Growth Assessment Protocol (GAP): Outline Specification - 2016/17

INTRODUCTION AND BACKGROUND

Fetal growth restriction (FGR) is associated with stillbirth, neonatal death and perinatal morbidity. Confidential Enquiries have demonstrated that most stillbirths due to fetal growth restriction are associated with suboptimal care and are potentially avoidable. A recent epidemiological analysis based on the comprehensive West Midlands database has underlined the impact that fetal growth restriction has on stillbirth rates, and the significant reduction which can be achieved through antenatal detection of pregnancies at risk. Customised assessment of birthweight and fetal growth has also been recommended by the RCOG since 2002 and is re-emphasised in the 2013 revision of the Green Top Guidelines.

The Perinatal Institute (PI) provides tools for assessment of fetal growth and birth weight by defining each pregnancy's growth potential through the Gestation Related Optimal Weight (GROW) software, including

- GROW-chart: customised antenatal charts for plotting fundal height and estimated fetal weight.
- GROW-centile: for calculation of customised birthweight centiles - as an individual centile calculator, or as a bulk centile calculator for databases of pregnancies

The software for these applications has been freely available and used in a variety of settings, and are currently already in use in over 110 Trusts and Health Boards in the NHS as a web application. However recently completed audits in the West Midlands have shown that antenatal detection of fetal growth restriction is directly related to the degree of training and implementation of standardised, evidence based protocols. Therefore from 2013/14, continued or new provision of the software requires Trusts to be accredited in the Growth Assessment Protocol (GAP). This includes comprehensive staff training, monitoring of FGR referral / detection rates, and regular audits of FGR cases not antenatally detected to help identify system failures in fetal growth surveillance. The GAP programme has resulted in significant reductions in stillbirths in each of the NHS regions where it was widely implemented, and has been associated with recent year on year drops in national stillbirth rates in England, to their lowest levels. These successes have been recognised by successive national Patient Safety Awards in 2013, 2014 and 2015 and a BMJ Award in 2015 (www.perinatal.org.uk/awards)

This document outlines the service specification and agreement the Perinatal Institute proposes to enter with your Trust / Health Board, with respective roles and responsibilities. It is based on three main elements;

1. Training and accreditation of all staff involved in clinical care
2. Adoption of evidence based protocols and guidelines
3. Rolling audit and benchmarking of performance

GENERAL

The GROW Team at the PI would like to establish regular communication with nominated 'link persons' in each specialty, including midwifery (e.g. HOM, clinical risk manager, matron); obstetrics / MFM, ultrasound and IT. These links are intended to serve as conduits for regular communication and feedback on progress, and ensuring implementation and Trust/ Health Board ownership of the GAP programme.

1. TRAINING

Rationale: *Fetal growth restriction is one of the most common complications in pregnancy. Alongside many competing priorities, competency in fetal growth assessment is essential to ensure clinical alertness and ability to make the expectant mother aware that her baby is at increased risk because of suboptimal fetal growth. Standardised assessment improves detection and reduces unnecessary investigations.*

Aim: all care providers who are engaged in maternity care to receive instruction on

- awareness of risk factors for FGR and perinatal mortality, including medical, social and obstetric history
- principles and use of customised charts
- standardised fundal height measurement and recording on the GROW chart
- clinical implications and referral pathways

Roles and Responsibilities:

PI:

- will provide latest updates of the GROW software (stand-alone or linked to the Trust's maternity information system GROW APIs) together with ongoing helpdesk support
- rolling programme of training workshops at the PI for GAP link persons / trainers (dates available at http://www.perinatal.org.uk/diary/diary.aspx)
- provide a GAP e-learning package and competency document to assess trained staff

Trust:

- ensures GAP lead/ trainers attend annual 'train the trainers' workshops at the Perinatal Institute to cascade train with individual units with;
- at least 75% of staff engaged in maternity care and their supervisors are trained in;

    - Awareness of risk factors for FGR and perinatal mortality, including medical, social and obstetric history

- Principles and evidence for use of customised charts
- Standardised fundal height measurement technique
- GROW chart production(stand-alone or linked to the Trust's maternity information system GROW APIs)
- Plotting of fundal height measurement or estimated fetal weight onto the GROW chart either manually or auto-plotting, and referral criterion.
- generation of a customised birth weight centile

- ensures competency of staff is assessed and documented:
    - Initial face-to-face training and completion of a test paper, or completion of e-learning and fundal height measurement technique

- ongoing annual training requirements (75% of staff):
    - Face-to-face training and fundal height measurement technique, or
    - passing of the e-learning modules
    - completion of the supplied competency document

- maintain a training and competency log
- Ongoing training of GAP elements is included in Trust Training Needs Analysis (TNA)

2. PROTOCOLS

Rationale: There is currently a wide variation in protocols for risk assessment, fetal growth surveillance and referral pathways. This is often accompanied by insufficient investigations for at-risk pregnancies as a result of real or perceived shortages in ultrasound services. New national guidelines present an opportunity to implement standardised, evidence based protocols.

Aim: To assist with the implementation of:

- risk assessment and definition of low and increased risk care pathways at booking / early pregnancy according to NHS England FGR algorithm
- indications for serial scans and protocols for frequency and timing
- indications for referral for further investigations / obstetric review where required

Roles and Responsibilities:

PI:

- will provide template protocols representing the latest evidence for surveillance, referral and investigation of pregnancies suspected of fetal growth problems

Trust:

- will agree a Trust wide policy which is consistent with such guidelines
- will monitor and ensure that these are adhered to through regular audit (see 3.)
- NB protocols are not intended to replace clinical considerations in the management of individual pregnancies.

3. AUDIT

Rationale: Experience in the West Midlands has shown that 'antenatal detection' of the SGA baby is an auditable indicator and collection of this information itself promotes learning opportunities and improvement.

Aim: To establish a rolling audit programme to monitor performance, through

- the SGA / FGR rate (proportion of babies born with a birthweight below the 10th customised centile)
- rate of antenatal referral for suspected SGA / FGR and antenatal detection/diagnosis of SGA
- regular case-note audit of SGA / FGR cases that were not antenatally detected, and action plans in response to system failures

Roles and Responsibilities:

PI:

- will provide data capture tool to calculate the customised birthweight centile and record antenatal detection of abnormal growth as an integral part of the GROW software
- will provide quarterly reports to feedback and benchmark performance
- will provide a tool and training for case note audit of SGA / FGR cases not antenatally detected

Trust:

- prior to implementation the Trust will complete a valid baseline audit to determine rates of SGA, referral and detection.
- will record a customised birthweight centile for each baby
- will review quarterly reports of referral and detection rates of abnormal growth and set Trust specific targets
- undertake a six monthly case note audit and review of at least 1% of total birth or 10 cases (whichever is the higher) of SGA / FGR cases not antenatally detected

4. GAPplus

The GROW software can also be integrated with Maternity Information Systems (MIS) through a set of standard software links called 'APIs' (application programming interface). Advantages of using GROW via the MIS system includes

- reduced need for double entry of data, saving clinicians' time
- reducing opportunity for human error by auto-plotting of fundal height and estimated fetal weight measurements
- allowing the customised centiles be part of the electronic patient record for future reference, audit and informing the management plan

This enhanced service (GAPplus), requires an additional nominal charge for the development, quality assurance, maintenance and support of the GROW-API. There should be no further set up charges from the MIS provider.

5. ANNUAL COST

Charges for the GAP or GAPplus Programme for current GROW users have been calculated on a minimum cost basis and stratified according to number of deliveries.

Size of Trust births per annum	**Annual Cost of GAP standard** from 2016/17	**Annual Cost of GAPplus** from 2016/17
<3000	£ 1500	£ 2250
3000-5000	£ 2000	£ 3000
5000-7000	£ 3000	£ 4500
7000-10,000	£ 4000	£ 6000
10,000-12,000	£ 5000	£ 7500
>12,000	Please contact the PI for cost	

6. PAYMENT

Details for purchase order

Supplier:
Perinatal Institute, 75 Harborne Road, Birmingham B15 3BU
Company Reg: 08466773
VAT: 161-7845-91

Bank:
Perinatal Institute,
NatWest Bank,
Edgbaston
Sort Code: 60-07-41
Account: 51150158

Please return purchase order together with completed Service Agreement, via
E-mail: grow@perinatal.org.uk;
Fax: 0121 607 0102; or
Post: Perinatal Institute
75 Harborne Road,
Edgbaston,
Birmingham B15 3BU.