Oxford University Hospitals
NHS Foundation Trust

Trust Board Meeting in Public: Wednesday 10 July 2019

TB2019.75A

Title	**Saving Babies Lives Report 2019**

Status	For information
History	

Board Lead(s)	Sam Foster			
Key purpose		**Assurance**		

Executive Summary

1. The Saving Babies Lives Care Bundle has been designed to help Trusts reduce still births, early neonatal deaths and intrapartum brain injuries and achieve the national ambition to reduce the rate of these poor outcomes by 50% by 2030. Implementation of the 4 elements of the Saving Babies Lives Care Bundle is now a requirement to be eligible for CNST discount scheme
2. All four elements of the care bundle have been implemented in the Trust. There has been a successful additional pilot quality project associated with the risk assessment and surveillance for fetal growth element of the Saving Babies Lives care bundle which has been run in association with the AHSN.
3. **Recommendation** The Trust Board is asked to receive this report.

Saving Babies Lives Report 2019

1. Purpose

1.1. This paper provides the Board with an update on the implementation of the national "Saving Babies Lives Care Bundle".

2. Background

2.1. The latest ONS data tells us that stillbirth rates have stayed at 4.3 per 1000 total births in England in 2016. The UK has a stillbirth rate more than double that of the best performing nation (Iceland (1.3) There is around 25 per cent variation in the stillbirth rate across the different English region.

2.2. The Secretary of State announced a national ambition to halve the rates of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2030, with a 20% reduction by 2020. This announcement was followed by 'Spotlight on Maternity' which sets out how this ambition can be achieved. The ambition is included in the 2016-17 Mandate.

2.3. Saving Babies' Lives is a care bundle designed to help Trusts tackle stillbirth and early neonatal death. It brings together four elements of care that are recognised as evidence-based and/or best practice: these include

- Reducing smoking in pregnancy
- Risk assessment and surveillance for fetal growth
- Raising awareness of reduced fetal movements
- Effective fetal monitoring during labour

2.4. Implementation of the "saving babies care bundle" is now a requirement of CNST Maternity Incentive Scheme (Patient safety Action 5)

2.5. An updated version "Saving Babies Care Bundle 2" has been launched in April 2019. A gap analysis is currently taking place and the implementation of this care bundle will be reported to the Board next year.

3. Reducing smoking in pregnancy

3.1. The intervention recommended from the Saving Babies Lives Care Bundle is to reduce smoking in pregnancy by carrying out Carbon Monoxide (CO) testing at the antenatal booking appointment to identify smokers (or those exposed to tobacco smoke) and referring these women to stop smoking service/specialist as appropriate.

3.2. OUHFT comply with these recommendations. Community midwives record the smoking status of every woman at the booking appointment. All women have a CO test and the results are documented in the notes. Women who smoke or who have high CO levels are referred to the smoking cessation team. (Guideline for supporting women to quit smoking during and after pregnancy 2017)

3.3. The percentage of women still smoking at birth at OUHFT is 6.4%.This is much lower than the national average of 11.4%. However there are some communities within Oxfordshire with smoking rates that are high (rates at 11%). We plan to target these post codes and other groups of women e.g. those with

mild to moderate mental health problems who also have higher rates of smoking. To enable the community midwives to assess these women, the maternity department has secured funding to purchase 40 more CO monitors. 20 are now in use and the rest will arrive when the funding is released.

3.4. 100% women at booking are screened with CO monitors 50% of women who are identified as smokers have CO screening results documented at every visit. The improved access to CO monitors will help to increase this to above 80%.

4.1. There is strong evidence to suggest that fetal growth restriction (FGR) is the biggest risk factor for stillbirth. However, antenatal detection of small for gestational age (SGA) babies has been poor (national average 30%) varying greatly across trusts in England in those that calculate their rates. Most trusts do not calculate their detection rates and these are therefore unknown. A recent audit (2015) of trusts in the Thames Valley conducted by the AHSN showed the rate of detection were low varying between 44-27% (OUHFT 44%)

4.2. OUHFT have trained all midwives in measuring symphysis fundal height and use a standard growth chart. The Saving Babies Lives and RCOG algorithms have been used to aid guidance to stratify risk and identify FGR. (Growth Scan Guideline 2016)

4.3. In addition, to address human factors and detect at risk infants who are not very small but are significantly smaller than their genetic potential meant them to be, the Oxford AHSN Maternity Network have introduced an innovative pilot scheme running at OUHFT which began in May 2016

The principles of the pilot are

1. A routine 36-week growth scan for all,
2. Ultrasound scans between 20 and 36 weeks used in a simpler, structured manner based on the risk factors and routine uterine artery Doppler
3. Assessment at the 36 week scan of parameters other than estimated fetal weight that are also associated with risk (e.g. growth trajectory, abnormal blood flow).

The initial reported outcomes are encouraging and it is intended if this is confirmed to roll out this pathway to all the Trusts in the AHSN.

4.4. The detection rate of SGA babies increased from under 40% in 2016 to 58% in 2017/18. This is considerably better than the national rate at 30%. The reported figures for 2018/19 show that rate of detection has remained high at 62%.

4.5. The perinatal death rate of babies over 36 weeks has also significantly reduced by 60% since this new scheme was introduced. This has stayed the same in 2018/19.

	No. pregnancies with EDD 0ct 14-Oct 16	No. pregnancies with EDD 0ct 16-Oct 17	Percentage change
No. pregnancies	14328	6522	
No. PNM	47 (0.32%)	17 (0.26%)	-19%
PNM>/= 36 weeks	31 (0.22%)	6 (0.09%)	-59% (p=0.04)
SGA detection	35%	62%	

5. Raising Awareness of reduced fetal movements

5.1. Confidential enquiries into stillbirth have consistently described a relationship between episodes of reduced fetal movement (RFM) and stillbirth incidences with unrecognised or poorly managed episodes of reduced fetal movement being highlighted as contributory factors to avoidable stillbirths

5.2. The Saving Babies Lives Care Bundle recommends that all pregnant women are given written patient information leaflets before 24 weeks addressing the issue of reduced fetal movements.

5.3. Enquiries into fetal movements are made at all clinical visit and if reduced fetal movements are reported, that the staff manage the women using guidance based on the RCOG guideline 57 Reduced Fetal Movements.

- Midwives give all women the patient information leaflet at booking (Kick counts, reduced fetal movements).
- The management of women presenting with reduced fetal movements is in line with RCOG guidance 57 and can be found in Guideline Reduced Fetal Movements 2018.
- A recent audit of referrals to the Maternity assement unit found that, excluding women in suspected labour, reduced fetal movements was the most common presentation
- There are 7-10 woman attending the unit /day with reduced fetal movements.

6. Effective fetal monitoring during labour

6.1 CTG interpretation is a high level skill and is susceptible to variation in judgment between clinicians and by the same clinician over time. These variations can lead to inappropriate care planning and subsequently impact on perinatal outcomes

6.2 As well as reducing stillbirth rates there is a need to reduce avoidable fetal morbidity related to brain injury causing conditions such as Hypoxic-Ischemic Encephalopathy (HIE) and Cerebral Palsy.

6.3 Saving Babies Lives expects Trusts to be to able demonstrate that all qualified staff who care for women in labour are competent to interpret CTG, use the buddy system at all times and escalate accordingly when concerns arise or risks develop, including staff that are brought in to support a busy service from other clinical areas.

6.4 OUHFT has worked with the Thames Valley AHSN and neighbouring trusts to standardise CTG interpretation in line with the FIGO recommendations. A fresh eyes sticker tool has been developed to ensure a robust standard method of reviewing the CTG using the buddy system. All midwives and doctors who care for women in labour must complete the Fresh eyes and fetal well-being training and pass a competency test annually.

6.5 100% of eligible staff attended and completed this course and passed the competency test. Fetal monitoring is not only confined to high risk women. Low risk women are monitored throughout labour by the midwife who uses intermittent auscultation. This is an important method to identify a baby at risk during labour.

6.6 At OUHFT a consultant midwife has developed a national award winning tool to ensure a robust high standard of training in this technique. We hope this will lead to improved detection of women who present in a low risk setting but whose pregnancies have increased in risk and require management in an obstetric unit

7. Outcome

Stillbirth,neonatal death and perinatal mortality rates

Financial Year April/March	Number of live births	Number HIE2/3	SB	neonatal death 7 days
2015/16	8638	13	45	13
2016/17	8422	9	41	14
2017/18	7615	5	34	13
2018/19	7721	4	31	15

Benchmarking against the 28 maternity units that have level 3 NICU and surgical provision.using the CEMACH 2018 data. OUHFT have rates that compare favourably with other similar units.

	Still birth (23+6 excluding termination of pregnancy/1000 live births	Neonatal mortality up to 7 days/1000 live births	Perinatal mortality including SB from 23+6 to 7 days of life/1000 live births
National bench mark	3.9-4.5	1.7-3.5	5.7-8.0
OUHFT	4.0	1.9	5.9

Hypoxic Ischaemia Encephalopathy (HIE) 2/3 rates

Network	**Unit**	**live births** (all)	**Suspected HIE** n	% term ads	per 1000 births
Thames Valley & Wessex	Milton Keynes	3569	2	1.2%	0.6
	Royal Berkshire, Reading	4915	3	1.2%	0.6
	Stoke Mandeville	4962	4	2.2%	0.8
	Wexham Park Hospital	4232	5	3.4%	1.2
	John Radcliffe, Oxford	7721	4	0.8%	0.4
	Dorset County Hospital FT	1681	3	4.6%	1.8
	HHFT - Basingstoke	2575	2	1.4%	0.8
	HHFT - Winchester	2502	1	0.7%	0.4
	Poole Hospital FT	4435	1	0.5%	0.2
	Salisbury NHS FT	2183	3	2.5%	1.4
	St Marys Isle of Wight	1060	1	1.4%	0.9
	St Richard's Hospital	2571	1	0.5%	0.4
	Queen Alexandra Hospital	5362	6	3.5%	1.1
	University Hospital Southampton FT	5509	6	2.0%	1.1
	TV & W Network Total	**53277**	**41**	**1.6%**	**0.8**

There has been a marked reduction in the number of cases of babies who have developed HIE 2/3 and required protective cooling

The rate of HIE2/3 per 1000 lives birth is currently 0.4 /1000 births at OUHFT.

The average rate for the South network is 0.8/1000 births.

8. Conclusion

8.1 OUHFT maternity department is compliant with all four elements of the Saving Babies Lives Care Bundle.

8.2 There has been a sustained reduction in the HIE rate, the perinatal mortality and still birth rate of term babies since the introduction of the SBL in 2016 which benchmark favourably with other similar units.

8.3 There has been an increase in the detection of babies with fetal growth restriction which is above the national average rate. OUHFT 62%% vs National rate 30%.

8.4 The percentage of women still smoking at birth is 6.2% compared to a national average of 11.4%. Work is to be focused on targeted populations where the rate is still 11%.

8.5 Saving babies lives care bundle 2 has now been launched with a new emphasis on preventing premature delivery.

9. Recommendation

The Trust Board is asked to receive the report.

Author: Dr Veronica Miller
Date: July 2019