pay	ODP	£270,292
Direct pay	Anaesthetics	£1,156,122
Direct pay	runner band 2	£173,846
Direct pay	Scrub nurse band 5	£270,292
Direct pay	Midwife band 6	£433,655
Direct Cost of Maternity Theatres		**£2,958,883**
Total Cost before Overheads		£11,900,290
Indirect	Pathology Tests – maternity	£31,802
Overhead	Overhead	£1,210,134
Total Indirect and Overhead Costs		£1,241,936
Total Cost		**£13,142,226**

[21] Nb. Posts are estimated and costed at midpoint of the grades with assumptions regarding enhancements; based on a total number of midwifery staff at 113 WTE.

Appendix 7

ACTIVITY	Intermediate	Complex	Standard	TOTAL
Pre-natal	120	15	1,608	1,743
Intrapartum	120	15	1,608	1,743
Post-natal	120	15	1,608	1,743

TARIFF 2016-17	Intermediate £'s	Complex £'s	Standard £'s	TOTAL £'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-

TOTAL INCOME	Intermediate £'s	Complex £'s	Standard £'s	TOTAL £'s
Pre-natal	202,920	42,225	1,699,656	1,944,801
Intrapartum	309,840	38,730	2,822,040	3,170,610
Post-natal	37,800	12,720	402,000	452,520
TOTAL				**5,567,931**

Appendix 8

Potential Cost of OU						
Activity		1743	2614	3486	5529	5342
Midwifery Staff		£4,955,741	£4,955,741	£4,955,741	£4,955,741	£4,955,741
Obstetrics Staff		£2,086,314	£2,086,314	£2,086,314	£2,086,314	£2,086,314
Non-Pay Costs		£514,655	£771,983	£1,029,310	£1,543,965	£1,574,844
CNST		£1,384,697	2,077,046	2769394	4154091	4237172.82
Maternity Theatres		£2,958,883	**£2,958,883**	**£2,958,883**	**£2,958,883**	**£2,958,883**
Total Cost before overheads		**£11,900,290**	**£12,849,966**	**£13,799,642**	**£15,698,994**	**£15,812,955**
Total Indirect and Overhead Costs	Pathology Tests	£31,802	£31,802	£31,802	£31,802	£31,802
	Overhead	£1,210,134	£1,210,134	£1,210,134	£1,210,134	£1,210,134
	Total	**£1,241,936**	**£1,241,936**	**£1,241,936**	**£1,241,936**	**£1,241,936**
Total Cost		**£13,142,226**	**£14,091,902**	**£15,041,578**	**£16,940,930**	**£17,054,891**

Appendix 9

ACTIVITY +50%	Intermediate	Complex	Standard	TOTAL
Pre-natal	180	23	2,412	2,615
Intrapartum	180	23	2,412	2,615
Post-natal	180	23	2,412	2,615
TARIFF	Intermediate	Complex	Standard	TOTAL
2016-17	£'s	£'s	£'s	£'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-
TOTAL INCOME	Intermediate	High Risk	Standard	TOTAL
	£'s	£'s	£'s	£'s
Pre-natal	304,380	64,745	2,549,484	2,918,609
Intrapartum	464,760	59,386	4,233,060	4,757,206
Post-natal	56,700	19,504	603,000	679,204
TOTAL				**8,355,019**
ACTIVITY +100%	Intermediate	Complex	Standard	TOTAL
Pre-natal	240	30	3,216	3,486
Intrapartum	240	30	3,216	3,486
Post-natal	240	30	3,216	3,486
TARIFF	Intermediate	Complex	Standard	TOTAL
2016-17	£'s	£'s	£'s	£'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-
TOTAL INCOME	Intermediate	High Risk	Standard	TOTAL
	£'s	£'s	£'s	£'s
Pre-natal	405,840	84,450	3,399,312	3,889,602
Intrapartum	619,680	77,460	5,644,080	6,341,220
Post-natal	75,600	25,440	804,000	905,040
TOTAL				**11,135,862**
ACTIVITY +200%	Intermediate	Complex	Standard	TOTAL
(1743 women)				
Pre-natal	360	45	4,824	5,229
Intrapartum	360	45	4,824	5,229
Post-natal	360	45	4,824	5,229
TARIFF	Intermediate	Complex	Standard	TOTAL
2016-17	£'s	£'s	£'s	£'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-
TOTAL INCOME	Intermediate	High Risk	Standard	TOTAL
	£'s	£'s	£'s	£'s
Pre-natal	608,760	126,675	5,098,968	5,834,403
Intrapartum	929,520	116,190	8,466,120	9,511,830
Post-natal	113,400	38,160	1,206,000	1,357,560

TOTAL				**16,703,793**
ACTIVITY +206%	Intermediate	Complex	Standard	TOTAL
(1791 women)				
Pre-natal	368	46	4,925	5,339
Intrapartum	368	46	4,925	5,339
Post-natal	368	46	4,925	5,339
TARIFF	Intermediate	Complex	Standard	TOTAL
2016-17	£'s	£'s	£'s	£'s
Pre-natal	1,691	2,815	1,057	-
Intrapartum	2,582	2,582	1,755	-
Post-natal	315	848	250	-
TOTAL INCOME	Intermediate	High Risk	Standard	TOTAL
	£'s	£'s	£'s	£'s
Pre-natal	622,288	129,490	5,205,975	5,957,753
Intrapartum	950,176	118,772	8,643,375	9,712,323
Post-natal	115,920	39,008	1,231,250	1,386,178
TOTAL				**17,056,254**