

Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board



Meeting Date	24 October 2		Agenda Item 3	
Report Title	Screening for Fetal Growth in line with Gap Grow			
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Presented by	Susan Jose, Interim Head of Midwifery			
Freedom of Information	Open			
Purpose of the Report	This report provides the Committee with a summary in respect of activity relating to the maternity services screening for small for gestational age babies with the aim of reducing the risk of stillbirth or long term morbidity.			
Key Issues	The Health Board's maternity services due to limited obstetric ultrasound capacity is unable to fully implement the Birmingham Perinatal Institute Growth Assessment Protocol (GAP) and Gestation Related Optimal Weight (GROW) programme. This poses a risk of litigation to the Health Board.			
Specific Action	Information	Discussion	Assurance	Approval
Required (please choose one only)	x			
Recommendations	<ul> <li>Members are asked to:</li> <li>NOTE the contents of the report</li> </ul>			

## SCREENING FOR FETAL GROWTH IN LINE WITH GAP GROW

#### 1. INTRODUCTION

The purpose of this paper is to discuss the current risks to the Health Board as its maternity services have not been able to fully implement screening for small for gestational babies due to limited obstetric ultrasound capacity.

# 2. BACKGROUND

Since 2014, a requirement by Welsh Government was for all Health Boards in Wales to implement the Growth Assessment Protocol (GAP) and Gestation Related Optimal Weight (GROW) with the primary aim to reduce the stillbirth rate. It was recognised that the stillbirth rate in Wales in the preceding 10 years had remained at a constant 5 per 1,000 births which was higher than other European countries. Swansea Bay University Health Board's maternity services (formerly ABM University Health Board) partially implemented GAP/GROW in 2016.

GAP/GROW developed by Birmingham Perinatal Institute Maternal and Child Health recommends its use to enable early identification and appropriate management of small for gestational age babies with the aim of reducing stillbirth. Fetal growth restriction resulting in small for gestational age babies is associated with:

- Stillbirth
- Neonatal deaths
- Perinatal morbidity
- Sudden Infant Death Syndrome
- Cerebral palsy.

## 2.1 Fetal growth assessment

The use of customised charts predicts the growth potential of each baby and displays the gestation related optimal weight curves (GAP/GROW). This is done by adjusting for known constitutional / physiological variables (maternal height, weight, ethnic origin and parity), and excluding pathological factors such as smoking and diabetes. As a result, GROW charts are better at identifying pathological growth and confirming when growth is normal than any population based chart.

#### Low risk women

Women who have no risk factors for having a small for gestational age baby will have routine antenatal care with their community midwife. Fetal growth is assessed by measuring the fundal height (of the uterus) with a tape measure and plotting the measurement on the individualised growth chart. If the community midwife identifies reduced fetal growth the woman will be referred for a fetal growth scan and the appropriate care plan put in place.

<u>Women at increased risk of having a small for gestational age baby</u> GAP/GROW has a large criteria list which identify women with an increased risk of having a small for gestational age baby. These women are offered serial growth scans from 28 weeks gestation repeated 3 - 4 weekly up to the baby's birth. These women will not require fundal height measurements.

Due to limited obstetric ultrasound resources, the Health Board has not fully implemented GAP/GROW. The following criteria has not been adopted by the Health Board:

- GAP/GROW criteria state that serial growth scans should be offered to all women who smoke, regardless of number (the Health Board offers serial growth scans to women who smoke 20 or more a day)
- PAPP-A < 0.415 MoM (a biochemical marker identified in the First Trimester Screening for Down's Syndrome blood test).

# 2.2 Monitoring of GAP/GROW within the Health Board's maternity services

Since May 2019 the Health Board's maternity services has commenced an audit of missed cases of small for gestational age babies. A common theme emerging is that women who smoke less than 20 a day, who were not offered serial growth scans as Health Board policy states, have given birth to small for gestational age babies.

## 3. GOVERNANCE AND RISK ISSUES

Obstetric ultrasound scan use within the Health Board has increased significantly following the introduction of All Wales care pathways in relation to altered fetal movements and implementation of GAP/GROW. The Superintendent Sonographer (Singleton Hospital) has reported ultrasound scanning requests from the obstetric service in Singleton Hospital is in excess 18,500 scans per annum. For this reason, the Health Board's maternity services are not able to fully implement the GAP/GROW criteria for offering serial growth scans due to limited obstetric ultrasound scan capacity.

#### 3.1 Smoking in pregnancy

The associated risk to the Health Board with the non-offer of serial growth scans to women who smoke less than 20 a day (where there are no other risk factors) is recorded on the Health Board's Obstetric and Corporate Risk Register. The clinical risk is that a woman who smokes less than 20 a day is not offered serial growth scans and then may suffer a stillbirth or adverse perinatal outcome with long term morbidity; the baby following birth maybe diagnosed as small for gestational age which is likely to be a contributing factor. This is extremely distressing for the woman and her family, more so when they are made aware that she had a risk factor for having a small for gestational age baby which increases her risk of stillbirth or adverse outcome and had not been offered serial growth scans. The Health Board is at financial risk due to litigation.

## 3.2 PAPP-A < 4.015 MOM

Antenatal Screening Wales endorses the UK National Screening Committee's decision not to recommend routine PAPP-A screening to detect small for gestational babies. Antenatal Screening Wales however does state the following for women who have received First Trimester Screening for Down's syndrome blood test where a low PAPP-A is identified:

"The PAPP-A levels are available for some women, clinicians can use this information as part of the overall risk assessment as the women continue through their antenatal care pathway".

The RCOG Green Top Guidance for detecting small for gestational age (SGA) babies specifies a low PAPP-A as a major risk factor for small for gestational age. As the obstetric ultrasound service does not have the capacity to provide serial growth scans to women with a low PAPP-A, this places obstetricians in an extremely difficult position when determining the woman's care plan. It also poses ethical questions when this information and the associated risks of a low PAPP-A is withheld from the woman.

The Health Board's maternity services has this year received a formal complaint from a pregnant woman who was aware that she had a low

PAPP-A but was not offered serial growth scans, adding that another Health Board in Wales could offer this.

Again, the clinical risk is that a woman who has a low PAPP-A (less than 0.415 MoM) is not offered serial growth scans and then may suffer a stillbirth or adverse perinatal outcome with long term morbidity; the baby following birth maybe diagnosed as small for gestational age which is likely to be a contributing factor. This is extremely distressing for the woman and her family, more so when they are made aware that she had a major risk factor for having a small for gestational age baby which increases her risk of stillbirth or adverse outcome and had not been offered serial growth scans. The Health Board is at financial risk due to litigation.

A PAPP-A risk assessment has been completed which will be submitted to the Risk Register Group.

# 4. FINANCIAL IMPLICATIONS

The Interim Head of Midwifery is in the process of arranging a meeting with senior radiology managers to discuss and agree the way forward. Topics of discussion will include:

- Prudent maternity care, i.e. ensuring all requests for obstetric scans are essential
- Financial resources to provide additional ultrasound capacity
- Financial loss to the Health Board as a result of litigation.

# 5. RECOMMENDATION

The Committee is requested to note the contents of the report.

Governance ar	nd Assurance				
Link to	Supporting better health and wellbeing by actively	promoting and			
Enabling	empowering people to live well in resilient communities				
Objectives	Partnerships for Improving Health and Wellbeing				
(please choose)	Co-Production and Health Literacy				
	Digitally Enabled Health and Wellbeing				
	Deliver better care through excellent health and care services achieving the outcomes that matter most to people				
	Best Value Outcomes and High Quality Care				
	Partnerships for Care				
	Excellent Staff				
	Digitally Enabled Care				
	Outstanding Research, Innovation, Education and Learning				
Health and Care Standards					
(please choose)	Staying Healthy				
	Safe Care	$\square$			
	Effective Care	$\square$			
	Dignified Care				
	Timely Care				
	Individual Care				
	Staff and Resources	$\boxtimes$			
Quality, Safety and Patient Experience					
The report makes reference to a formal complaint from a pregnant woman who was					
not offered serial growth scans in line with GAP/GROW criteria.					
Financial Implications					
No implications for the Committee to be notified of at this time.					
Legal Implications (including equality and diversity assessment)					
No implications for the Committee to be notified of at this time					
Staffing Implic	ations				
No implications for the Committee to be notified of at this time.					
Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)					
	for the Committee to be notified of at this time.				
Report History	Standing agenda item for Quality and Safety Comm	ittee meetina.			
Appendices	None				