



# Growth Assessment Protocol (GAP) Service Specification and Agreement

PI\_UK01\_GAP SLA – Version 1.2






## Reviewers

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NAME	SIGNATURE	TITLE	DATE	VERSION
Adam Marsters		IT Lead	07.11.2019	V1.2
Amanda Williams		Programme Manager	07.11.2019	V1.2

## Approvals

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NAME	SIGNATURE	TITLE	DATE	VERSION
Adam Marsters		IT Lead	07.11.2019	V1.2
Amanda Williams		Programme Manager	07.11.2019	V1.2
Professor Jason Gardosi		Executive Director	07.11.2019	V1.2

## Distribution

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This document is available on our company website for public viewing – <https://www.perinatal.org.uk/GAP/GAP.aspx>

## Document Status

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## 1 | Introduction

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The Growth Assessment Protocol (GAP) service specification details the agreement entered into by the trust in collaboration with Perinatal Institute (PI).

This document shall form the agreement between both Parties as detailed below, specifying the roles and responsibilities of each that is to be adhered to throughout its contractual period.

Parties

The Parties to this service level agreement (Agreement) are:

1. Perinatal Institute of Chamber of Commerce House, 75 Harborne Road, Birmingham, UK, B15 3BU (PI) and;
2. [Trust]

## 2 | Background

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Fetal growth restriction (FGR) is associated with stillbirth, neonatal death and perinatal morbidity. Confidential Enquiries have demonstrated that most stillbirths with fetal growth restriction are associated with suboptimal care and are potentially avoidable. Epidemiological analyses have highlighted the link between fetal growth restriction and stillbirth risk, and the reduction in risk if the growth problem is recognised antenatally. Customised assessment of birthweight and fetal growth has been recommended by the RCOG's 2002 and 2013 revision of the Green Top guidelines.

The Perinatal Institute (PI), a not-for-profit organisation based in Birmingham, provides services including tools for the assessment of fetal growth and birth weight. The Gestation Related Optimal Weight (GROW) software defines each pregnancy's growth potential through:

- **GROW-App** - a web-based application that produces a customised growth chart for fetal growth during pregnancy and for calculation of customised birthweight centiles for each baby at birth; or
- **GROW-Services API** - a web service that links to the local maternity information system to produce the customised growth chart at the beginning of pregnancy. It auto-plots fundal height and ultrasound estimated fetal weight and calculates the customised birthweight centile for each baby at birth.

Historically, the customised growth chart software was provided by PI with limited support in its implementation. However, audits have shown that antenatal detection of fetal growth restriction was directly related to the degree of training and implementation of standardised protocols for measurement of fundal height, referral and investigation of FGR. Therefore, since 2013, continued provision of the software requires maternity service providers to be accredited in the Growth Assessment Protocol (GAP). The GAP programme has resulted in significant reductions in stillbirths in each of the UK NHS regions where it was implemented and has been associated with recent year on year drops in national stillbirth rates in England to their lowest ever levels. These successes have been recognised by successive British Patient Safety Awards in 2013, 2014 and 2015, a 2016 Queens Award and a 2018 Princess Royal Training Award.

### 3 | Principles

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The Parties agree to adopt the following (non-legally binding) principles in relation to this agreement:

- (a) Collaborate and co-operate to ensure correct use of GAP products and services;
- (b) Communicate openly about any issues or opportunities relating to this agreement;
- (c) Learn, develop and seek to achieve the full potential of the project. Share information, experience and skills to learn from each other and to identify solutions and mitigate risk to the project;
- (d) Comply with all applicable laws and standards throughout the duration of this agreement along with [PI standard terms of service](#) and [privacy policy](#);
- (e) Act in a timely manner, recognising the time-critical nature of aspects in this agreement

### 4 | Service Specification

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This section outlines the service specification and agreement PI proposes to enter with the trust, with respective roles and responsibilities (also summarised in Annex [A]). It is based on the following elements:

1. Facilitation of the project by local 'champions' (local GAP leads/team)
2. Training and accreditation of all staff involved in maternity care
3. Adoption of evidence-based protocols and guidelines
4. Rolling audit, reporting and benchmarking of performance (Annex [C] - GROW software)
5. Providing GROW software and helpdesk support

## 4.1. Local GAP lead and the GAP team

**Rationale:** The GAP programme includes the surveillance of fetal growth and wellbeing from early pregnancy to birth with the involvement of numerous speciality care providers. Successful implementation of this stillbirth reduction strategy requires coordination and comprehensive engagement and collaboration between several different specialities and departments.

**Aim:** To establish regular communication with nominated 'link persons' in each speciality, including obstetrics / maternal fetal medicine (MFM), midwifery, ultrasonography, neonatology and IT (where appropriate) to facilitate the project in their respective departments. These links are intended to serve as conduits for regular communication and feedback on progress, ensuring comprehensive implementation and trust ownership of the GAP programme.

### Roles and Responsibilities

#### Perinatal Institute:

- provide initial GAP team training workshop
- provide the local GAP team with supporting documentation and reference material to assist in local implementation
- provide regular support for the GAP team (one-to-one or regular teleconference calls)

#### Trust:

- nominate the local GAP lead and GAP team
- provide backfill for the GAP lead/s to enable capacity to coordinate local implementation
- ensure the local GAP team meet regularly to monitor performance and share good practice

## 4.2. 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 maternity care providers who are engaged in maternity care should 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**

#### **Perinatal Institute:**

- provide an initial ‘train the trainer’ workshop
- provide the designated GAP trainers with training slides and notes and supporting documentation including test papers, competency template etc
- provide access to the GAP E-learning package and send reminders when training renewal is required
- provide reports back to the trust on utilisation and SGA/FGR surveillance

#### **Trust:**

- ensure all maternity care clinicians who use GROW receive training by the designated GAP trainers (initial face-to-face training for clinicians who have never received training, and face-to-face or E-learning for yearly updates)
- forward all care provider email addresses to PI to set up e-learning accounts (or maintain the admin of the E-learning application locally) and document training and competency logs.
- enable maternity care clinicians to complete the face-to-face or E-learning package and assessment on an annual basis

## **4.3. Protocols**

**Rationale:** There is wide variation in local protocols and guidelines for risk assessment, fetal growth surveillance and referral pathways. GAP template guidelines present an opportunity to implement standardised, evidence-based protocols tailored to the needs of individual trusts.

**Aim:** To assist with the implementation of:

- risk assessment and definition of low and increased-risk care pathways at booking / early pregnancy according to local guidelines/protocol or the recommended guideline

(PI algorithm or the RCOG number 31 “small for gestational age fetus investigation and management”)

- indications for serial scans and guidelines for frequency and timing
- indications for referral for further investigations and obstetric / MFM review where required

## **Roles and Responsibilities**

### **Perinatal Institute:**

- will provide, where appropriate, template protocols and algorithms for local adaptation, representing the latest evidence for surveillance, referral, investigation and management of pregnancies suspected of fetal growth problems
- will provide up to date, quality assured software which is consistent with supporting national guidelines for the assessment of fetal growth

### **Trust:**

- will agree to implement trust wide protocols which are consistent with national guidelines
- will monitor adherence to these protocols through regular audit (see section 4.4)

***NB - guidelines are not intended to replace clinical considerations in the management of individual pregnancies.***

## **4.4.Audit**

**Rationale:** Experience 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:** Working along local and national guidelines, to facilitate a rolling audit programme to provide for the trust:

- the SGA / FGR rate (proportion of babies born with a birthweight below the 10th and <3<sup>rd</sup> customised centile)
- rate of antenatal referral for suspected SGA / FGR, and antenatal detection / diagnosis of SGA
- tool which can be used for case-note audit of SGA / FGR cases not detected antenatally (GAP SCORE)



## Roles and Responsibilities

### Perinatal Institute:

- will provide the GROW-App / GROW-API to calculate the customised birthweight centile to determine SGA / FGR rates, and to record antenatal referral and detection rates
- will provide an online audit tool (GROW-Baseline) to enable the collection of a cohort of cases to determine SGA / FGR rates and antenatal referral and detection rates prior to implementing the GAP programme
- will provide automated quarterly reports to the trust to feedback and benchmark performance
- will provide an online tool and reporting for case note audit of SGA / FGR cases not detected antenatally (GAP SCORE)

### Trust:

- will record birth outcome, birthweight, sex and gestation to derive the customised birthweight centile for each baby at birth
- will record baseline and ongoing referral / detection rates of SGA / FGR where GROW is in use and set trust specific targets for antenatal referral / detection
- will aim to undertake regular case note audit and review, as agreed by the trust / GAP team. It is suggested to review a minimum 30 missed SGA cases per 6 months to identify potential learning points and possible hurdles or system failures

## 4.5.GROW software and Helpdesk Support

**Rationale:** The standard for growth assessment is provided by the quality assured GROW software chart which needs to be readily available for clinicians to provide day to day care. The software is available as either a stand-alone web application (GROW-App) or linked to the local Maternity Information System (GROW-API). Advantages of using GROW via the MIS 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 to be part of the electronic patient record for future reference, audit and informing the management plan.

Where a trust uses GROW via the GROW-API the service is called GAPplus which incurs an additional charge detailed in section 8.

**Aim:** To provide an up-to-date, reliable and quality assured customised GROW software and service (Annex [C] - GROW software)

## **Roles and Responsibilities**

### **Perinatal Institute:**

- will provide latest updates of the GROW software
- will work with Maternity Information System providers to integrate the GROW software and make it continuously available to users while on-line
- will provide the GROW-App if no Maternity information System available
- will test and quality assure the application/s
- will provide a service desk in collaboration with the local Maternity Information System and local IT helpdesk as per the helpdesk support specification and process map – Annex [B]

### **Trust agrees to use reasonable efforts to:**

- require its Maternity Information System to work with all PI - GROW policies, integration and upgrades
- require its' Maternity Information System to provide first line support and to inform local IT helpdesk of any service desk calls
- ensure end users are informed of the service desk incident reporting process and to assist where issues arise
- ensure that all maternity care clinicians using GROW have received training in its use

## **5 | Information Governance and Data Sharing & Processing**

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### **5.1. Legislation**

Information Governance compliance shall be the responsibility of both Parties with both being subject to the requirements of the GDPR concerning data protection.

Both Parties will notify and work together to ensure requirements, roles and responsibilities are clearly defined and documented. It is of the understanding that the authorising person(s) signing this agreement on behalf of the trust confirms that the trust is and shall remain compliant with all information governance and legislative requirements.

## 5.2. Accreditation and Commitment

PI is accredited in ISO27001:2013 and is committed to ensuring our Information Security Management System (ISMS) is embedded in all aspects of our business. This framework is regularly reviewed as well as being internally and externally audited to ensure we continue to uphold our high level of compliance.

## 5.3. Training and Monitoring

All PI staff are mandated to complete the Information Governance training as well as the General Data Protection Regulation (GDPR) training modules which became effective from 25th May 2018. All training requirements are monitored and reviewed internally by the Information Security Lead.

## 5.4. Notifying and Reporting Incidents

Where there is a concern from either party that a breach has occurred, it is the responsibility of the information security officer to ensure it is recorded, each party informed and the supervisory authority informed where appropriate according to GDPR processes. The PI has an incident reporting policy that all staff are aware of and adhere to and is available upon request.

## 5.5. Data Sharing

In order to fulfil the Purpose of the GAP programme, GROW data items (Annex C) will be shared between the trust and PI. The PI agree to use patient data for the provision of direct care to mothers and babies or to provide the audit element of the GAP programme in a manner consistent with PI's [terms of service](#), data processing arrangements and legislative requirements. PI will also store anonymised data for continued improvements in the quality and accuracy of its growth chart tools.

All GROW software is held on approved servers with VPN access to nominated, appropriately qualified and vetted PI staff (system administrators and developers) to maintain the system and carry out upgrades.

# 6 | Performance Management

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## 6.1. Relationship Manager

The Parties shall appoint a dedicated relationship manager to act as a contact point for the management of this agreement and the services used throughout the duration of this agreement.

Should it be necessary to change the relationship manager it is the Parties for whom the relationship manager is changing to notify the other Party with immediate effect.

## **6.2. Products and Services Performance**

Where performance of the GAP product(s)/service(s) and or any other obligations under this Agreement fall below the service requirements set out in Annex [A] or could be reasonably expected from a Party to this Agreement; a corrective action plan shall be written and agreed by both the Parties, setting out the improvement in performance that should be achieved by both/either Party prior to a performance review meeting.

Where there is persistent failure to meet the expected performance; or a corrective action plan is not complied with, then the lead shall be notified. If the issue(s) remain unresolved this shall then be escalated to the appropriate manager as determined by the individual Parties. Final escalation point shall be with the Director of each Party. At such point it may be agreed for the Parties to exercise the right to terminate this agreement to allow the trust to procure an alternative solution.

Records shall be kept detailing any corrective action plans along with any consequences exercised.

## **7 | Monitoring and Reporting**

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### **7.1. Training and User Records**

The trust's appointed local GAP training lead shall facilitate and record all internal training conducted, ensuring records are kept and maintained. They shall also notify PI of new users and leavers for the GROW software including GAP SCORE and e-learning applications. Where a user leaves the trust, it will remain the responsibility of the local GAP lead to update PI so that the account access can be disabled.

### **7.2. Software and System Monitoring**

The trust shall be informed of scheduled downtime and maintenance for all products and services used within a reasonable timeframe. Annex [B] outline these expected timeframes and PI's level of commitment during the agreement's lifecycle.

### **7.3. Reporting**

The trust shall have access to automated reporting for the GROW-App; GROW-Service API and GAP E-Learning. GROW baseline and GAP-SCORE reporting is available upon request via [grow@perinatal.org.uk](mailto:grow@perinatal.org.uk). Good practice will also be documented and shared in order to facilitate learning.

## 8 | Fees

Charges for the GAP or GAPplus (trusts using the GROW-API) for GROW users will be calculated on a minimum cost basis and stratified according to number of deliveries per annum. Costs will be reviewed on a yearly basis.

**Payment of set-up and pro-rata first-year costs are due on commencement of training.** Please note that the set-up cost includes training at Perinatal Institute in Birmingham; if onsite training is required this is available by special arrangement for an additional charge of £1000 + expenses.

Size of Trust births per annum	Set up cost* Incl training	Annual Cost of GAP standard from 2019/20	Annual Cost of GAPplus (GROW-API) from 2019/20
<3000	£ 500	£ 1500	£ 2250
3000-5000	£ 500	£ 2000	£ 3000
5000-7000	£ 500	£ 3000	£ 4500
7000-10,000	£ 500	£ 4000	£ 6000
10,000-12,000	£ 500	£ 5000	£ 7500
>12,000	Please contact the PI for cost		

\* Set-up costs including unlimited spaces for training at Perinatal Institute.

If on-site training is required; expenses (travel, accommodation) are charged additionally.

## 9 | Approval Signatures

To accept this Service License Agreement, please sign and return to [grow@perinatal.org.uk](mailto:grow@perinatal.org.uk).

### On behalf of: Perinatal Institute

Date:

Name: Professor Jason Gardosi

Position: Executive Director

Email: [grow@perinatal.org.uk](mailto:grow@perinatal.org.uk)

Phone Number: +44 121 607 0101

Signature:



**On behalf of: Trust**

Date:

Name:

Position:

Email:

Phone Number:

Signature:

# SERVICE AGREEMENT

## Perinatal Institute (PI) - Growth Assessment Protocol (GAP) programme

I agree the GAP service specification, with the programme starting on the [date] until [date] and have read and agree with PI's [terms of service](#) 12 monthly rolling agreement

Please complete - NB All information is required; should any of these details change, please update PI.

Name			
Position			
Trust Name			
Trust Address			
Size of Trust (No. of births)			
Manager Details	Name:	Email:	Tel No.
CD Details	Name:	Email:	Tel No.

**Link person(s) details for the trust and number of staff per speciality:**

GAP Lead(s)	Name	Position	Email	No. of staff
Midwifery				
Obstetrics/MFM				
Ultrasound				
Neonatology				
IT				N/A

**Maternity Information System:** \_\_\_\_\_

## Annex A – Key Responsibilities

GAP Element	Trust responsibilities	PI responsibilities
Local GAP team	<p>To nominate and support clinicians to act as GAP leads for their speciality (including midwifery, obstetrics / MFM, ultrasound and neonatology) and to coordinate the project.</p> <p>The local GAP team will facilitate implementation of the GAP programme and serve as conduits for regular communication and feedback on progress with PI</p>	<p>To ensure all GAP leads are trained in the GAP programme and have all supporting documentation</p> <p>To regularly communicate with the GAP team with any new evidence, changes, good practice examples, support etc</p>
Training	<p>Ensure GAP lead/s has participated in initial training workshop with the PI.</p> <p>75% of clinical staff engaged in maternity care are trained and accredited in GAP (minimum of face-to-face with test for year 1 and E-learning and competency assessment year 2 onwards)</p> <p>Maintain a training and competency log and forward email addresses of all clinicians requiring access to E-learning to PI (or maintain E-learning admin locally)</p> <p>Ongoing training of GAP elements is included in the trust's Training Needs Analysis (TNA)</p>	<p>On-site GAP workshop to ensure as many clinicians are trained in GAP prior to going live with the programme. (additional cost), Alternatively key clinicians attend free GAP workshop at PI and be responsible for cascade training in the trust</p> <p>Provide a GAP E-learning package and supporting documentation to enable training locally</p> <p>Provide additional training on specific GROW software where required (GROW-baseline, GAP-SCORE).</p>
Protocol	<p>Agree a trust wide policy which is consistent with national guidelines</p> <p>Monitor and ensure that these are adhered to through regular audit</p>	<p>Provide software and template protocols representing the latest evidence for surveillance, referral, investigation and management of pregnancies suspected to have fetal growth problems</p>
Audit	<p>Prior to implementation, to complete a valid baseline audit (minimum 400 cases) to determine rates of SGA, referral and detection</p> <p>Record required information to generate a customised birthweight centile for each baby delivered at that trust</p> <p>Review automated quarterly reports of referral and detection rates of abnormal growth and set trust specific targets</p> <p>Undertake a six-monthly case note audit and review of at least 30 cases of SGA babies not detected antenatally to be SGA / FGR and produce relevant action plans (using GAP-SCORE)</p>	<p>Provide the GROW-baseline software and training</p> <p>Provide the relevant GROW software to calculate the customised birthweight centile and record antenatal detection of abnormal growth as an integral part</p> <p>Provide automated quarterly reports to feedback and benchmark performance</p> <p>Provide an audit tool (including reporting functionality) and training for case note audit of SGA / FGR cases not detected antenatally (GAP-SCORE)</p>



<p>GROW Software</p>	<p>To assist in ensuring the GROW-App is available on all trust computers OR</p> <p>To support collaboration between the local maternity information system provider and PI to facilitate integration and upgrades of the GROW-API</p> <p>To assist in the help desk work in line with the helpdesk support specification and process map</p>	<p>To provide and maintain quality assured GROW software in line with project and national requirements</p> <p>To collaborate with the local maternity information system provider to facilitate integration and upgrades of the GROW-API</p> <p>To provide a help desk in collaboration with the local maternity information system and local IT helpdesk as per the helpdesk support specification and process map</p>
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## Annex B – Help Desk Services

### Definitions

<b>PI/us/we</b>	Perinatal Institute: UK-based provider of GROW software
<b>User</b>	Clinical user of GROW software
<b>1st Line support</b>	Initial contact for all user support – system provider if using GROW-API, PI help desk if using any other GROW software (e.g. GROW-App, GAP-SCORE, E-learning etc)
<b>2nd Line Support</b>	All specific clinical and technical queries relating to GROW – PI midwives or PI IT department

### Introduction

This document outlines the support that trusts and individual users can expect when assistance is required from PI. The agreement covers the duration of your GAP contract with PI.

We aim for 99.5% availability of the software during the agreement period, including weekends and bank holidays. The system will experience some disruption during routine maintenance of the local servers. Users will be informed of any such planned work in advance and disruption will be kept to a minimum during these time periods. If there is a problem with the software outside of routine maintenance, the GAP help desk is available to log and resolve issues.

### Help desk – contact and process

The GAP help desk provides a helpdesk for logging and managing all incidents and requests from the user. The help desk is open between 08.30 and 16.30 Monday to Fridays. Please click the [link](#) if you have a helpdesk query. Outside of working hours, if a user is unable to obtain a birthweight centile, the automated email response from the help desk will supply access to a stand-alone birth weight centile calculator as an interim measure.

### What do we support?

Members of the help desk team at PI will provide the following services:

- Log, track, maintain support and troubleshoot the GROW software in accordance with agreed support contract
- Provide general consultation and advice for end users. The performance of the help desk is monitored regularly and reports can be provided upon request.

### Responsibilities of those making a request

When logging a helpdesk query, please give as much information as possible to assist to resolve the issue as quickly as possible:

- Trust / hospital Site / location details
- Your full name, role and contact details

- Prioritisation of the problem (priority 1-4 according to the severity of the problem – see table).
- Description of your problem, including GROW software used, browser type and version, details of the problem including any error messages, screen shot, business areas and users affected

### Logging procedures and help level monitoring

The help desk treats all issues as important and will make its best effort to resolve all reported problems in an appropriate timeframe. Please see the [helpdesk process map](#) for further details how the help desk deals with issues with the GROW systems.

Each issue is logged as a ticket in the tracking database and a unique ID number allocated. The initial response will take the form of an automated email to the user informing them that their issue has reached PI. This will then be followed up with a call or email confirming the existence of the issue and to gather additional information if required. The help desk team will use this response as an opportunity to triage and establish an estimated timeframe to resolution. Local IT and the trust’s maternity information system provider will also be informed where required. PI will prioritise the issue into one of four levels according to whether the system is for clinical use (GROW-App or GROW-API) or a support system not required for the delivery of clinical care (e.g. GAP SCORE, E-learning).

Priority	Definition	Clinical System		Support System	
		Response Time	Resolution Time	Response Time	Resolution Time
<b>Priority 1</b>	Inability to use functionality that is core to the user’s business. This would include system outages	A plan to fix the issue will be provided within 1 working hour	A solution will be provided within 4 working hours	A plan to fix the issue will be provided within 4 working hours	A solution will be provided within 2 working days
<b>Priority 2</b>	System performance is so poor that it prevents normal service. E.g. slow operation	Within 2 working hours	Within 8 working hours	Within 4 working hours	Within 3 working days
<b>Priority 3</b>	System is functioning and can be used but is suffering from fault(s) that affect user experience	Within 4 working hours	Within 5 working days	Within 1 working day	Within 10 working days
<b>Priority 4</b>	Non-support issue (e.g. change request)	Within 1 working day	This will form part of the next scheduled upgrade.	Within 5 working days	This will form part of the next scheduled upgrade.

If the user is not available on email / call-back, a voicemail, an email or voicemail message will be left. If the user does not respond within five working days (minimum three attempts by PI), the ticket will be closed. An issue will be considered resolved when a solution or a workaround that is acceptable to the user has been implemented. In the event where an issue cannot be resolved or is not meeting the resolution time target, the incident will be brought to the attention of the 2nd line support the - GAP team and escalated to PI IT manager if appropriate.

## Annex C – GROW Software, data Items and User accounts

Please see PI [Terms of Service](#) Schedule 1 for further information on the data processing arrangements

### Software products

GAP has a number of software products alongside the services provided which consist of:

- The Gestation Related Optimal Weight (GROW) software that defines each pregnancy's growth potential: -
  - **GROW-App** – a web-based application that produces a customised growth chart for fetal growth during pregnancy and for calculation of customised birthweight centiles for each baby at birth; or
  - **GROW-Services API** – a web service that links to the local maternity information system to produce the customised growth chart at the beginning of pregnancy. It auto-plots fundal height and ultrasound estimated fetal weight during pregnancy and calculates the customised birthweight centile for each baby at birth
- **GROW-baseline** electronic audit tool to establish a baseline detection rate of fetal growth restriction prior to implementation of the GAP programme
- **GROW-Demo** a replica of the GROW-App that trainers can use to demonstrate the GROW-App to their users
- **Individual centile calculator** a web-based application that produces a customised birthweight (and estimated fetal weight) centile
- **GAP-SCORE (Standardised Case Outcome Review Evaluation)** - An electronic audit tool to assist clinicians in reviewing clinical care of 'missed cases' of fetal growth restriction within their trust
- **GAP E-Learning:** For online clinical training in relation to reinforce face-to-face training provided by PI and the local GAP lead

### Data Items

#### GROW-App /API

Data will be passed from either the GROW-App, GROW-Baseline or local Maternity information system provider (GROW-Services API) to PI securely over https, to enable the development of GROW charts and centiles. Data items sent to the web service will include:

- Reference Number\* (local/national)
- First name\*
- Surname\*

- Date of birth\*
- Maternal Height
- Maternal Weight (at booking)
- Ethnicity
- Parity (number of previous babies including stillbirths)
- EDD\*
- Fundal height (cm) [API only]
- Scan measurements (Estimated Fetal Weight) [API only]
- Date of measurement [API only]
- Date of birth of the baby\*
- Sex of baby
- Birth weight
- Gestation (generated by GROW web service)
- Pregnancy outcome (livebirth/stillbirth)
- Antenatal referral for suspected SGA or FGR by fundal height
- SGA detected antenatally by ultrasound
- Birth weight centile (generated by GROW web service)

All the above data items are stored to enable automated reporting for the audit element of the GAP programme. "\*" patient identifiable fields are processed in order to produce PDF printable charts; the mother's name, reference number and date of birth will be passed to the web service for inclusion on the PDF; however, they will not be stored.

PI will continue to retain and process certain non-identifiable data following the provision of clinical care in order to continue to develop the GROW-App/API specifically and more generally for the development of further tools for medical diagnoses and care. As such this shall be retained for scientific and statistical purposes. The Data shall be held with such technical and security systems in place that is not reasonably practicable for the re-identification of patients from the retained data.

## **E-learning**

Clinicians names role, and email address are collected and stored within the E-learning application in order to monitor training locally and nationally for the project.

## GAP SCORE

The dataset for GAP SCORE is currently being reviewed in-line with Saving Babies Lives v2 and will be finalised following consultation. Data items are expected to contain:

- Risk factors at booking and relevant serial growth scanning protocol
- Pregnancy related complications resulting in serial growth scans
- Accuracy of the data items on the GROW chart (height, weight, ethnicity, parity, EDD and previous baby details)
- Fundal height measurements, recognition of abnormal growth and subsequent management
- Estimated fetal weight measurements, recognition of abnormal growth and subsequent management
- Birth details

The Chart ID number produced by the GROW-App / GROW- API is the unique identifier used within the GAP SCORE record. No further patient identifiable data is processed or stored.

## User Accounts

Management of user accounts is dependent on which tool is being accessed and utilised, as outlined below:

- (a) **GROW-App, GROW-Baseline and GROW-Services API**– the user account for access to these applications are trust / hospital specific and shall only be issued once training requirements have been satisfied as detailed in Annex [A] and the SLA is in place. These user accounts shall remain valid throughout the life cycle of the SLA and shall only become invalid if the agreement is terminated by either party (see [terms of service](#)).
- (b) **GAP-SCORE and GAP E-Learning** – User accounts are caregiver specific and shall only be issued once all training requirements are satisfied where appropriate as detailed in Annex [A] and the local GAP lead has approved access for the user(s) through the completion of a relevant documentation (new user form) for user permissions.

All software shall undergo regular updates in accordance with the latest evidence and national guidance as well as collaborative feedback from users.