

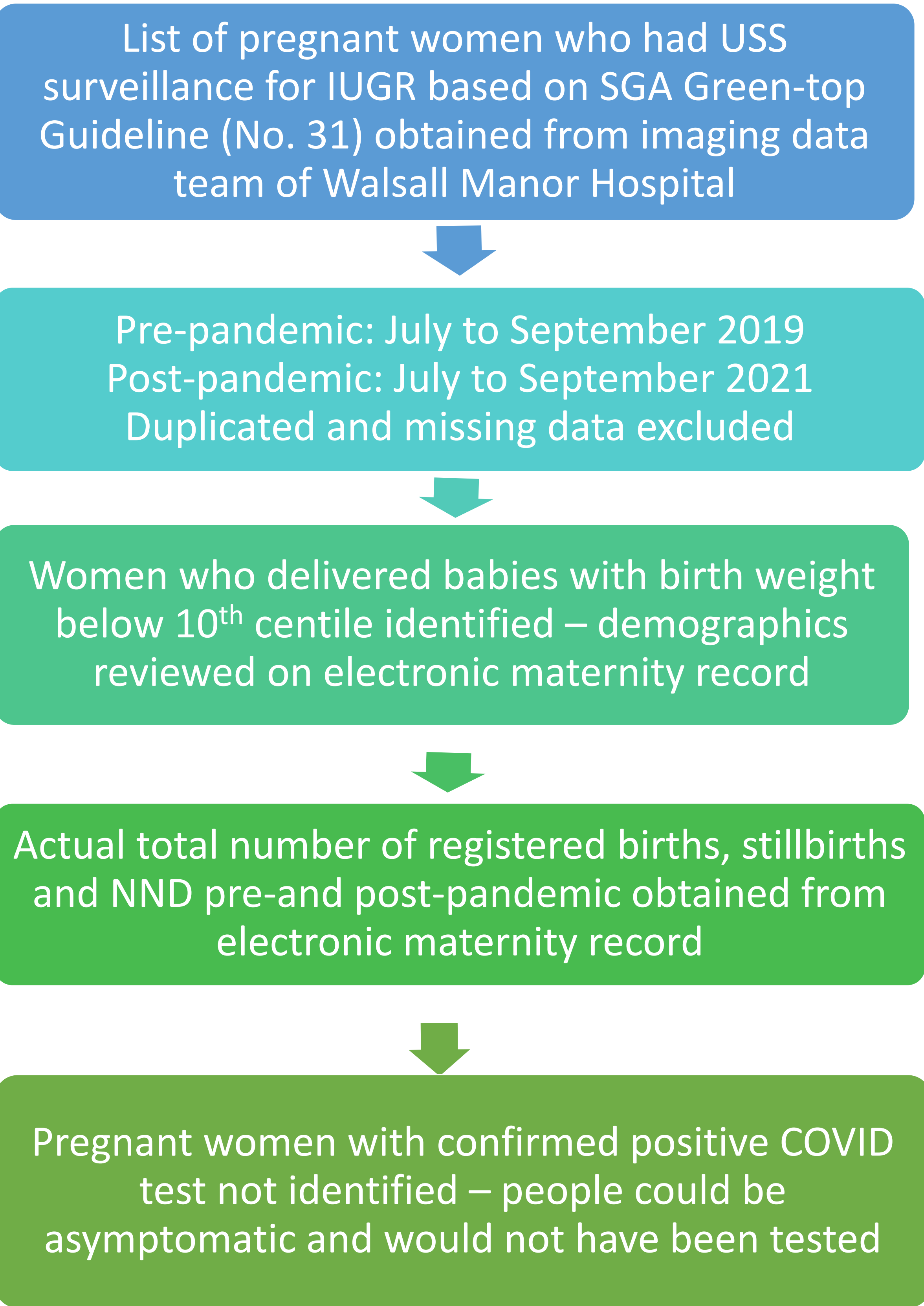
Intrauterine Growth Restriction (IUGR): The Silent Killer in COVID's Arsenal

Liaw YY¹, Hassan A², Thomas T², ¹The Royal Wolverhampton NHS Trust, UK, ²Walsall Healthcare NHS Trust, UK

Aim

To evaluate incidence of IUGR, stillbirths, and neonatal deaths (NND) before and after onset of COVID pandemic.

Methodology



Results

Table 1: Demographic profiles of women with antenatally detected IUGR babies pre- and post-COVID period.

	Pre-COVID (n = 431)	Post-COVID (n = 393)
Maternal age ≥40	2%	4%
Primigravida	24%	20%
Multiple pregnancy	2%	3%
Previous SGA	41%	34%
Previous PIH/PET	6%	4%
Smoker	39%	35%
Substance use	6%	3%
Chronic HTN	2%	1%
CKD/SLE/APLS/heart disease	0%	0%
Diabetes	0%	2%
BMI >35	6%	18%
Pregnancy interval >10y	4%	2%
FHx of PET	7%	5%

Table 2: Number of babies born with birth weight below the 10th and 3rd centile among women who had regular growth scans during pre- and post-COVID period.

	Pre-COVID (n = 431)	Post-COVID (n = 393)
Babies with birth weight below 10th centile (IUGR)	54 (12.53%)	102 (25.95%)
Babies with birth weight below 3rd centile (severe IUGR)	15 (3.48%)	49 (12.50%)

Table 3: Number of total registered births, antenatally detected IUGR, actual total number of IUGR, stillbirths, and NNDs during pre- and post-COVID period.

	Pre-COVID (July-Sept 19)	Post-COVID (July-Sept 21)
Registered births	957	982
IUGR babies captured on USS	54	102
Actual total number of IUGR babies	81	144
Stillbirth	5	6
NND	2	0



Conclusions

Similar profiles between pre- and post-COVID groups apart from 12% increase of BMI above 35kg/m² in post-COVID group.

A significant rise in incidence of IUGR among pregnant women after COVID pandemic outbreak.

Traditional-risk-assessment-based ultrasound screening resulted in 42 IUGR babies being missed during pandemic, as opposed to 27 babies in pre-pandemic period.

Recommendations

Women with maternal COVID infection require enhanced antenatal vigilance.

Rapid adaptations need to be made to existing screening criteria when the world is faced with similar health emergencies in the future.

Abbreviations: SGA: small for gestational age, PIH: pregnancy-induced hypertension, PET: preeclampsia, HTN: hypertension, CKD: chronic kidney disease, SLE: systemic lupus erythematosus, APLS: antiphospholipid syndrome, BMI: body mass index, FHx: family history