

Objective

Evaluating the use of the GAP to attain a key standard set by NHS England’s Saving Babies’ Lives Care Bundle, Version Two.

Background

The NHS Long Term Plan is committed a 50% reduction in stillbirth, maternal mortality, neonatal mortality and serious brain injury and a reduction in preterm birth rate by 2025.

- GAP was implemented at Chelsea and Westminster Hospital (CWH) to attain the 2nd standard of the Saving Babies Lives V2 care bundle: The risk assessment, prevention and surveillance of pregnancies at risk of fetal growth restriction (FGR).



Design

A retrospective audit of births was conducted during April to June 2021 asked 5 questions:

- What proportion of babies were born small for gestational age (SGA) <3rd or 10th Centile?
- What was the antenatal detection rates of babies born SGA?
- What proportion of pregnancies were identified as high risk at booking?
- Was aspirin prophylaxis^{1,2} given appropriately for PET or low PAPP-A?
- What was the false positive detection rates of babies born SGA?

Method

All investigators, including a dedicated GAP midwife, obtained data from:

- Paper & Electronic records on K2 Medical Systems™, Cerner ©, Evolve electronic medical record (EMR) system and CMIS.
- Microsoft Excel to record & analyse data.

Table 1: False positive rates (FPR) SGA detection April – June 2021.

EFW (g)	Centile on scan	Actual Birth Weight	Centile at birth
2780	10th	3142	13.3
2298	<10th	2472	12
2512	<10	2480	13.7
2289	<3 rd	2562	11.7
2587	>12 th	2980	33.4
2363	<10	2670	13.8
2512	<10	2480	26

31 births with anticipated SGA on scan.
7 had a normal birth weight, 22% FPR.

Results

- CWH had a low SGA birth rate from April to June 2021 of 3.4%.
- Antenatal detection rate of SGA fetus, approximately 62%, above national average.
- Majority of undetected SGA cases had a low maternal PAPP-A level.
- CWH had a low false positive rate 22%.
- Poor documentation of aspirin use.

Conclusion

GAP implementation at CWH has resulted in a high detection rate of SGA and low false negative rate, supporting the NHS commitment to reduce stillbirth rate by 50% by 2025.

References

- Morris et al. *Prenat. Diagnosis.* 2017 Mar;37(3):253-265. doi: 10.1002
- Roberge et al. *Am J Obstet Gynaecol* 2018 Mar;218(3):287-293.e1. doi: 10.1016