

Are we compliant to Saving babies' life bundle 3? A small for gestational age Re-Audit

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Introduction:

Severe small for gestational age refers to those babies whose birth weight is less than the 3rd centile.

NHS England introduced the Saving Babies Life bundle 3 in July 2023. It encompasses six elements of care that are aimed towards reduction of stillbirth and perinatal morbidity

- 1. Reducing smoking in pregnancy
- 2. Risk assessment, prevention and surveillance for fetal growth restriction
- 3. Raising awareness of reduced fetal movement
- 4. Effective fetal monitoring during labour
- 5. Reducing preterm birth
- 6. Management of pre-existing diabetes in pregnancy for women with Type 1 or Type 2 diabetes

Methods:

- All mothers who delivered babies with birth weights less than 3rd centile at term in January 2023 to March 2023 were included in the study.
- A total of 26 patients had delivered severe SGA babies.
- Retrospective study was done including risk assessment, antenatal care and follow-up, delivery and perinatal outcome.
- The results were tabulated and analyzed.

OXFOG 2022

Are we compliant to the “Saving Babies Life bundle 2”?- small for gestational age (SGA) audit

Introduction

- “Saving Babies Life bundle 2” introduced in March 2019, encompasses five elements of care that are aimed towards reduction of stillbirth and perinatal morbidity.
- Reducing smoking in pregnancy, risk assessment, prevention and surveillance for fetal growth restriction and raising awareness of reduced fetal movement were focused in this audit.

Objective

- To check compliance of maternity department Royal Berkshire Hospital with “Saving Babies Life bundle 2”.

Methods

All mothers who delivered severe small for gestational age (SGA) babies (birth weights less than 3rd centile) in April 2022 to June 2022 were included in this audit.

Retrospective review through electronic patient record (EPR) was done for a total of 21 patients.

Results

- **Demographics:** Majority of the patients belonged to age group 31-40 years. 62% of patients were from BAME group, an over-representation.
- **SGA risk:** Assessed in all patients at booking but was wrongly documented as 'not done' in 3 patients' records.
- **Smoking status:** Checked for all women at booking. Smokers (14%), were managed in antenatal period with growth scans as per hospital policy.
- **CO monitoring:** At booking only 29% and further reduced at 36 weeks (9%).

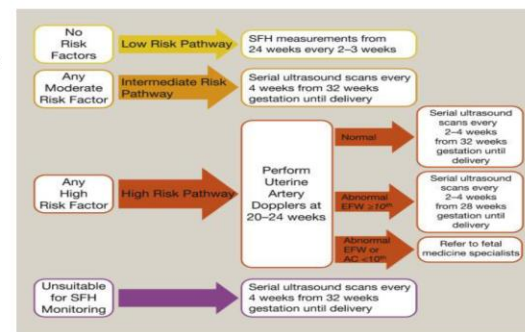


Results (continued)

- **Kick-count discussion** by 28 weeks 100%
- **Attendance with reduced fetal movements:** 38%. All had DR CTG.
- **Growth scans:** 52% patients had no further scans after anomaly scan. 33% had scans within 4 weeks of delivery. Difference between estimated fetal weights from ultrasound and birth weights were within 20% for all women who underwent growth scans.
- **Onset of labour:** 62% spontaneous, 10% augmented and 5% induced. 23% never laboured.
- **Caesarean section:** Rate in our trust was 23% during the audit period while its rate among the women who had SGA babies was increased (48%). 1 planned caesarean section for known SGA baby. 9 emergency caesarean sections.
- **Indication among emergency caesarean deliveries:** suspected fetal compromise (67%), abnormal lie or presentation (22%) and failure to progress in labour (11%).
- **Gender of SGA babies:** no difference (females 53%, males 47%).
- **Neonatal ICU admission:** 1
- **All cord gases** were found to be within normal range.
- **Blood sugar results of babies:** not documented in 29% of cases

Recommendations

- Growth centile chart to be included on EPR.
- Increased routine USS surveillance for women from BAME group.
- Highlight blood sugar documentation for babies.
- SGA risk assessment on EPR needs to be more structured rather than yes or no



SGA risk assessment

Other
 High risk
 Moderate risk
 Low risk

Epilepsy
 IMB g (a) measurement for rhinog to prog to delivery
 None identified

Other Risk Factors

2 or more Moderate risk factors above
 Previous SGA
 Previous stillbirth
 Hypertensive disease in a previous pregnancy
 Previous FPH
 Maternal medical conditions
 None identified

High Risk Factors

SFH is 2cm below expected age
 Women < 35 years of age
 Drug misuse
 Current smoker at booking (any)
 None identified

Moderate Risk Factors

Reason for assessment: Maternity booking

NHS: MRI: 23448145
 2227EST-MIDWIFEER' 06

SGA/FP Risk Assessment

- Assess for complications
 - Reassess at 28 weeks and after any antenatal admission

Clinical Prompt

NIL
 previous
 Assess for history of placental dysfunction and consider aspirin 120mg at night < 16 weeks as appropriate
 previous
 Assess for history of placental dysfunction and consider aspirin 120mg at night < 16 weeks as appropriate
 previous

Chronic Conditions: Heart Disease, Diabetes, Hypertension, Chronic Kidney Disease
 Maternal Medical Conditions

No
 Yes

SGA/FP Risk Assessment completed

Smoking cessation referral:

Smoking cessation referred:

Booked for day at:

Date stopped smoking:

Consented what to give:

Consent to perform Carbon Monoxide:

Are you able to perform Carbon Monoxide:

Carbon Monoxide:

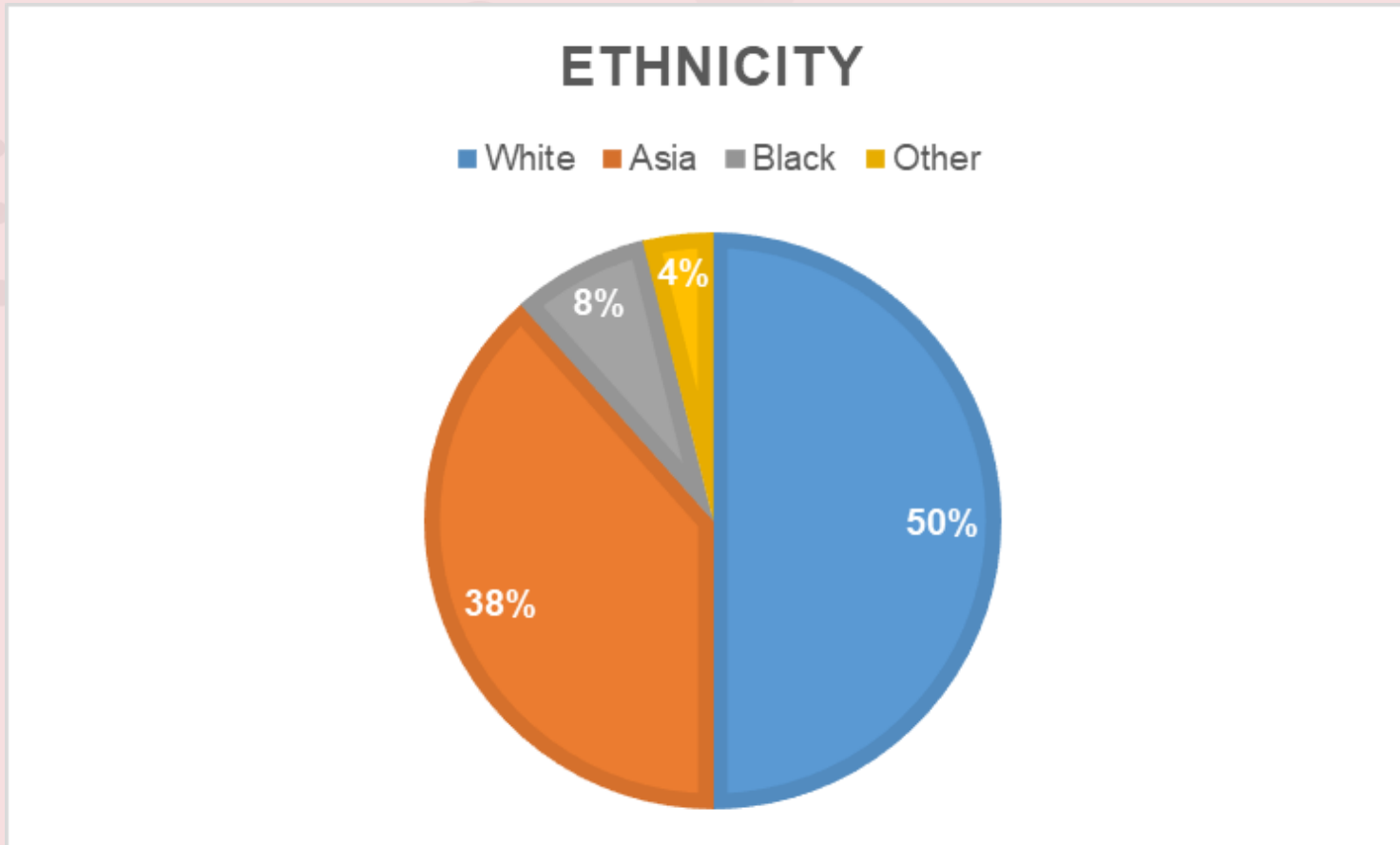
Monoxide comments:

NHS: MRI: 23448145
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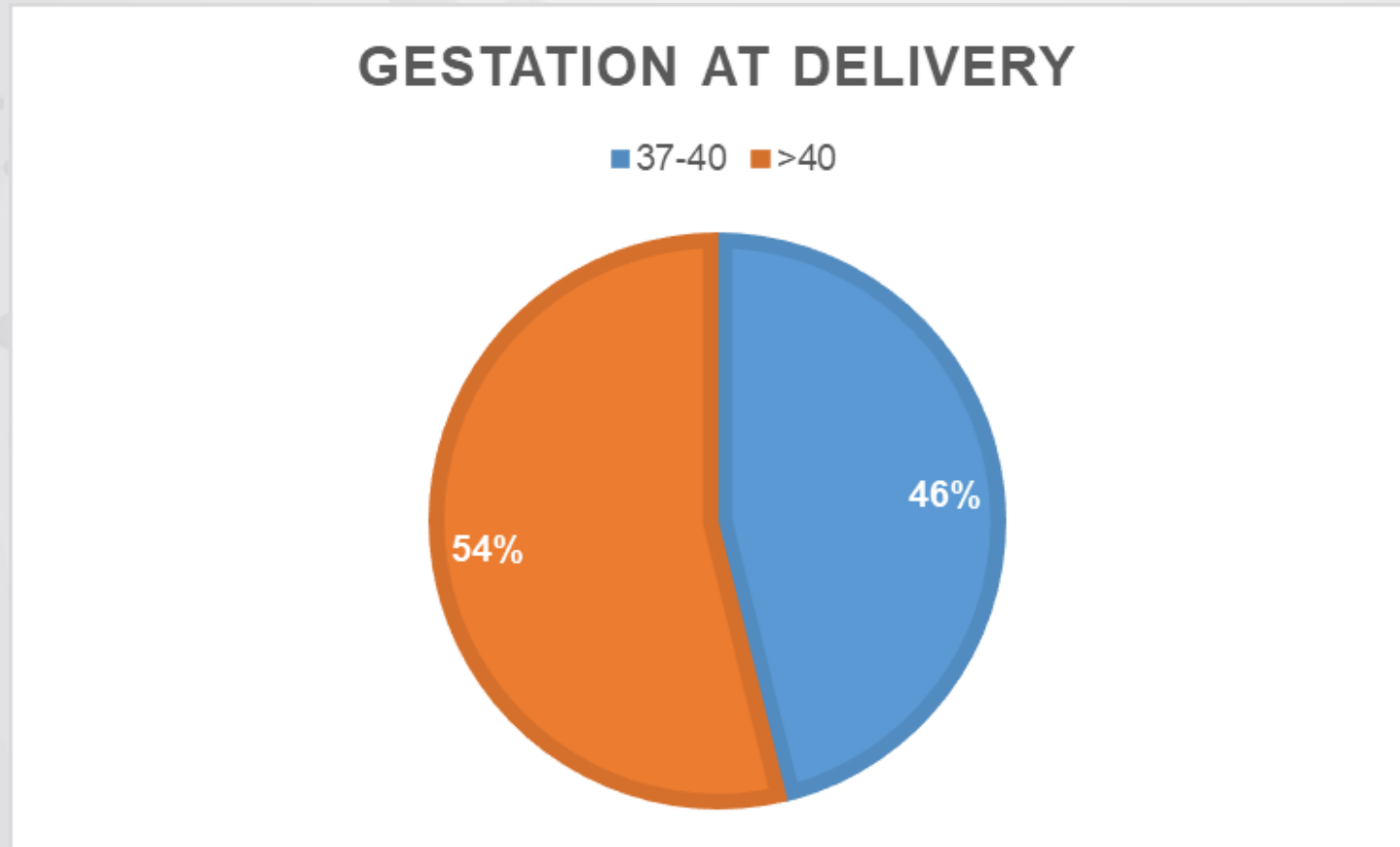
Smoking \ Alcohol Details

for completion
 the below comes up
 When yes is selected

Ethnicity



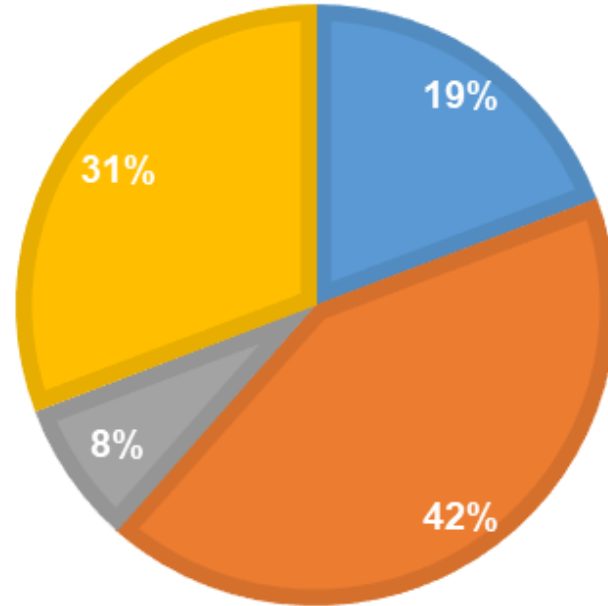
Gestation at delivery



Ultrasound monitoring

ULTRASOUND MONITORING

■ <1 ■ 1 to 4 ■ >4 ■ Anomaly scan

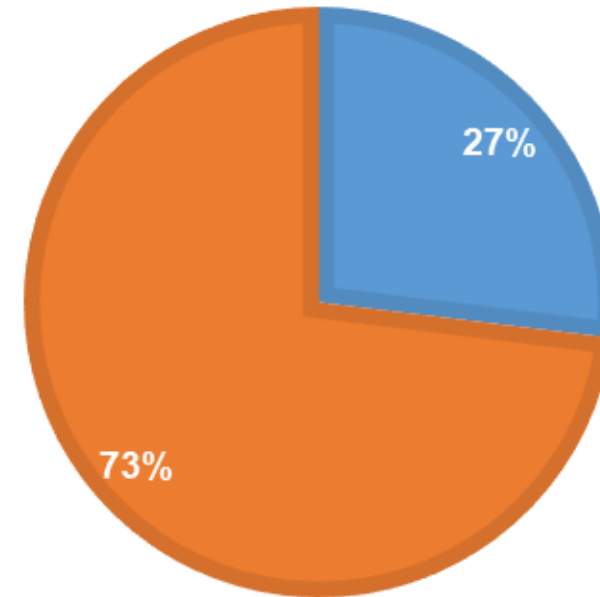


SGA at delivery

- Difference between USS EFW and birth weight were within 20% for all women who underwent growth scans.
- 17 women had undergone growth scans, all had dopplers done as well.
- 7 of them were picked up as AC/EFW <10% and were correctly followed up in SGA/FM clinic.

SGA AT DELIVERY

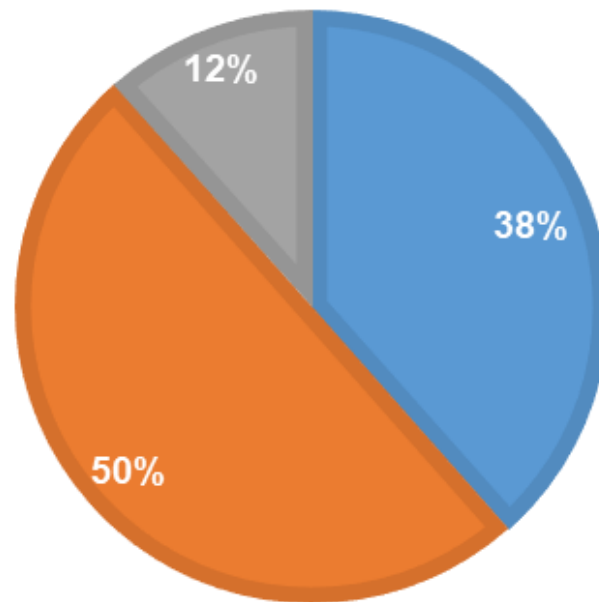
■ Known SGA ■ SGA not known



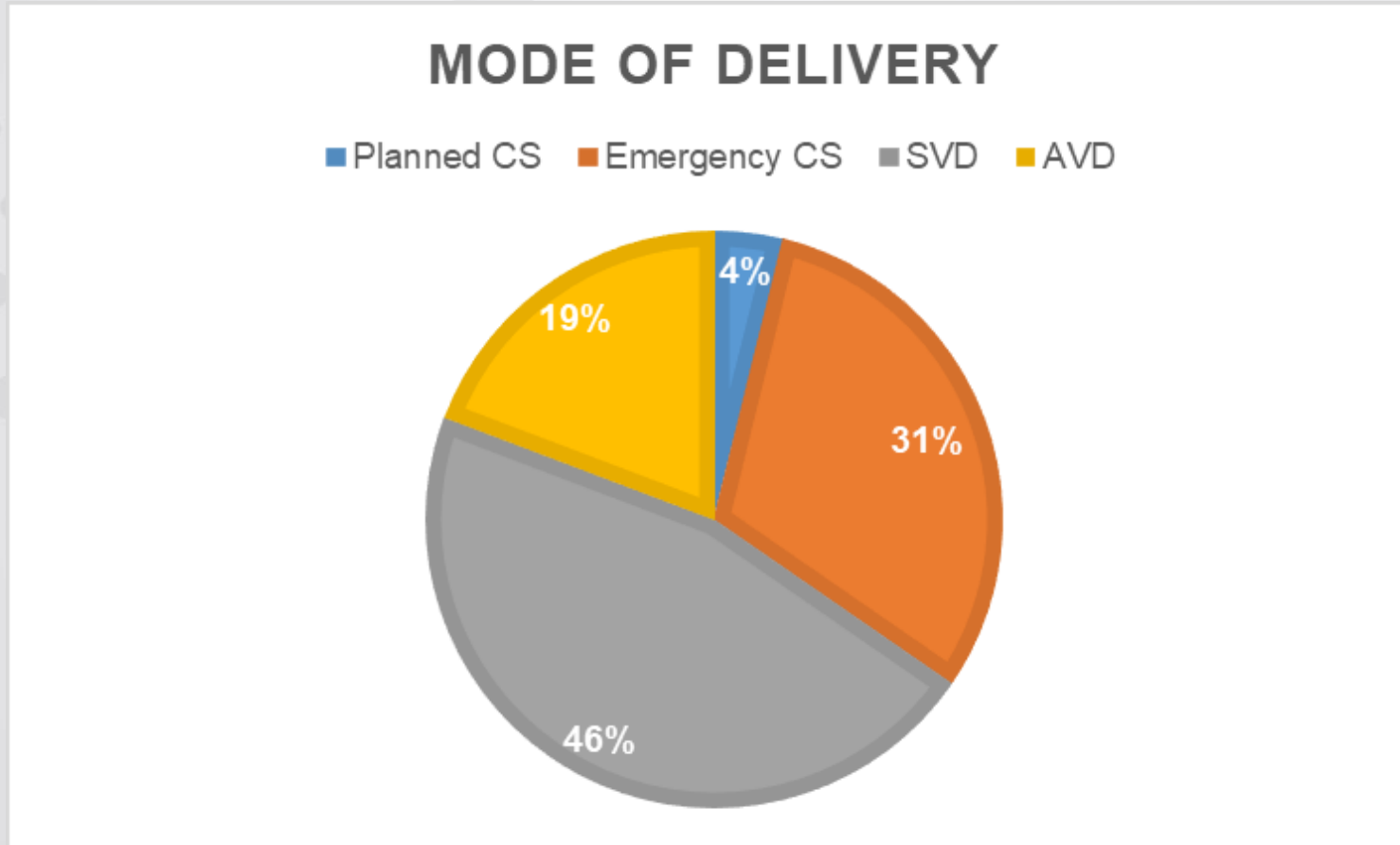
Onset of labour

ONSET OF LABOUR

■ SOL ■ IOL ■ Never laboured



Mode of delivery



Smoking Status

Smoking status	(n = 26)
Booking	100% (26)
Smoking status checked	
Booking	7%(2)
Current Smoker	
Booking	16%(4) 1 started smoking by 36 weeks
Ex Smoker	
Booking	77%(20)
Non Smoker	

CO monitoring

CO monitoring	(n = 26)
Booking	73% (19)
36 weeks	88% (23)

SGA risk assessment

- SGA risk assessment was done for all but wrongly documented as “not done” for 3
- Risks identified :
 - Smoker – 3 (3 ex smoker)
 - Age – 2
 - Low PAPP-A-1
 - Fibroids-1
 - Hypothyroid-2
 - Previous SGA-3

Antenatal attendance and fetal monitoring

	(N = 26)
Kick count discussion by 28/40	100%
Attended DAU with RFM	46%(12) 1 attended multiple time with RFM but had no growth scan done.
DR CTG on AN admission/DAU	100%

Neonatal outcome

- All cord gases were normal except 1
- 1 BUSCOT admission: required CPAP. Discharged the next day with diagnosis of transient respiratory distress, received 48 hours of antibiotics.

	(N = 26)
BM Check	61% (16)
BM >2	100% (16)
Resuscitation	8% (2)

Analysis

- 50% of patients were from BAME group
- The CS rate in our trust is 23%.The CS rate among the women who had SGA babies was 35%
- 65% women had growth scans, 27% were known SGA at delivery (40% of women who were scanned).
- The CO monitoring at booking was 73% and at 36 weeks was 88%
- All women had kick-count discussion by 28 weeks.
- SGA risk was assessed in all but was documented as 'not done' in 3 patients
- All patient had DR CTG during AN admission
- Baby BM result was not documented in 39%

Recommendations

1. Increased routine USS surveillance for women from BAME group
2. Performing BM and documenting them for babies
3. Consider growth scan if multiple attendances with reduced FM
4. Continue to improve CO monitoring

Thank you for your attention