Responding to Secretary of State letter following referral of the permanent closure of consultant-led maternity services at the Horton General Hospital

Work Stream 5c Travel and access

1. Introduction

The purpose of this work stream is to understand the range of travel times for services and the impact (in terms of increased travel time) on these of the temporary closure of the obstetric services from the Horton General Hospital. This will differentiate between travel times (defined as the time taken for women and their families to travel to services) and transfer times (defined as the time taken for an ambulance transfer from a Midwife led Unit (MLU) to an obstetric service)

- Travel times; previous analyses to be reviewed and reissued to identify if any further work is required.
- Transfer times
    - Using the information collected over the period of the temporary closure of the obstetric service at the Horton General Hospital a review of transfer times between the Horton MLU and the other three Oxfordshire MLUs and the John Radcliffe will be undertaken. If possible these will be set in the context of national data.
    - An independent clinical view on the acceptability of transfer times will be sought.
    - The processes enacted when there are multiple demands on the dedicated ambulance or severe traffic delays will be summarised.

Completion of this work will be the development of clear information that is used within the option appraisal process.

It is important to note that there have always been some women who would travel to Oxford from the Banbury area and further afield. Women who need the care of specialist services because existing health conditions or other issues that might mean additional specialist support is needed would always need to attend an obstetrics unit in a specialist hospital like the JR. They would be identified early in pregnancy and plans would be made during the pregnancy to ensure they could travel safely. Other women chose to have their baby in Oxford despite having a local obstetric unit in Banbury.

Many of these women would have travelled to Oxford in their own car but others would have needed to travel by ambulance, some will have transferred as an emergency from the Horton to Oxford to ensure they had the specialist care needed.

2. Travel Times

2.1 Sources of information

Work was undertaken during 2017 to analyse and understand the impact on travel and access for women and their families if there was not an obstetric service at the Horton General Hospital (HGH).

This analysis was detailed and included consideration of time of day (peak and off-peak) of the week which impacted on travel time because the traffic conditions vary. The analysis is presented as maps that illustrate how travel time is affected by distance and time of travel.

It was acknowledged that the changes to obstetric services would mean many women and their families would need to travel further for some aspects of their care and the travel times would vary.

This work is still relevant today and is based on standard methodologies for calculating travel times. In addition to the travel times, the impact of parking was also investigated. The congestion on the JR site was highlighted and a survey was conducted by Healthwatch Oxfordshire to gather evidence about availability of parking and delays that could add to travel times.

The work commissioned by Oxfordshire Clinical Commissioning Group resulted in a number of reports that have been published and remain available on OCCG website including:

- Hospital car parking survey conducted by Mott MacDonald
- Healthwatch travel survey
- Integrated Impact Assessment
- Baseline travel analysis
- Travel analysis

These documents can be found here:
http://www.oxonhealthcaretransformation.nhs.uk/what-is-the-vision/consultation-documents

The Integrated Impact Assessment Final Report provided more detailed analysis of the direct impact of changes including the increased travel time (particularly relevant for maternity services are pages 30-32, 39-40 and 69-78; these have been saved as a standalone document and are included at Appendix 1).

In addition

2.2 What this tells us

We know that the changes to obstetric services have meant most people from the Banbury area need to travel further for some of their care. The analysis we have done demonstrates the how the travel time varies and how this impacts on different groups within the community. It is not just the distance to travel, it is also the traffic conditions that affect the time taken for the journey. Rush hour traffic and roadworks all contribute to longer journeys.

The information from the travel confirms that removal of the obstetric service from the HGH results in an increase in journey times. With services at the HGH the majority of the catchment area could access the hospital within 30 minutes and with the HGH this increases to up to 50 minutes (average car journeys). It is understood that one important consideration is the variation in journey times and the CCG is working with the County Council to get an understanding of this variation from the Banbury area to the John Radcliffe Hospital.

It is also clear that the need to have time to find a car parking space adds to the overall experience and journey time.

These factors have an impact on patient experience and this will be considered as part of the appraisal of options where access and experience will be considered alongside the other factors.

Victoria Prentis MP undertook a travel survey #BanburytoJR which highlighted the same issues of increased travel time and time to park.

3. Transfer Times

3.1 *Managing Transfer from an MLU to an obstetric unit*

Some women need to be transferred during labour or soon after birth because of problems that have developed. If these problems are serious or life-threatening, the transfer will be conducted with a blue light ambulance to ensure minimum time to reach the expertise needed.

Being transferred by ambulance from an MLU is not unusual and happens at every MLU. The decision about whether to transfer in these circumstances is taken by the midwife attending the woman and she/he will take into account the distance and time it will take for a transfer.

In Oxfordshire ambulance transfers are classified as ‘time critical’ and ‘non-time critical’. The decision as to whether a transfer is classified as time critical depends on the reason for transfer and the urgency of the clinical problem.

- **Time critical transfers** where the safety of the mother or baby is at risk, these are extremely rare and can be subdivided into those where a blue light transfer is required and those where there is a need for urgent medical review to avoid a poor outcome for either mother or baby.
- **Non-time critical** are when further monitoring or treatment is required for either the mother or baby because there is a potential for risk to occur

3.2 Transfer rates and times from Oxfordshire MLUs 1 October 2016 – 30 September 2018

The transfer data from 1 October 2016 to 30 September 2018 for all the Oxfordshire MLUs has been analysed to look at transfer numbers, rates and time taken for transfer.

3.2.1 Reason for transfer and transfer rates

Women are transferred from MLUs for a variety of factors - for example, the identification of new onset risk factors during birth such as slow progress, meconium stained liquor or suspicion of fetal distress; or maternal choice on pain relief; or, post-birth complications or if the baby requires further assessment or additional monitoring. A safety first culture is operated and if there are concerns, midwives will explain these to the patient and arrange a transfer. Midwives will be in close contact with the obstetricians at the John Radcliffe at all times to discuss options and ensure they are making the best decision for the mother and baby concerned.

The Table below shows the timing of the transfer during labour or in the 4 hours following birth for the 358 women who were transferred over the 2 year period.

Table 1 Transfers broken down by unit and stage of transfer October 2016 to September 2018

Stage of transfer	Cotswold Chipping Norton	Horton Banbury	Wallingford	Wantage	TOTAL
First stage	29	79	40	7	155
Second stage	15	14	13	7	49
Third stage	8	25	11	4	48
Post natal	10	23	10	3	46
Newborn	9	27	21	3	60
TOTAL	71	168	95	24	358

Table 2 below shows the transfer rates for each of the MLUs over the two year period.

Table 2 Births and Transfer rates October 2016 to September 2018

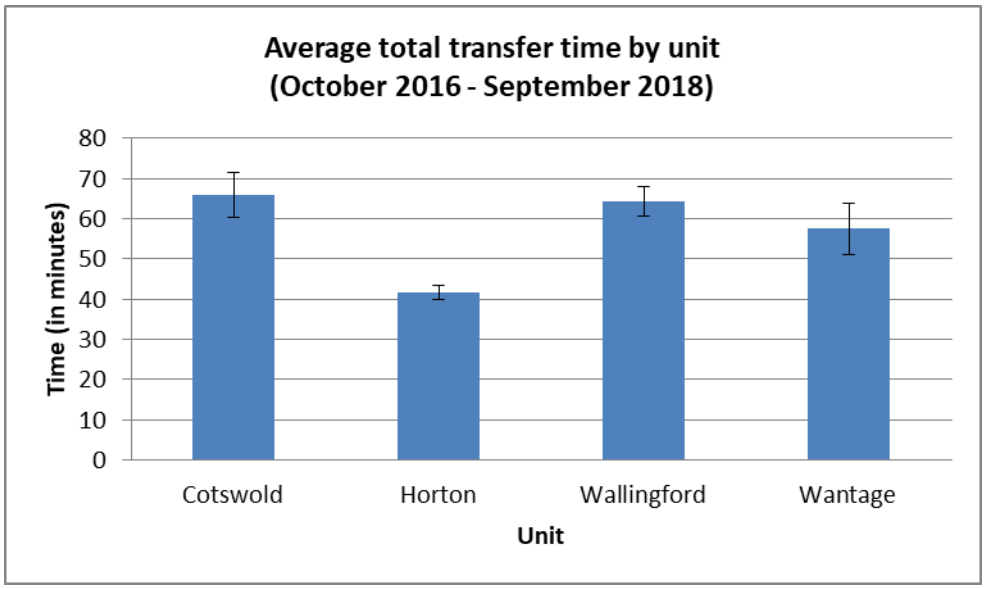
	Cotswold Chipping Norton	Horton Banbury	Wallingford	Wantage	TOTAL
Planned	224	460	393	92	1169
Births	180	370	337	78	965
Transfers	71	168	95	24	358
Transfer rate	32%	37%	24%	26%	31%

3.2.2 Transfer times

The data presented here shows the average total time for transfer (this includes the time waiting for the ambulance to arrive and the journey time). Table 3 contains the mean, median and interquartile range and the mean transfer times are then shown in the graph below.

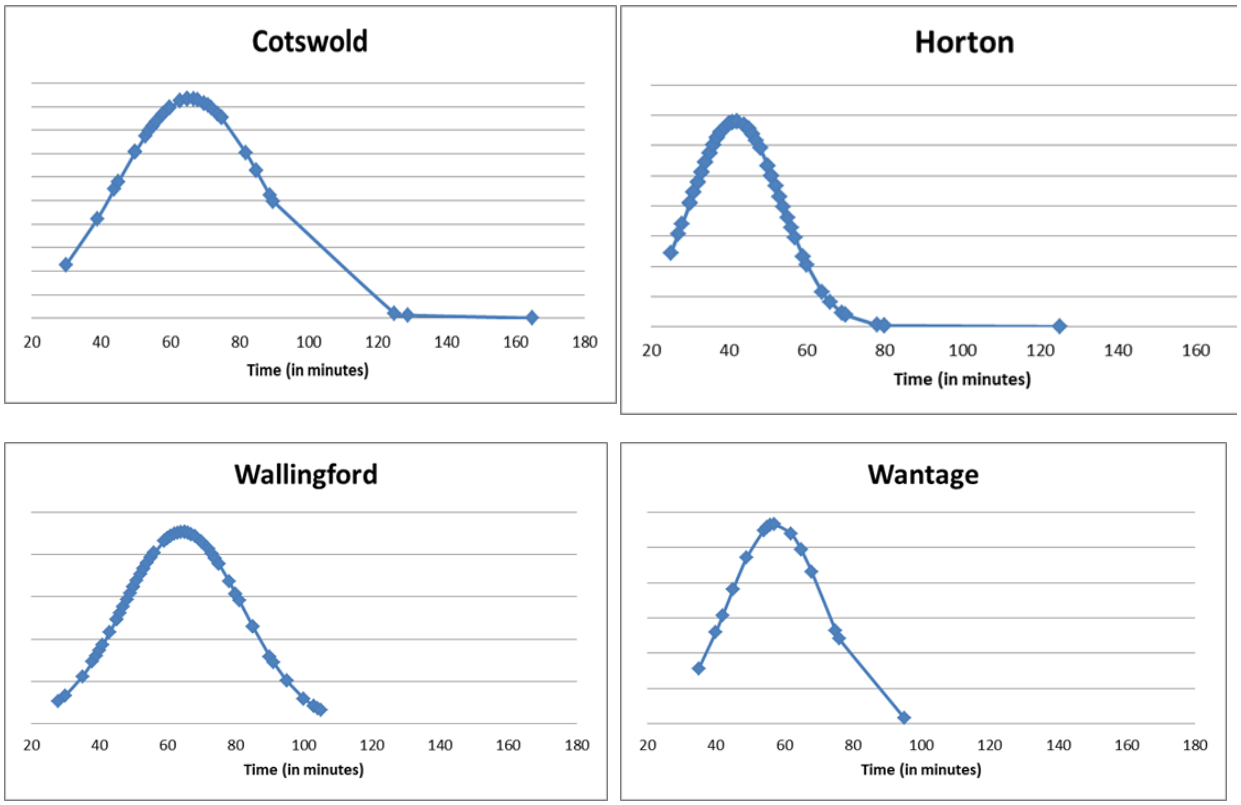
Table 3 – Transfer times from MLUs to John Radcliffe Hospital from October 2016 to September 2018

	Cotswold Chipping Norton	Horton Banbury	Wallingford	Wantage
Mean (minutes)	66	42	64	58
Median (minutes)	60	40	62	55
Interquartile range (minutes)	55 - 72	35 - 45	53 - 75	45 - 65



The Cotswold unit has the highest average total transfer time of 66 minutes. The Horton has a lower average total transfer time (42 minutes) given the shorter time women wait for an ambulance

Distribution curves for each unit showing all recorded total transfer times (i.e. where both the call to arrival and travel time in the ambulance were both recorded).



The longest total transfer time across all of Oxfordshire's MLUs was 165 minutes from the Cotswold unit (135 minutes from call to arrival and 30 minutes travel time). This was a non-time critical transfer. Four transfers took longer than 2 hours in total – one from the Horton (this was due to an ambulance breaking down en route and contact between the ambulance crew and the hospital was maintained throughout until the transfer could be resumed) and three from the Cotswold unit.

3.3 Clinical view on acceptability of transfer rates and times

3.3.1 National context

The Birthplace cohort study, conducted in 2011, collected data on over 64,000 'low-risk' births in England, including 28,000 planned 'low-risk' midwifery unit births in both FMLUs and Alongside MLUs (AMLUs)[1].

The key findings from the study [2] were:

- For women in their first pregnancy who planned birth in a FMLU, the transfer rate during labour or immediately following delivery was 36%.

[1] NPEU Birthplace cohort study (2011).
[2] Extract from 'The Birthplace cohort study: Key findings' found at website

- For women having a second or subsequent baby, the transfer rate was 9%.

There have been a number of practice and guidance changes in the 6 years since the Birthplace cohort study was published. Most notably this includes guideline changes regarding the thresholds for admission and transfer criteria for women in labour and following the birth: for example, recognition and early management of suspected sepsis and an increase in observations required for newborn babies.

It is also worth acknowledging the changing profile of pregnant women due to: a) increased maternal age - around 50% of women having their first baby aged 40 years or over are transferred ; b) the increase in women with a raised body mass index (BMI), and c) the fact that the population is generally less fit/healthy. These factors mean that women are more likely to have pregnancy-related complications, particularly delay in labour and postpartum haemorrhage.

In the Birthplace study, two thirds of the 53 FMLUs studied were between 20-40km from the nearest obstetric hospital with a median transfer time of 60 minutes (interquartile range 45-75 minutes). Most transfers from MLUs to the John Radcliffe Hospital are made via ambulance with the accompanying midwife; however, it is possible for women to be taken by their birthing partner in their own vehicle if the woman and her partner so wish and it is clinically appropriate. Midwives have a guide to review the most suitable mode of transport for transfers depending on clinical presentation.

The distances from each of the MLUs to the John Radcliffe Hospital are as follows:

- Cotswold – 20.2 miles / 32.5km
- Wallingford – 17.5 miles / 28km
- Wantage – 19 miles / 30.5km
- Horton – 23.2 miles / 37km (and 22 miles/35.4km to Warwick Hospital)

From the total transfer time data analysed the median transfer times for all the MLUs in Oxfordshire were in line with those of the Birthplace study.

3.3.2 Local arrangements

The Birthplace study found that

- For planned births in freestanding midwifery units and alongside midwifery there were no significant difference in adverse perinatal outcomes compared with planned birth in an obstetric unit.
- Women who planned birth in a midwifery unit (AMU or FMU) had significantly fewer interventions, including substantially fewer intrapartum caesarean sections, and more 'normal births' than women who planned birth in an obstetric unit.

OUH has provided services from MLUs for many years and midwifes staffing these units are trained to support women in labour including careful monitoring of the progress of labour and the incidence of any complications. There are agreed protocols and thresholds for transfer set to ensure the safety of mother and baby.

The midwives link with the receiving obstetric unit to agree the need and urgency of a transfer and continued communications would also occur between the ambulance crew and receiving unit if the clinical situation changed.

Transfers from the Cotswolds, Wantage and Wallingford midwife led units are provided by South Central Ambulance Service (SCAS). There is a dedicated Ambulance at the Horton MLU which is provided by another provider but dispatched via SCAS. At the Horton HOSC evidence session on 19 December 2018 representatives from SCAS confirmed that all decisions are clinically based and that all factors are taken into account, on an individual patient basis, to balance speed and comfort. When clinically indicated it is safe to transfer the mother and paramedics are trained to support women in labour and would be accompanied by a midwife.

OUH reviews all transfers on a continual basis and any potential concerns or issues would be investigated

4. Conclusions and next steps

From the data we have there is nothing to indicate that the increased travel distance and time (for women and their families to travel to services) and transfer times (the time taken for an ambulance transfer from a Midwife led Unit (MLU) to an obstetric service) is unsafe. Comparison of median transfer times from the Oxfordshire MLUS to the JR obstetric service is in line with the national findings of the Birthplace study. The Public Health Wales Observatory Research Evidence Review (2015) "did not find conclusive evidence to support a causal link between increasing distance, or the time, required to travel from mother's residence to maternity services and adverse birth outcomes"[3].

As stated earlier this analysis of travel and transfer times and the impact on mothers and their families will inform the option appraisal process.

The HOSC is asked to comment on the information requested and identify if there is any further analysis that should be undertaken.

Catherine Mountford
Director of Governance, Oxfordshire CCG
14 February 2019

[3] p.23;Research Evidence Review: Impact of Distance/Travel Time to Maternity Services on Birth Outcomes;1 October 2015; Public Health Wales Observatory