A 1-YEAR OBSERVATIONAL STUDY ON THE ASSOCIATION BETWEEN SAVING BABIES' LIVES CARE BUNDLE VERSION 2 AND THE DETECTION OF FOETAL GROWTH RESTRICTION AT A LONDON TEACHING HOSPITAL

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INTRODUCTION:

In 2015, the United Kingdom set a national goal to reduce the number of stillbirths and neonatal deaths by 50% by the year 2030. To address this, a care bundle known as Saving Babies' Lives Care Bundle Version 2 (SBLCBv2) has been developed which includes a key risk assessment and surveillance tool to identify foetal growth restriction (FGR) in the antenatal period. This tool involves stratifying these women into high or moderate risk groups for developing FGR, based on certain risk factors in a mothers medical history at the time of booking or mid-trimester anomaly scan. Based on their risk, women are subsequently offered surveillance serial ultrasound scans every 2-4 weeks with the hope of improving perinatal outcomes.

AIM:

The aim of our study was to assess the link between SBLCBv2 risk assessment and subsequent appropriate identification of FGR in our patient cohort.

DESIGN:

Retrospective observational study on all pregnancies delivered at Northwick Park Hospital (NPH) Maternity Department from 1st January 2021 to 31st December 2021 with FGR babies, as defined by the Foetal Medicine Foundation (FMF) (≤3rd centile).

METHODS:

- 3943 women delivered after 24 weeks at NPH between our study dates.
- The FMF birth weight assessment tool was used to calculate the birth weight centile for all these babies.
- 196 babies were identified to have a birth weight which was ≤ 3rd centile.
- Data on risk factors to classify pregnancies as being moderate or high risk, as per the SBLCBv2 at booking, was obtained.
- Data was collected through CMiS maternity electronic system and Sunquest ICE, anonymised, and collated in Excel.

RESULTS:

- 4.9% of all babies born in 2021 at NPH had shown FGR.
- From these, 27% of mothers had a high risk factor identified at booking as per SBLCBv2 and 17% had a moderate risk factor.
- The most common risk factors included: a previous FGR baby, previous SGA, previous hypertensive disorder and smoking in current pregnancy.
- In our study, being placed on the SBLCBv2 was associated with increased probability of appropriate detection of FGR (OR 3.14, 95% CI 1.66 to 5.93; p = 0.0039).
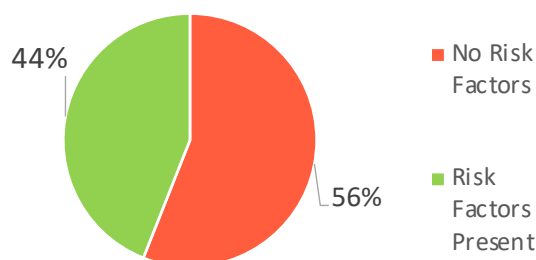
### % of patients appropriately placed on the SBLCBv2 pathway:

- 6% No
- 94% Yes
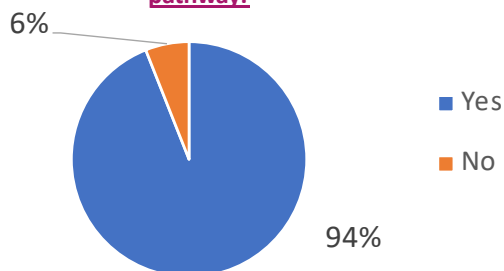
Of the patients appropriately placed on the SBLCBv2, % of patients delivered for indication of FGR:

- 43% Yes
- 57% No
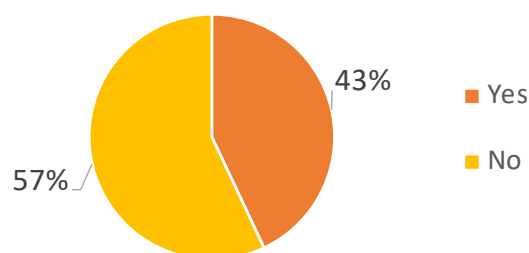
% of mothers that delivered FGR babies that exhibited NO RISK FACTORS as per the SBLCBv2 pathway:

- 56% No Risk Factors
- 44% Risk Factors Present

% of mothers that exhibited no risk factors who were delivered for the indication of FGR:

- 24% Delivered for FGR
- 76% Not Delivered for FGR
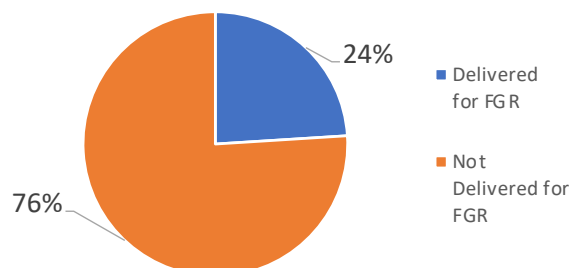
CONCLUSION:

- Being placed on the SBLCBv2 pathway can be associated with an increased probability of appropriate detection of FGR.
- However, more than half of mothers that delivered FGR babies did not meet the criteria to be placed on the pathway.
- Another method, or an improved method, is required to increase the proportion of FGR births appropriately identified.