

MATERNITY LEARNING – Presentation attached to Minutes

The Chair welcomed Mr Adam Gornall, Consultant Obstetrician, to the meeting to provide a presentation in relation to Maternity Learning.

Mr Gornall reported that he has been a Consultant in Obstetrics since 2003 and Clinical Director in Maternity since 2014, and has seen a number of changes throughout the years. He provided an update with regard to learning, development and changes that have taken place in Maternity over the last few years. (The presentation is available on the website)

The presentation provided detail of what the service has been doing benchmarked against national directives. Mr Gornall advised he would be covering all aspects of clinical outcomes, with a focus on mortality and morbidity.

Perinatal mortality (babies who are still born or die after delivery)

Mr Gornall reported that the organisation responsible for monitoring deaths across the county are an organisation called MBRRACE (Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK) They have produced reports since 2013 which are benchmarked to identify any trends or outliers.

The data within the presentation to the Board is that which has been published from 2013 to 2016. Mr Gornall explained that data is published two years after collection so the 2017 data, which has just been submitted, will be published in 2019.

Stillbirths

Published data shows that the stillbirth rate at SaTH in 2013 was higher than the national rate for comparable units; 2014 again higher than the national rate for comparable units; 2015 at the national rate for comparable units and 2016 above the national rate for comparable units. This is similar for perinatal mortality rates where stillbirth rates and neonatal death rates are combined. Mr Gornall explained that there is a national designation of Neonatal Units based on complexity of cases (with more complex cases having higher rates of mortality or morbidity). SaTH has been designated Level 2, which would normally provide basic care, but also provide care to infants who are moderately ill with problems that are expected to resolve rapidly or who are recovering from serious illness treated in a Level 3 Unit. A Level 3 Unit is a neonatal intensive care unit (NICU) that is capable of caring for very small or very sick newborn babies. Level 3 NICUs have a wide variety of staff on site, including neonatologists, neonatal nurses, and respiratory therapists who are available 24 hours a day. However up until 2016 SaTH had been operating as a Level 3 Unit (dealing with more seriously ill babies) until the capacity issues in Stoke and Wolverhampton had been improved. SaTH's stabilised and adjusted figures are generally the same as the national rate over the four years.

Neonatal Deaths

Again, these were higher than expected as up to 2016 the Neonatal Unit was operating as a Level 3 Unit (accepting more complex cases) as there was no capacity at nearby Level 3 Units This skewed the figures as SaTH was designated as Level 2 but operating as Level 3.

The graphs in the presentation also show regional variation with a marked north-south divide; the south-east of England are primarily yellow dots (performing 10% better than the average) and the midlands and the north are orange dots (performing 10% worse than the average) at 2016. There is also one red dot in central Birmingham (representing a Trust more than 10% above the average).

Mr Gornall reported that there have been many national initiatives aiming to reduce the stillbirth levels; as a country we are higher than we should be and should be aiming towards Scandinavia who has the lowest rate.

1) One of the initiatives relates to the 2016 'Saving Babies Lives' report where all Trusts are expected to deliver four High Impact changes (a Care Bundle with all four aspects to be completed and to be fully implemented by 2019):

- Reducing smoking in pregnancy

- Risk assessment for small babies
- Looking for reduced foetal movements
- Monitoring during labour

All Trusts should have implemented this initiative by 2019; Sath implemented the complete bundle by May 2018 and is amongst the 31% of Trusts across the country who have fully implemented it.

a) Smoking in Pregnancy – 2016/17 figures

Mr Gornall presented a graph which showed Telford & Wrekin as the worst in the West Midlands at 22% of women smoking at time of delivery. Shropshire is the fifth worst on the graph at 16%, with the national average at 12% which shows that as a county, Shropshire and Telford & Wrekin has a real problem as smoking at time of delivery results in small babies and small babies are more likely to be stillborn and having other complications.

SaTH was aware of the problems with smoking and has therefore appointed a Public Health Midwife who has been in post for 12 months – she supports pregnant women across the county to stop smoking and we hope that we should see a reduction in smoking rates for both parts of the county.

All women are now screened for carbon monoxide; this enables an accurate clinical picture to be obtained of actual smoking levels, as this can be under-reported.

Money boxes have also been introduced to show mothers how much money they can save from quitting smoking by putting the equivalent amount in the money box.

From the work being undertaken, it has already produced a reduction in the smoking rates t:

- Telford & Wrekin – 22% has reduced to 18.4%
- Shropshire – 16% to 13.6%
- Overall Trust-wide rate – 15.6% against a national rate of 12% - therefore all systems and departments need to continue to focus on this key issue to improve birth outcomes

b) Risk Assessment for Small Babies

Mr Gornall advised that SaTH does have more small babies than average, which is likely to be a consequence of smoking during pregnancy; to further respond to this the Trust has appointed an additional 2WTE (whole time equivalent) sonographers to ensure the number of scans being undertaken is increased to identify small babies earlier, which should lead to a reduction in stillbirths. Staff have also been trained to ensure this is a key focus during clinic assessments

c) Foetal Movements

Mr Gornall advised that there has been a lot of work and innovation around improving this. All staff have been trained to recognise and refer to this. There is a system in place to assess mothers in the MLUs so that it is convenient for them without having to travel to the Consultant Unit.

SaTH has also introduced a bracelet for women to wear to remind them keep an eye on movements and has stressed this on the front cover of women's hand-held records folder to improve awareness so that early action can be taken

d) CTG Monitoring (monitoring of women in labour)

The Trust has the latest CTG machines and although they are not infallible they can identify early problems to allow for more effective intervention. During 2014, SaTH were aware that CTGs and staff training were a problem across the NHS and nationwide. The Trust therefore developed a bid in 2015 for additional funding for training; SaTH were successful in the bid and received £186k from NHSLA which was invested in a number of areas around CTG training – better monitors, software, advanced training for midwives, human factors training to improve team-working, and the key co-ordinators on Labour Ward attended a CTG masterclass in London. There is also a built-in QA of CTG traces using a separate Quality Assurance process that the Trust has invested in - the *Dawes Redman computerised CTG* for normality which is based on over 100,000 CTG traces linked to outcomes and can be used for antenatal traces where the foetal gestation is between 26 weeks and term and is associated with a significant reduction in perinatal mortality compared with clinical CTG interpretation alone

2) RCOG (Each Baby Counts)

Each Baby Counts is the RCOG's national quality improvement programme to reduce the number of babies who die, or are left with severe disability, as a result of incidents occurring during term labour. Each Baby Counts has an ambitious aim to reduce by 50% the incidence of stillbirth, neonatal death and severe brain injury as a result of incidents during term labour by 2020.

Stillbirths, neonatal deaths and brain injuries occurring due to incidents in labour are initially investigated at a local level. The Each Baby Counts programme brings together the results of these local investigations to understand the bigger picture and share the lessons learned. The results presented are based on analysis of the data submitted along with in-depth thematic analysis of several key topics.

During 2017 RCOG Report 'Each Baby Counts' was published– which looked at 1,136 babies across the whole country and found that there was a substantial number where the outcome could have been different.

They found four key areas which could have been improved:

- Risk assessment
- CTG training
- Human factors (working as a team)
- Education and training

SaTH was already aware that these areas were fundamental to improved outcomes and had therefore invested in all these areas years earlier to strengthen outcomes and improve safety in these aspects of care which have such significant benefits.

The handover process at SaTH has also been further improved and strengthened; and staff huddles are held twice a day as well as management huddles, to be proactive.

Monthly training sessions are also held, and the neonatal training which was developed in-house at SaTH is now being rolled out nationally.

a) Neonatal Cooling

For a baby with suspected brain-damage, the modern treatment is to cool the baby down to a temperature of 34° for a period of three days to protect the brain and reduce the damage. In terms of cooling rates, SaTH would expect between 1-1.5 per 1,000 babies who require cooling. Between 2013-2015, SaTH was running at that rate, however during 2016 and 2017 this reduced (as illustrated on the chart) and during 2018 the rate reduced to below the national expected rate; Mr Gornall felt this is a direct result of CTG training which has had a significant positive effect on outcomes.

b) Mortality - Crude Data

In 2017, stillbirths at SaTH increased to higher than expected; however the neonatal death rate reduced significantly.

The neonatal death rate has stayed low during 2018 and the stillbirth rate has reduced again. The current rate to end September 2018 is the lowest it has ever been. SaTH's rate is back at the national rate for units of a similar size, following the work being undertaken to drive the figures down.

Mr Gornall stressed that despite what is being portrayed in the press, SaTH is not an outlier in terms of mortality and is performing at better than the overall national average, but is striving to perform better still.

c) Full-Term Admissions

A National Programme - Avoiding Term Admissions into Neonatal units (ATAIN) was developed to look at stopping term-babies being admitted to the Neonatal Unit unnecessarily (due to problems with breathing, cold, blood sugar levels, jaundice, oxygen etc). NHS Improvement identified that over 20% of admissions of full term babies to neonatal units could be avoided. Providing services and staffing models that keep mother and baby together can reduce the harm caused by separation.

There is overwhelming evidence that separation of mother and baby so soon after birth interrupts the normal bonding process, which can have a profound and lasting effect on maternal mental health, breastfeeding, long-term morbidity for mother and child. This makes preventing separation, except for compelling medical reason, an essential practice in maternity services and an ethical responsibility for healthcare professionals. A lot of work has been undertaken in SaTH including the 'red hat' initiative to act as a very visual prompt to identify those babies most at risk who needed additional monitoring to safely avoid admissions to the Neonatal Unit. The national rate is approx. 8% and the national target is 6%. During January 2018, SaTH achieved 6% however following all the initiatives over the last 9 months this has reduced to 3.5%.

d) Investigations into Incidents

The department has undertaken a lot of work, alongside the Trust, to improve its investigation process. The Trust has appointed an external company to provide external investigation training to a number of members of staff to ensure objective and thorough investigations are undertaken. The Secretary of State Review (Ockenden review) is looking at this aspect of historic investigations

A Risk Midwife has also been appointed; she has been in post for over a year and introduced a number of improvements; and an experienced Consultant with risk experience has also been appointed and will commence in the next month.

The Trust is also using a lot more external investigators and experts to provide external scrutiny.

Weekly risk meetings are being held and are extremely proactive to resolve any risks identified.

The national perinatal mortality review tool has also been launched (MBRRACE tool) to help perform investigations in a structured manner

The national Healthcare Special Investigation Branch (HSIB) has been established to go into Trusts to provide support during investigations - SaTH received an introductory visit two weeks ago.

Mr Gornall reported on the following two papers that have been published this year that looked at outcomes and the harm being created:

- National Audit – GIRFT (Getting it Right First Time)
- 2018 CQC Maternity Survey –all points in the survey show that SaTH performs 'about the same' as the rest of the country, apart from six where SaTH performs 'better than average'. This is very positive feedback from mums who use the service

In summary:

- SaTH has challenges in the community with smoking and small babies
- SaTH's mortality is about the same as the rest of the West Midlands
- SaTH's Cooling rates and Term Admission rates to Neonatal Unit are performing very well
- Lots of actions in place which meet national drivers and requirements
- Evidence that interventions are appropriate
- Overall harm at SaTH is lower than average
- High satisfaction rates from mothers
- SaTH does recognise when issues occur but owns them from the outset and ensures timely and thorough investigations and will ask for external assistance
- SaTH recognises the importance of demonstrating learning and aware that nationally the maternity system needs to continue to improve.

The Chair thanked Mr Gornall for attending to provide the above presentation. Mr Gornall agreed to accept the following questions from the floor.

QUESTIONS FROM THE FLOOR

Q1

Chair of T&W Health & Wellbeing Board highlighted that Telford & Wrekin have some of the highest numbers of deprivation and higher level of mortality and morbidity in birth, however when the Women & Children's Unit was built at Telford this started to fall. What is the expectation when moving the Women & Children's Unit away from the areas of need? Will the rate increase again?

- A1** Mr Gornall felt the fall in the rate was not related to the W&C building; He stressed the need for good and accessible antenatal care which is delivered in lots of areas in the county. One of the areas targeted for small babies is the Woodside/Sutton Hill area – a scan machine and additional midwifery care has been introduced to improve antenatal care.
With the local maternity system working with the CCG, it will push the antenatal care out into the community and therefore improve, taking the service out into the communities to perform more scans. Good outcomes are linked to services in the community not the bricks and mortar of the Consultant Unit, where mums may only be there to deliver for less than a day. Around 99% of antenatal services would still be provided at PRH regardless of where the Consultant Unit was based
- Q2** *What happens if Telford loses the W&C Unit at Telford and mothers giving birth between Telford – Shrewsbury, and out of their community where family can't be with them?*
- A2** Mr Gornall reported that the BBA (Born Before Arrival) rate is low; it is about preparation before birth. It does not relate to a building; it relates to antenatal care. In any new build provision would be made for partners to be with mums.
- Q3i)** *Gill George raised the MBRRACE data (2016 data and 2015 data) – for both, the published outcomes showed SaTH as being the fourth worst performing Trust for extended perinatal mortality (over 4,000 births per year – without a level 3 neonatal unit). Gill reported that she has not heard before that perhaps SaTH was wrongly categorised by MBRRACE and suggested it may be appropriate to share an analysis of the numbers of high risk births who came to SaTH as a result, how long the situation went on for and the impact on data.*
Mr Gornall reported that the Level 2/Level 3 was regulated in conjunction with the West Midlands neonatal network; traditionally SaTH has always had a neonatal intensive care unit (NICU) and therefore agreed to carry on with this until they were able to adapt. He reported that this is very well documented.
- ii)** *Raised the Ockenden Review which is investigating 100+ deaths and adverse incidents to babies and four maternal deaths; as well as the CQC current concerns around safety in the maternity service. Is certainty of service as justified as the impression given?*
Mr Gornall clarified that the Ockenden Review is investigating the investigations – they are not investigating the deaths. In terms of the 100 deaths – Mr Gornall clarified that it is 100 cases, not 100 deaths; that has been mis-reported. There have already been reviews into some of the historic cases undertaken by SaTH which have demonstrated no harm has occurred. Mr Gornall reported that he welcomes all questions/investigations as they form part of the learning.
- iii)** *Is it appropriate that currently around 90% of births are take place at the Consultant Unit, given the context of the Better Births recommendations to shift as many as possible to Midwife Led care?*
Mr Gornall felt the Head of Midwifery was best placed to answer this as part of her rural MLU presentation
- iv)** *On the CQC Maternity Survey – the score around 'choice' of where to give birth given the closure of rural midwife led units may have influenced that score?*
Again, Mr Gornall felt the Head of Midwifery was best placed to answer this as part of her rural MLU presentation.
- Q4** *During 2017 there was a rise in stillbirths?*
- A4** Mr Gornall reported that there are variations in years - the figures relate to a rate, not large numbers. He reported that 2017 was a year not as good as anticipated. Stillbirths are a lot more challenging to identify. If baby is small or if mum smokes, it increases the risk, so need to turn the tide with the funding this year to prevent more and more stillbirths.
- Q5** *David Sandbach suggested i) Mr Gornall's presentation be shared with the Shropshire CCG, and ii) For Mr Gornall and members of the Board to meet with representatives of the civic community to look at what happens in societies that have good maternity services, to identify what could be rolled out into the social care system and maternity system in the county.*
- A5** The Chair reported that the presentation would be shared wider as the Board understand the public's concerns; to rebuild confidence in the current Maternity Service and the women we serve. It would also be available on

the website, with a narrative to accompany it

The Chair wished Mr Gornall and the team luck in the continuing improvement.