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## Reducing Still Birth initiative – performance of a district hospital

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*Our Values*  
Service Teamwork Ambition Respect

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- Why is it needed
- What is it about
- What is our local still birth rate
- How good are we following this initiative
- Is it really working

## Why did we need to take this initiative

Still Birth rate in UK is 4.7 per 1000)

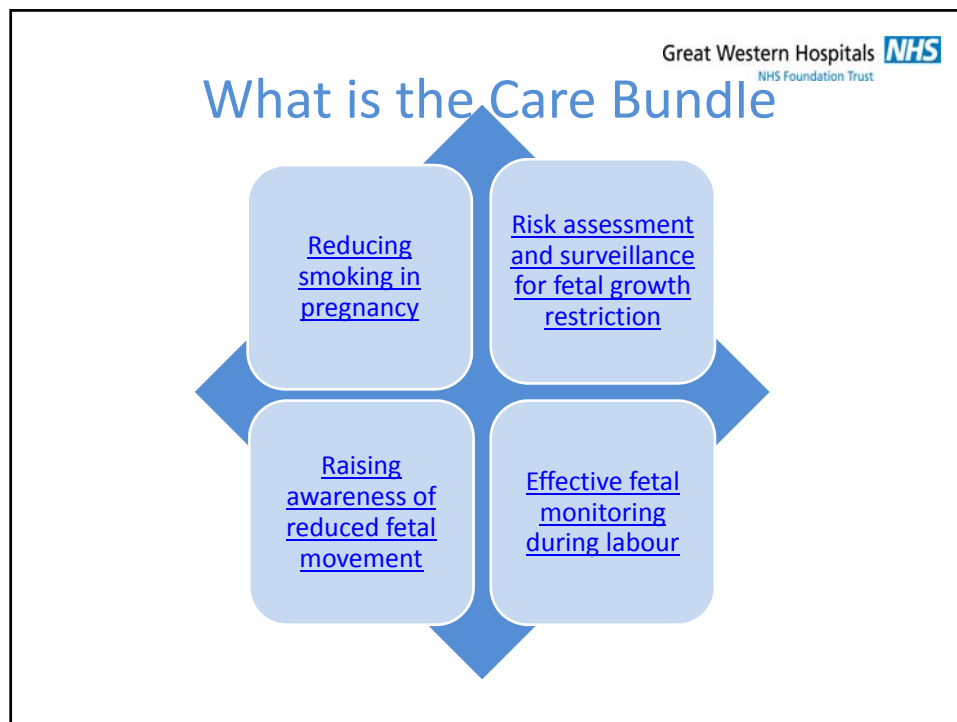
MBRRACE


NHS England Mandate

(50% reduction by 2030)

## MBRRACE common themes

- Reduced fetal movements
- SGA
- Placental problems (2ndary to smoking)
- Inadequet intrapartum care



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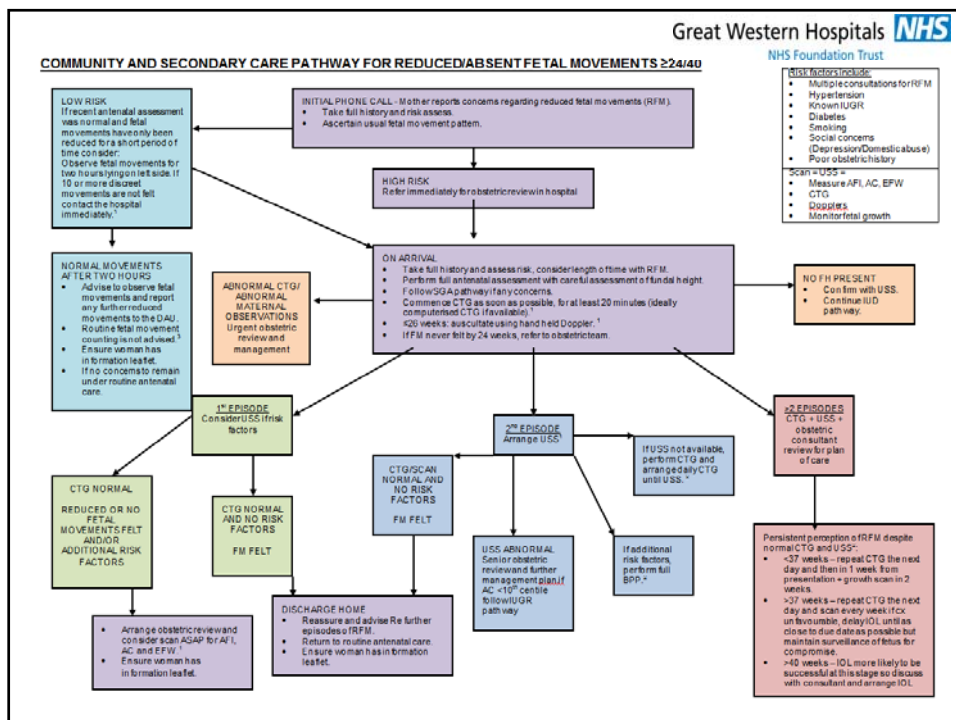
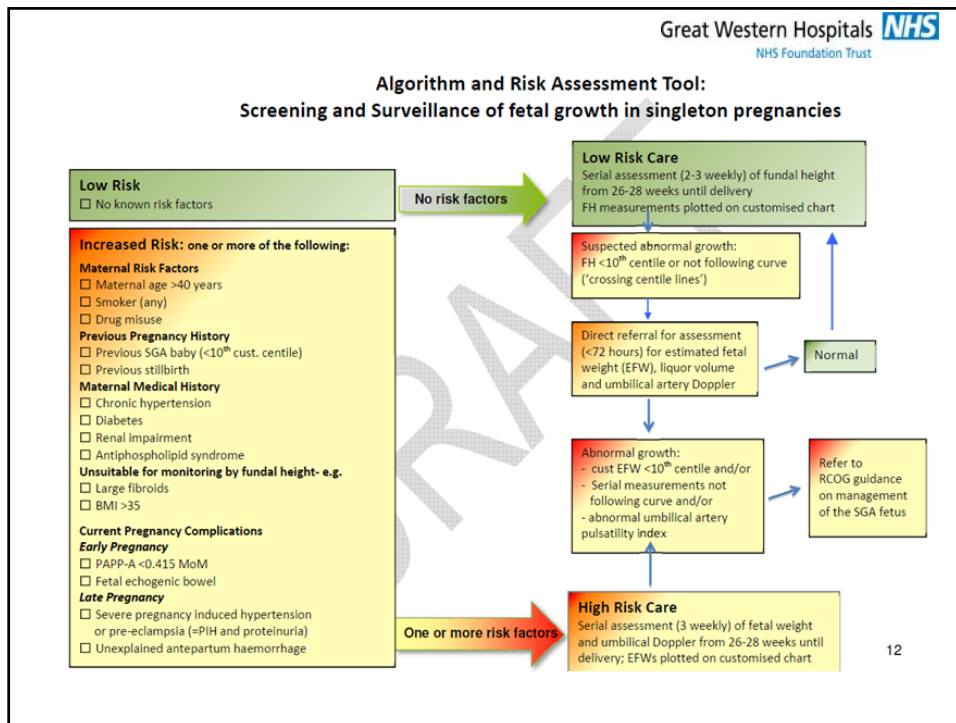
## Fetal Growth Monitoring

FGR is the biggest risk factor for stillbirth

One in three term still birth due abnormalities of fetal growth (MBBRACE reports on stillbirths)

**Intervention :**

- [Use algorithm supplied by NHS England/RCOG for Growth surveillance](#)
- Ongoing Audit of detection rate ,identify missed cases (false negative/false positives) and learning from review



## Smoking Cessation

High association with SB ,IUGR, preterm and SIDS

**Suggested Intervention:**

- Carbon monoxide (CO) testing at booking
- Referral to a stop smoking service/specialist

## Fetal Movements

Strong correlation between episodes of reduced fetal movements and stillbirth.

**Suggested Intervention:**

- Increase awareness by providing information leaflet
- [Mangement in line with RCOG guideline](#)  
(attach Algo)


# Intrapartum monitoring (CTG)

Recognised method for assessment of fetal well being  
Screening tool for fetal hypoxia

- Variation in interpretation
- Prevention of HIE (correct interpretation and timely intervention)

**Intervention:**

- Staff training
- [review of interpretation \(fresh eyes\) hourly](#)
- [Documentation of systemetic review hourly](#)
- Protocol for escalation




**Fresh Eyes**

NORMAL  
SUSPICIOUS  
PATHOLOGICAL

DATE                      TIME

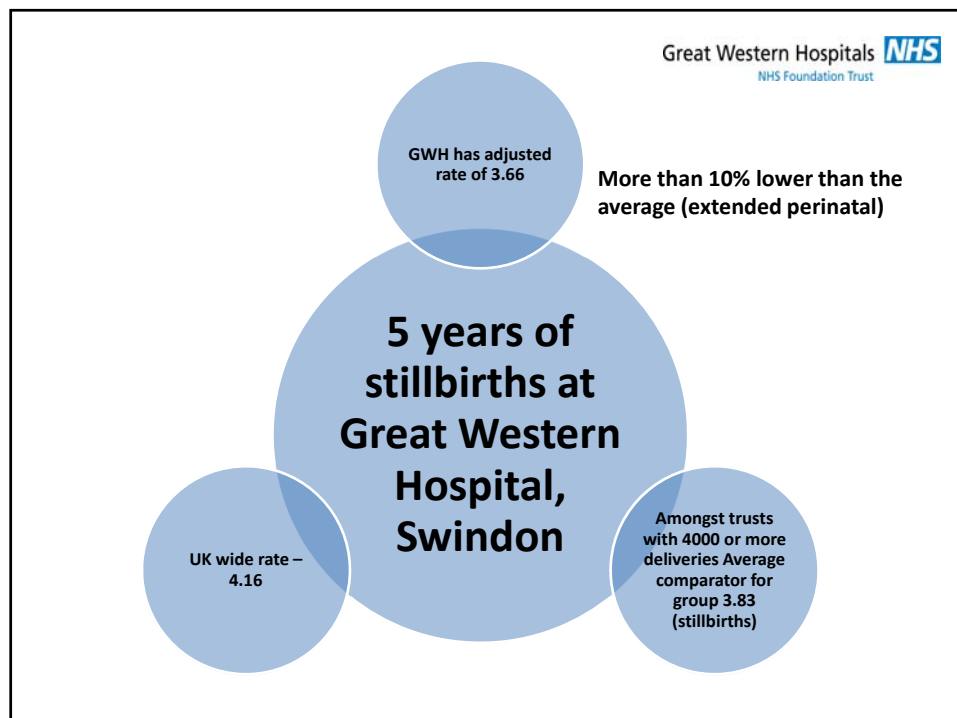
SIGNATURE

DEFINITION	Reassuring	Non-Reassuring	Abnormal	Paper speed
Baseline Rate (bpm)	110 - 160	100 - 109 161 - 180	<100 >180 Sinusoidal pattern for > 10 mins	..... cm/min N.B Rising baseline even within normal range may be of concern if other non-reassuring/ abnormal features present
Variability (bpm)	5 bpm or more	<5 for 40 mins or more but <90 mins. (In the absence of accelerations)	<5 for 90 mins or more. (In the absence of accelerations)	Comments
Accelerations	Present	None	Comments:	
Decelerations	None	-Typical variable decelerations with over 50% of contractions [g.c. over 90 mins. -Single prolonged deceleration up to 3 mins. -Atypical variable decelerations with more than 50% contractions for less than 30 mins.	-Atypical variable decelerations with over 50% contractions for over 30 mins. -Late decelerations [g.c. over 30 mins. -single prolonged [g.c. over 3 mins.	Comments
Opinion	Normal CTG (All four features reassuring)	Suspicious CTG (one non-reassuring feature)	Pathological CTG (Two or more non-reassuring or one or more abnormal features)-FB5 or DELIVER WITHIN 30 MINS	
Dilatation	Liquor colour	Maternal Pulse	Contractions :.....:10	
Action				
Date:.....Time :.....	Signature:.....		Status:.....	

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## How do we perform at GWH

- 5 year data of still birth (2010-2015)
- Various Small audits to check our Compliance with Saving baby life Care bundle
  - to check our IUGR detection rate and reviewed our SGA guideline
  - Compliance with RCOG reduced FM guideline
  - Smoking Cessation Program
  - Intrapartum Monitoring



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### 2014 Perinatal Mortality Rates by Region

Organisation	Total births <sup>§</sup>	Mortality rate per 1,000 births <sup>§</sup>					
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>	
		Crude	Stabilised & adjusted (95% CI) <sup>◇</sup>	Crude	Stabilised & adjusted (95% CI) <sup>◇</sup>	Crude	Stabilised & adjusted (95% CI) <sup>◇#</sup>
<b>ENGLAND</b>							
South West	48,308	4.12	4.32 (3.89 to 4.87)	1.32	1.51 (1.13 to 1.93)	5.44	5.99 (5.19 to 6.67)

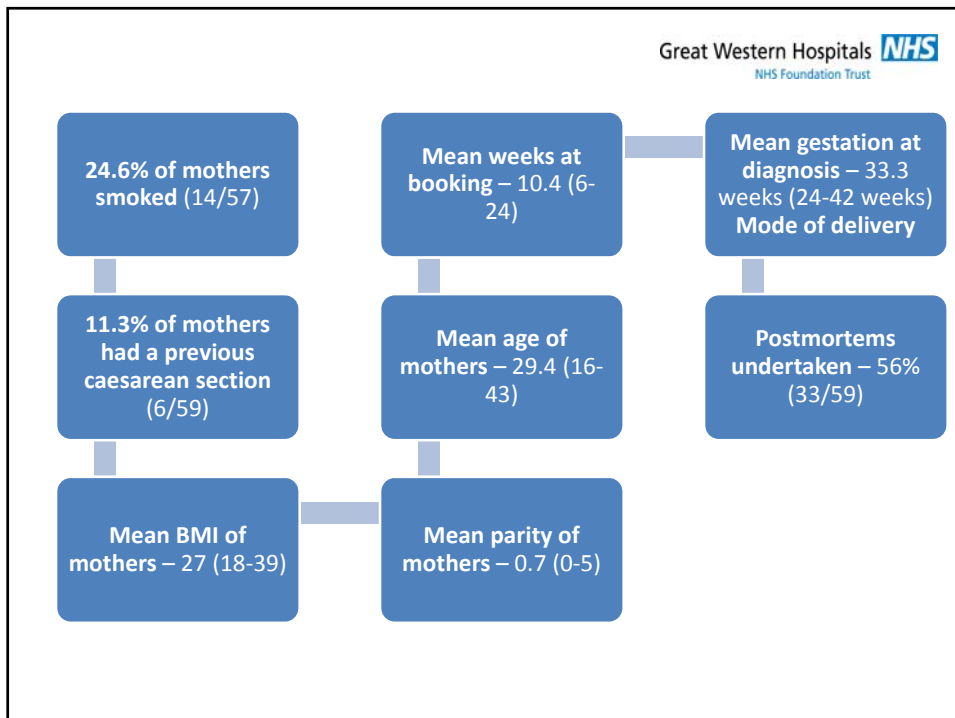
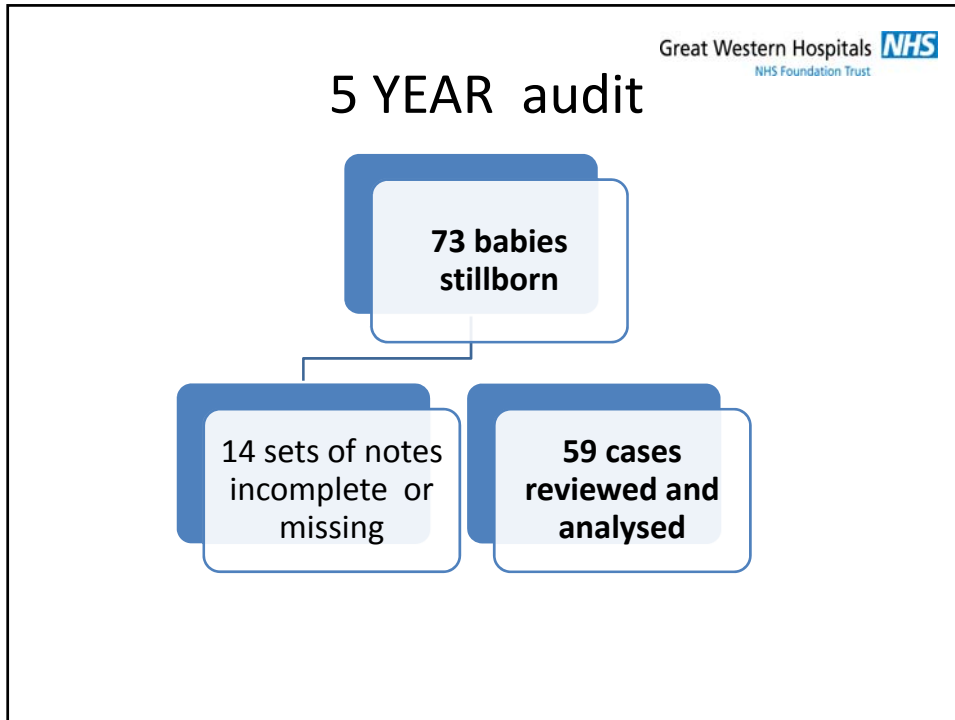
*Unit >= 4,000 births per year with no level 3 NICU*

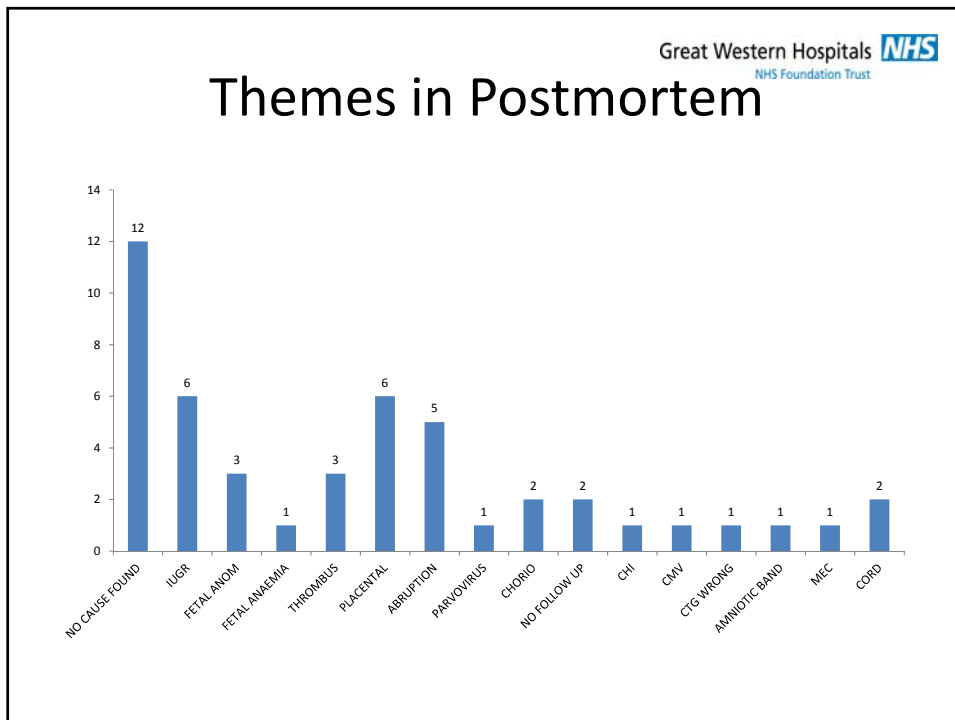
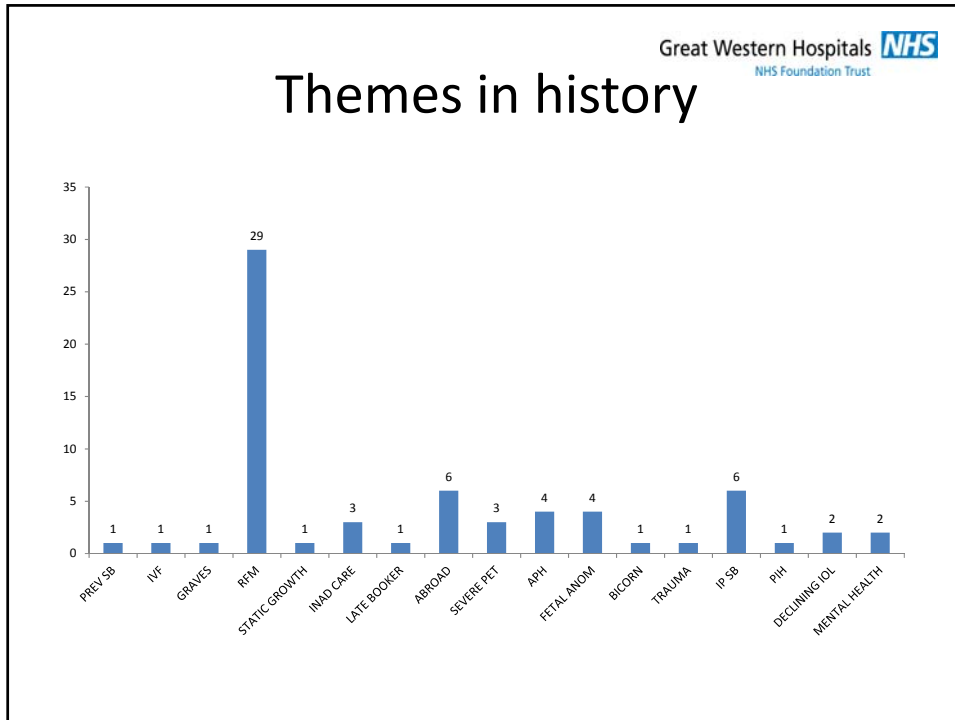
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<b>ENGLAND</b>							
Gloucestershire Hospitals NHS Foundation Trust	6,223	4.18	3.90 (3.32 to 4.64)	1.45	1.29 (0.83 to 2.21)	5.62	5.33 (4.35 to 6.72)
Great Western Hospitals NHS Foundation Trust	4,973	2.2	3.66 (2.97 to 4.36)	0.81	1.05 (0.65 to 1.79)	3.02	4.48 (3.53 to 5.68)
Royal United Hospital Bath NHS Foundation Trust	4,320	2.78	3.74 (3.14 to 4.38)	1.62	1.31 (0.82 to 2.28)	4.40	4.91 (4.04 to 6.28)
Poole Hospital NHS Foundation Trust	4,536	*	3.68 (3.01 to 4.35)	*	0.95 (0.60 to 1.70)	2.65	4.42 (3.54 to 5.69)
Royal Berkshire NHS Foundation Trust	5,790	5.70	4.03 (3.38 to 5.17)	0.69	0.99 (0.63 to 1.76)	6.39	5.39 (4.45 to 6.83)
Royal Cornwall Hospitals NHS Trust	4,171	4.56	3.91 (3.35 to 4.78)	0.72	1.04 (0.65 to 1.87)	5.27	5.14 (4.14 to 6.57)

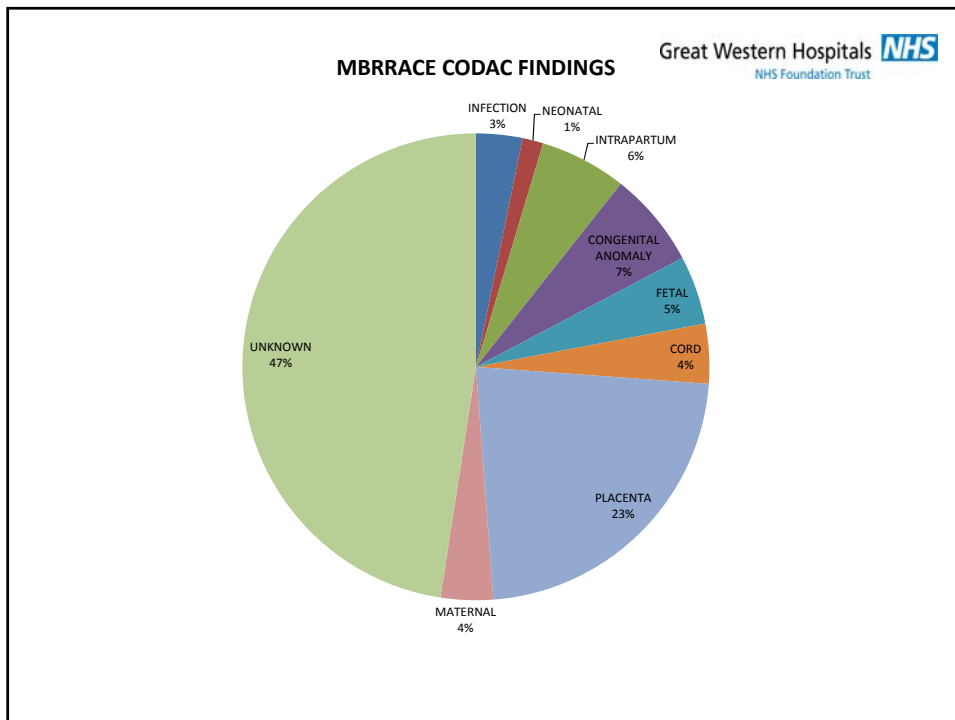
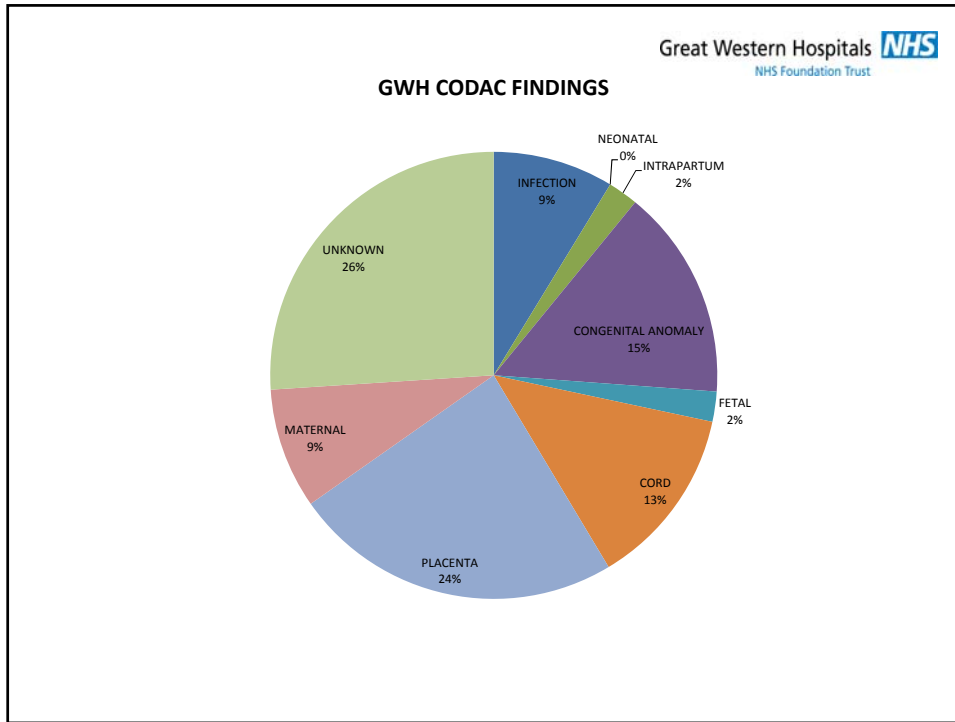
## MMBRACE 2015

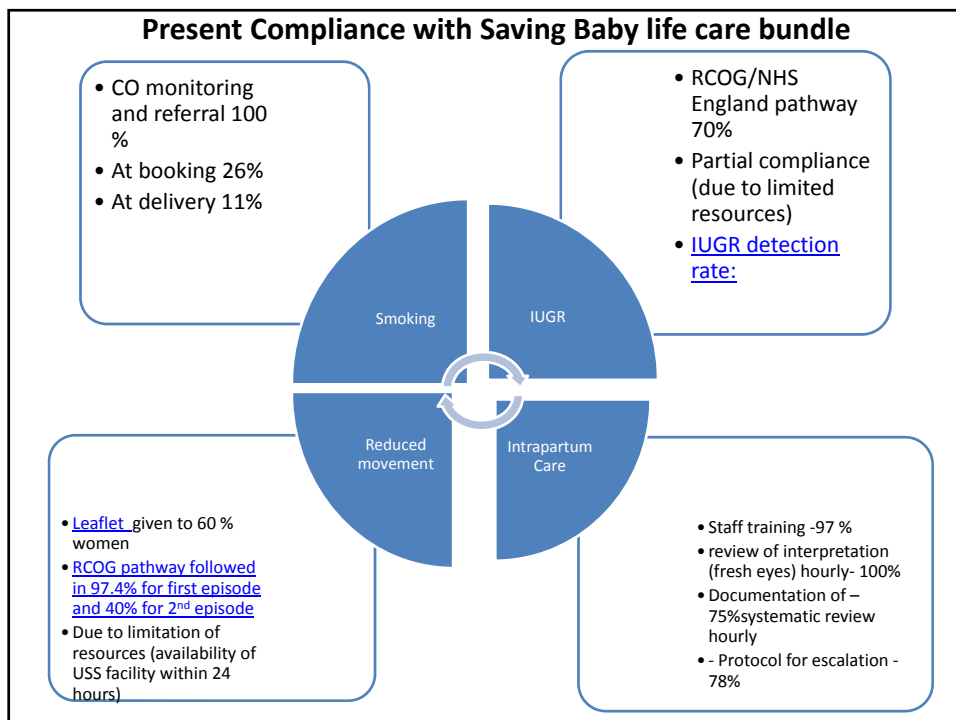
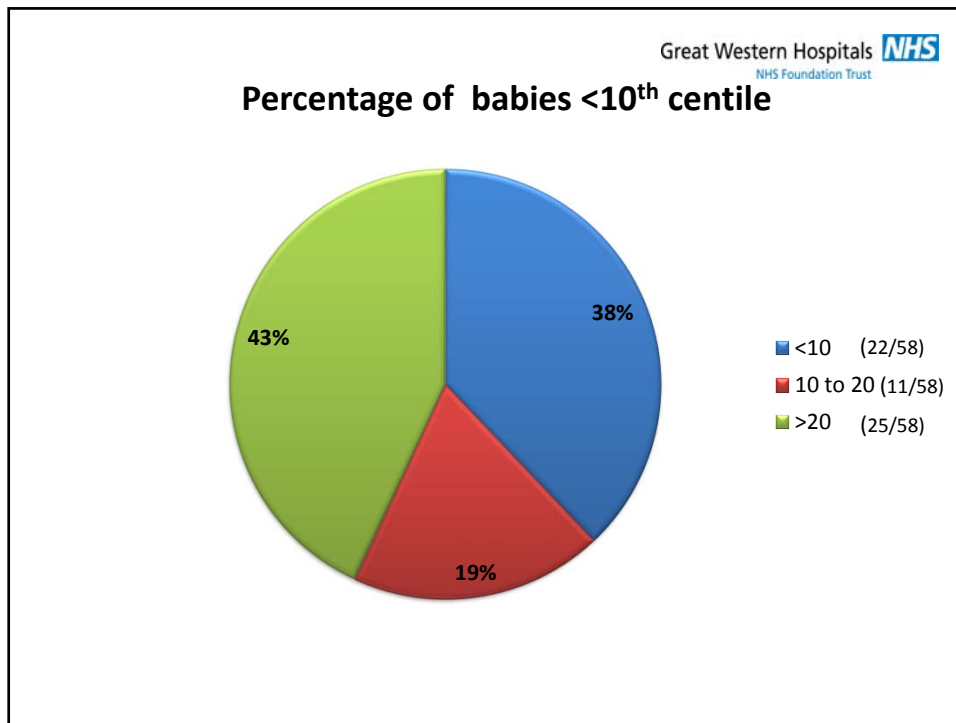
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Swindon	2,951	1.69	3.72 (3.09 to 4.34)	2.72	2.14 (1.42 to 3.22)	4.41	5.83 (5.08 to 7.15)
Tameside and Glossop	3,204	2.18	3.75 (3.11 to 4.62)	1.25	1.55 (1.03 to 2.30)	3.43	5.25 (4.46 to 6.62)
Telford and Wrekin	2,080	3.37	3.84 (3.35 to 5.07)	4.82	2.30 (1.46 to 3.67)	8.17	6.24 (5.14 to 8.08)
Thanet	1,685	3.56	3.86 (3.28 to 4.35)	2.38	1.89 (1.19 to 2.72)	5.93	5.74 (5.13 to 6.88)
Thurrock	2,538	3.94	3.87 (3.31 to 4.51)	2.37	1.94 (1.32 to 3.05)	6.30	5.80 (5.06 to 7.51)

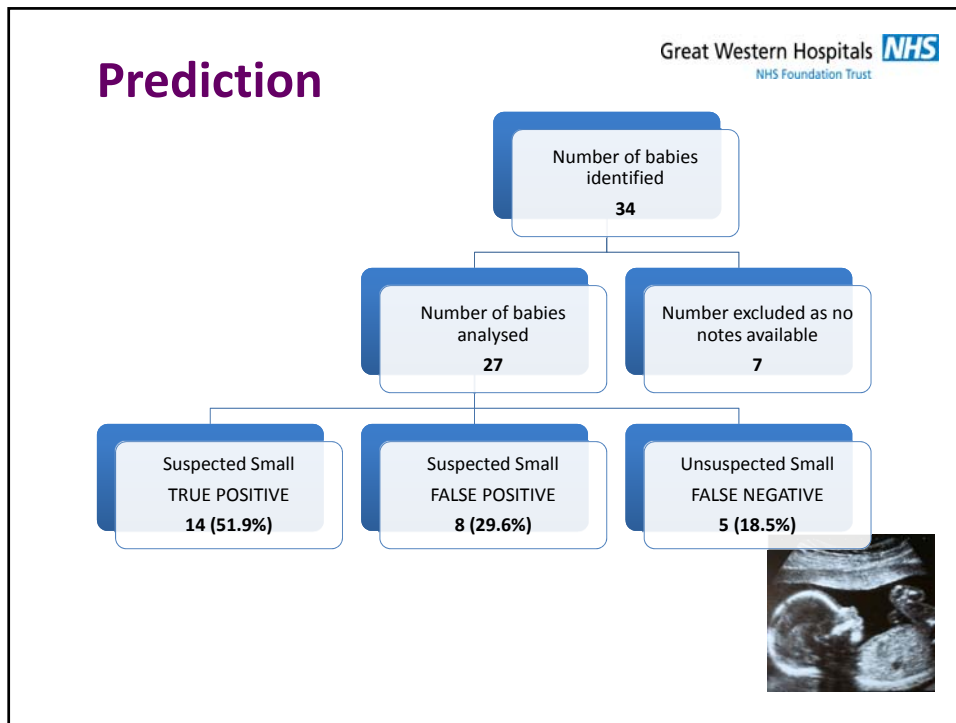













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## Feeling your baby move is a sign that they are well

Most women usually begin to feel their baby move between 16 and 24 weeks of pregnancy. A baby's movements can be described as anything from a kick, flutter, splash or roll. The type of movement may change as your pregnancy progresses.

### How often should my baby move?

There is no set number of normal movements. Your baby will have their own pattern of movements that you should get to know. From 16-24 weeks on you should feel the baby move more and more up until 32 weeks then stay roughly the same until you give birth.

**It is NOT TRUE** that babies move less towards the end of pregnancy.

You should **CONTINUE** to feel your baby move right up to the time you go into labour and whilst you are in labour too.

**Get to know your baby's normal pattern of movements.**

### You must NOT WAIT until the next day to seek advice if you are worried about your baby's movements

- Do NOT put off calling until the next day to see what happens.
- Do not worry about phoning, it is important for your doctors and midwives to know if your baby's movements have slowed down or stopped.

Do not use any hand-held monitors, Dopplers or phone apps to check your baby's heartbeat. Even if you detect a heartbeat, this does not mean your baby is well.

### Why are my baby's movements important?

A reduction in a baby's movements can sometimes be an important warning sign that a baby is unwell. Around half of women who had a stillbirth noticed their baby's movements had slowed down or stopped.

**What next...see overleaf**

For more information on baby movements talk to your midwife

**What if my baby's movements are reduced again?**

If, after your check up, you are still not happy with your baby's movement, you must contact either your midwife or maternity unit straight away, even if everything was normal last time.

**NEVER HESITATE** to contact your midwife or the maternity unit for advice, no matter how many times this happens.





Contact details:

**Health & care information you can trust**

Version 1, published in Jan 2016 under the Tommy's accredited production process ([www.tommys.org/informationstandards](http://www.tommys.org/informationstandards)).  
Review date: Jan 2019

**Sources and acknowledgements**  
The information in this leaflet is based on RCOG Green-top Guideline No. 17 Reduced Fetal Movements (2011) and NICE Patient Information Leaflet: Your baby's movements in pregnancy: information for you (2012).

Thank you to the following organisations for supporting the development of this leaflet:

## Further Analysis

- False positives learning:
  - Actually small by centile for gestation but more than 2.5 Kg
  - False negatives learning: one single scan cannot give reassurance, need to be serial
  - Smokers should have serial growth scans.

### REDUCED FETAL MOVEMENTS – How well do we manage maternal instinct?

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**INTRODUCTION**

Many studies have demonstrated an increased incidence of stillbirth in mothers who present with reduced fetal movements (RFM), with RFM often preceding consecutive fetal death.

Stillbirth remains a major cause of neonatal mortality. Its importance is highlighted in the Lancet 2012 paper which addressed all aspects of stillbirth. Treatment of reduced fetal movements was listed as one of the priorities for action in high income countries as part of the goal to decrease stillbirths in this area.

This relationship between RFM and stillbirths reported through the risk factors for stillbirth.

**METHOD**

Participants were identified from the Day Assessment Unit register at GWH. The sample included mothers who presented with RFM in the third trimester as a singleton pregnancy between 36 weeks gestation and a maximum age of 40 years.

**RESULTS**

1. There was 97.7% compliance with the RCOG guideline with regards to the management of a first presentation with RFM.
2. Mothers who presented on two or more separate occasions with RFM largely received a CTG, with only 48% receiving an ultrasound scan as per the guideline.
3. Most mothers (52%) presented only once with RFM. However, 48% presented on 2 or more occasions. These mothers will be at particular risk of stillbirth and therefore, the need for appropriate management of RFM is highlighted.
4. Neonatal outcomes were very good in the considerable majority of cases reviewed. There were 5 admissions to the SCBU overall, only one of these admissions was from a pregnancy that was induced for RFM.

**DISCUSSION AND CONCLUSION**

Compliance with the RCOG guideline (off with reduced RFM presentations, most likely due to the lack of clear advice on this issue, with management advised on most of our participants. Nonetheless, it is clear that this type of management system has not regularly affected neonatal or maternal health being reviewed. The need for a re-evaluated management guideline for RFM that was based on the best evidence available is highlighted by this study. With the implementation of a more structured pathway for RFM, the management of a more structured pathway for RFM should be reviewed in a more detailed way, leading to clearly positive outcomes.

More information about RFM should be given to mothers early during their pregnancy to ensure timely presentation and management of RFM is pursued, as indicated. Their usual RFM for review should be offered routinely when mothers present with reduced fetal movements.

Additional data to undertake in the future would include the management of other risk pregnancies.

High quality studies such as the MFMU trial are essential for ensuring best practice. The results of this trial will take us one step closer to developing a guideline to manage RFM, making the target of further reducing stillbirth rates in high-income countries, a reality.

**RESULTS**

**RISK FACTORS FOR STILLBIRTH**

**NUMBER OF SEPARATE PRESENTATIONS WITH REDUCED FETAL MOVEMENTS**

1. There was 97.7% compliance with the RCOG guideline with regards to the management of a first presentation with RFM.
2. Mothers who presented on two or more separate occasions with RFM largely received a CTG, with only 40.9% receiving an ultrasound scan as per the guideline.
3. Most mothers (52%) presented only once with RFM. However, 48% presented on 2 or more occasions. These mothers will be at particular risk of stillbirth and therefore, the need for appropriate management of RFM is highlighted.
4. Neonatal outcomes were very good in the considerable majority only once with RFM. However, 48% presented on 2 or more occasions. These mothers will be at particular risk of stillbirth and therefore, the need for appropriate management of RFM is highlighted.

of cases reviewed. There were 5 admissions to the SCBU overall, only one of these admissions was from a pregnancy that was induced for RFM.

## Reflection: Have we made difference?

- Our SB rate is 10% lower than national average
- IUGR and Reduced RFM remains the main themes and need to improve surveillance in these two areas even further
- Allocation of more resources/scanning capacity to meet the vision for reducing by 50% by 2030
- CQUIN 2016 ( SB (crude)= 2.39/1000)

## Acknowledgement

- Maxine Sleath
- Lisa Kirk
- Emily Hotton
- Ines Clement

## References

- <https://www.england.nhs.uk/wp-content/uploads/2016/03/saving-babies-lives-car-bundl.pdf>
- <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg31/>
- <https://www.npeu.ox.ac.uk/mbrance-uk>
- <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg57/>

Any Questions?