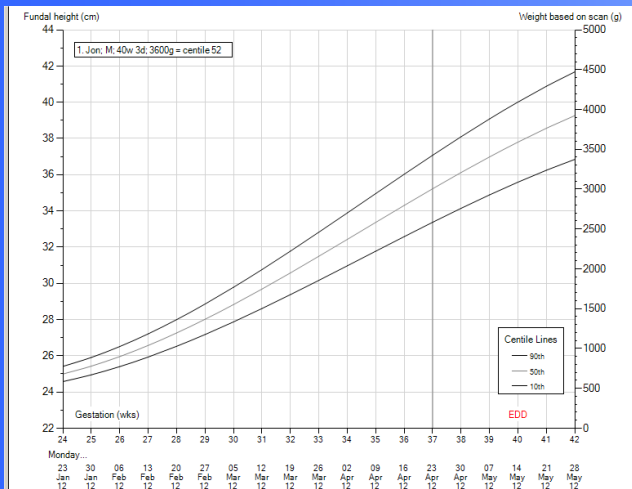


Customised Antenatal Growth Charts

Adapted with permission
Perinatal Institute



2020



Aims of Training

- Promote best practice
- Understand risk assessment at booking
- Increase knowledge of customised growth charts
- Standardise fundal height measurement
- Expand awareness of referral criteria

Parameters of normal growth

- What is the average size baby at term?
- What is the local definition of SGA?
- What is the local definition of LGA?

Birth weight

2500g = SGA?

4500g = LGA?



Antenatal Detection

Using population standards to assess fetal growth in the 3rd trimester will miss most cases of SGA. Population standards group all women together and predict they will all have the same size baby at term.

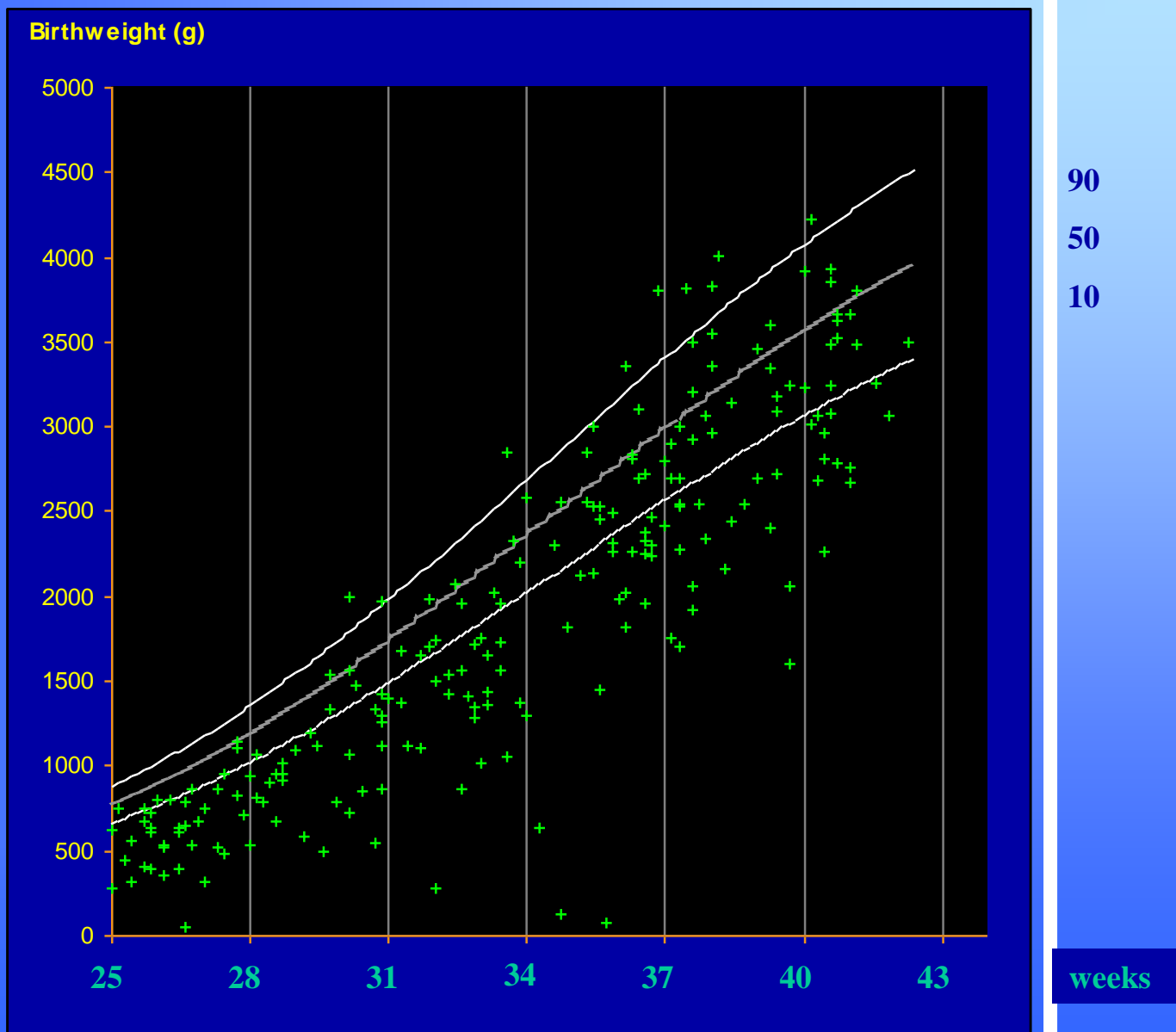
Fetal growth restriction

associations

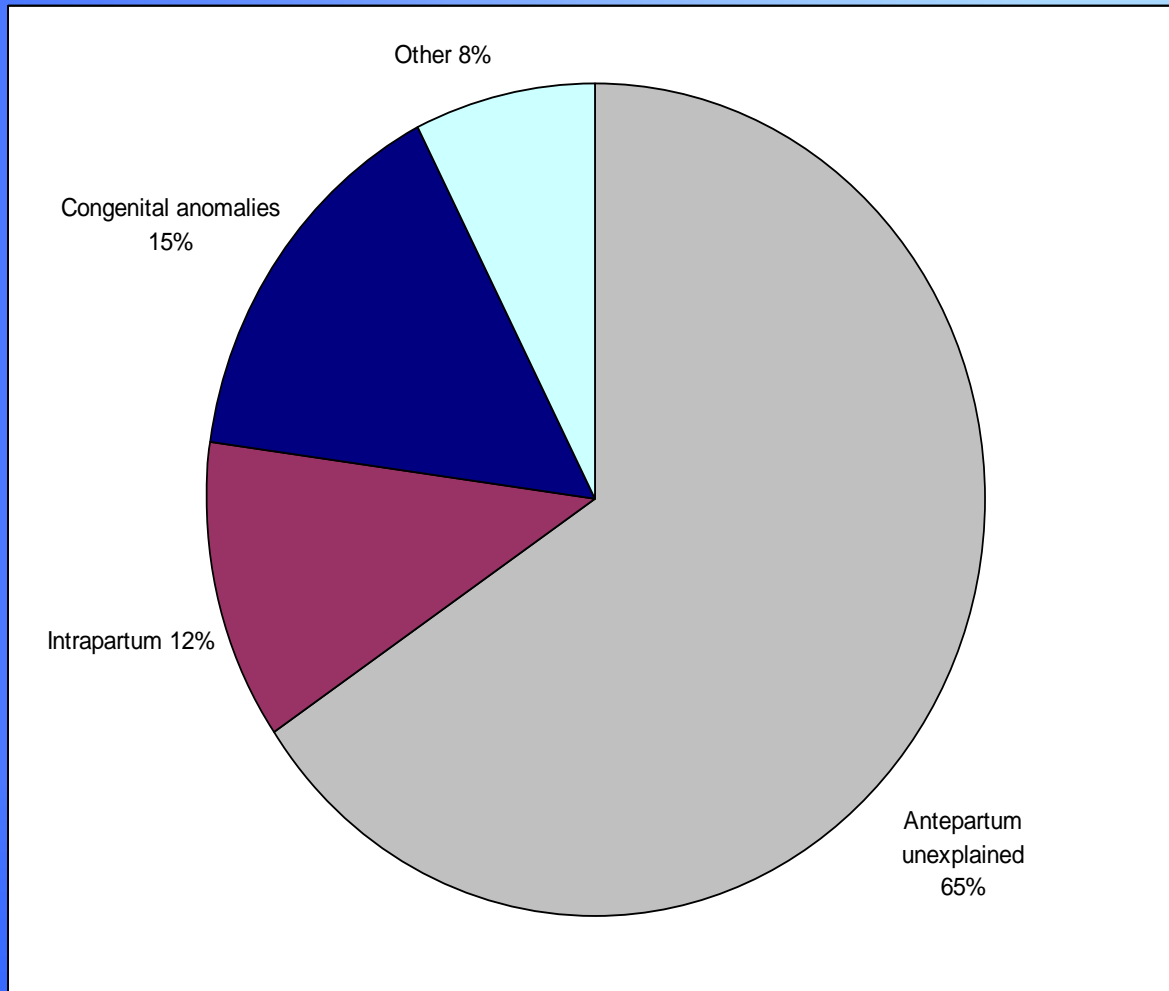
- Stillbirth
- Neonatal deaths
- SIDS
- Perinatal morbidity
- Cerebral palsy
- Effects in later life

'Unexplained' Stillbirths in West Midlands, 2001

n=231; <10th percentile: 140 = 62 %



Stillbirths – Wigglesworth classification: consistently about two-thirds are 'Unexplained'



**Maternal, Newborn and
Infant Clinical Outcome
Review Programme**



MBRRACE-UK Perinatal Mortality Surveillance Report

UK Perinatal Deaths for Births from
January to December 2017

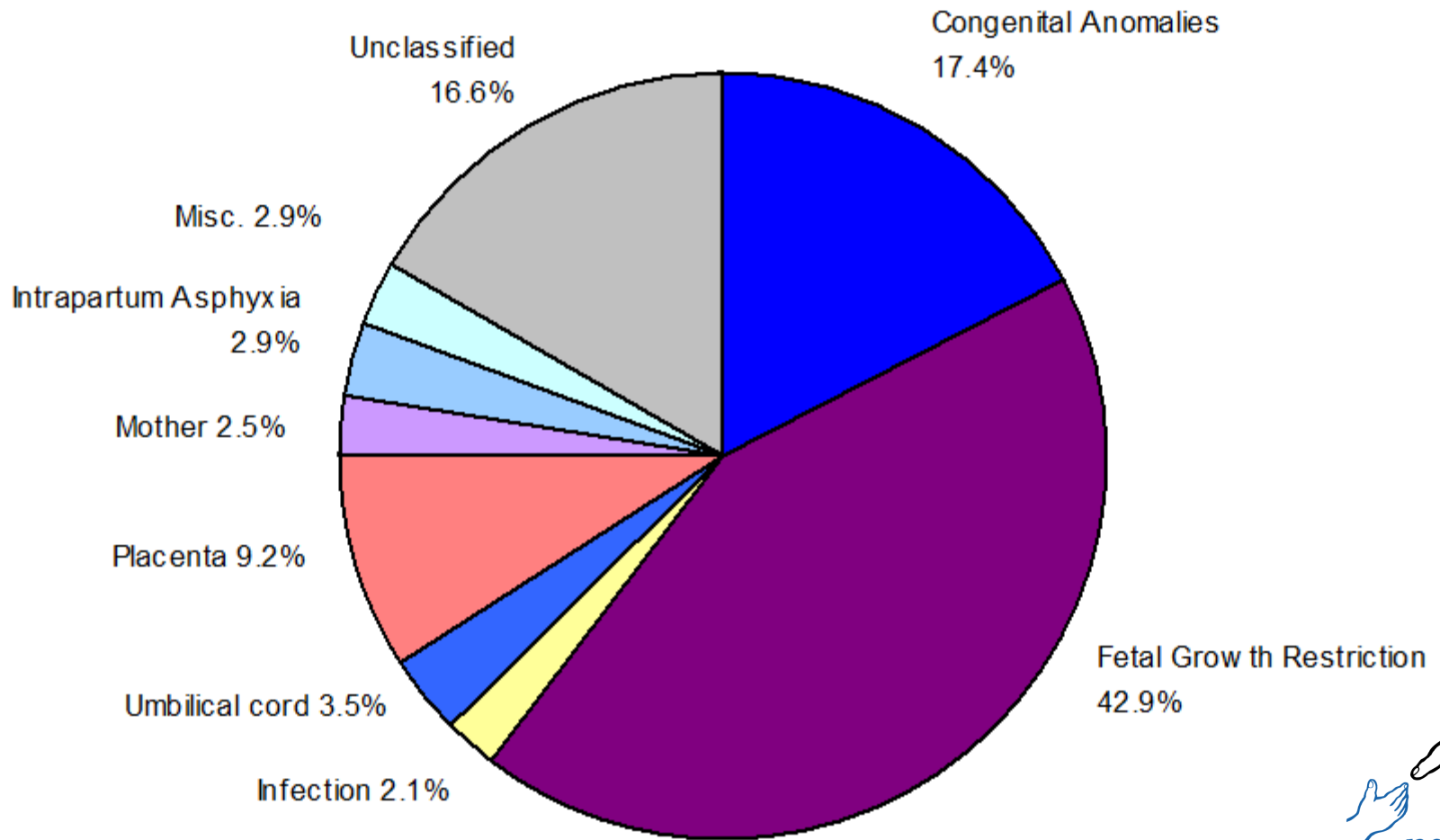


9. There has been a substantial reduction in stillbirths recorded as having an intrapartum cause in the CODAC classification of cause of death from 189 (5.8%) stillbirths in 2014 to 51 (1.8%) stillbirths in 2017. The proportion of stillbirths reported as having an unknown cause of death using CODAC has reduced from around a half (46.0%) in 2014 to around one third (34.6%) in 2017.

Key findings

1. There has been a reduction in the rate of extended perinatal mortality in the UK in 2017: 5.40 per 1,000 total births for babies born at 24⁺⁰ weeks gestational age or later compared with 5.64 in 2016. This represents a 12% reduction in extended perinatal mortality since 2013, equivalent to nearly 500 fewer deaths in 2017.
2. The stillbirth rate for the UK in 2017 has reduced to 3.74 per 1,000 total births from 4.20 in 2013, which represents 350 fewer stillbirths.
3. The rate of neonatal mortality for babies born at 24 weeks gestational age or later in the UK continues to show a steady decline over the period 2013 to 2017 from 1.84 to 1.67 deaths per 1,000 live births. This represents a 10% reduction in neonatal mortality over the last five years.
4. The largest fall in stillbirth and neonatal death rates is seen in term babies (37⁺⁰ to 41⁺⁶ weeks gestational age), accounting for half of the reduction seen in these rates.

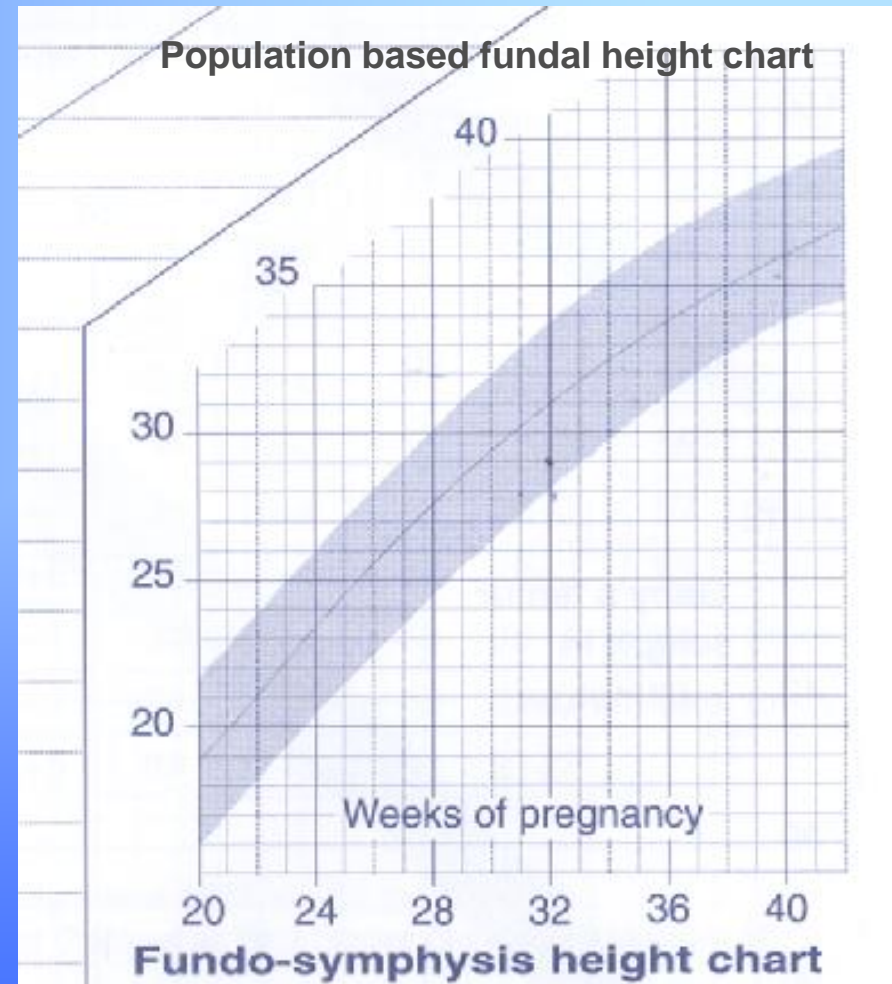
RECODE classification



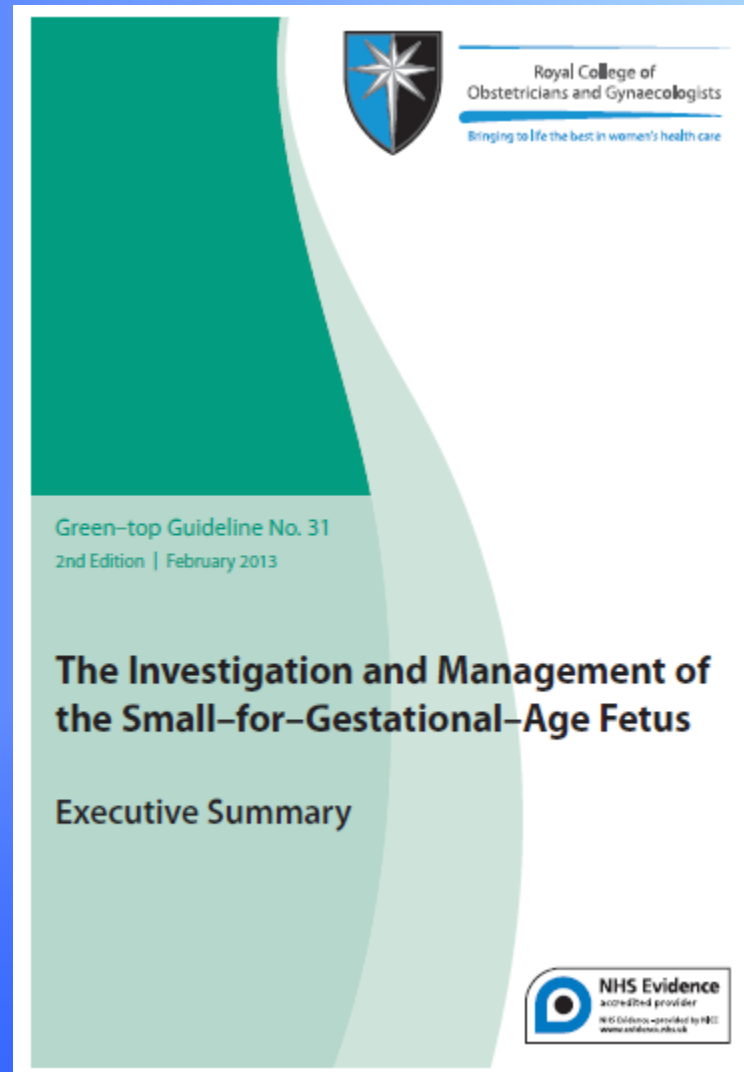
Fetal growth surveillance

Methods

- Manual palpation
 - Landmarks
- Fundal height measurements
 - Tape measure
 - Interpretation
 - Documentation
- Ultrasound
 - Biometry
 - Estimated fetal weight
 - Liquor volume
 - Doppler

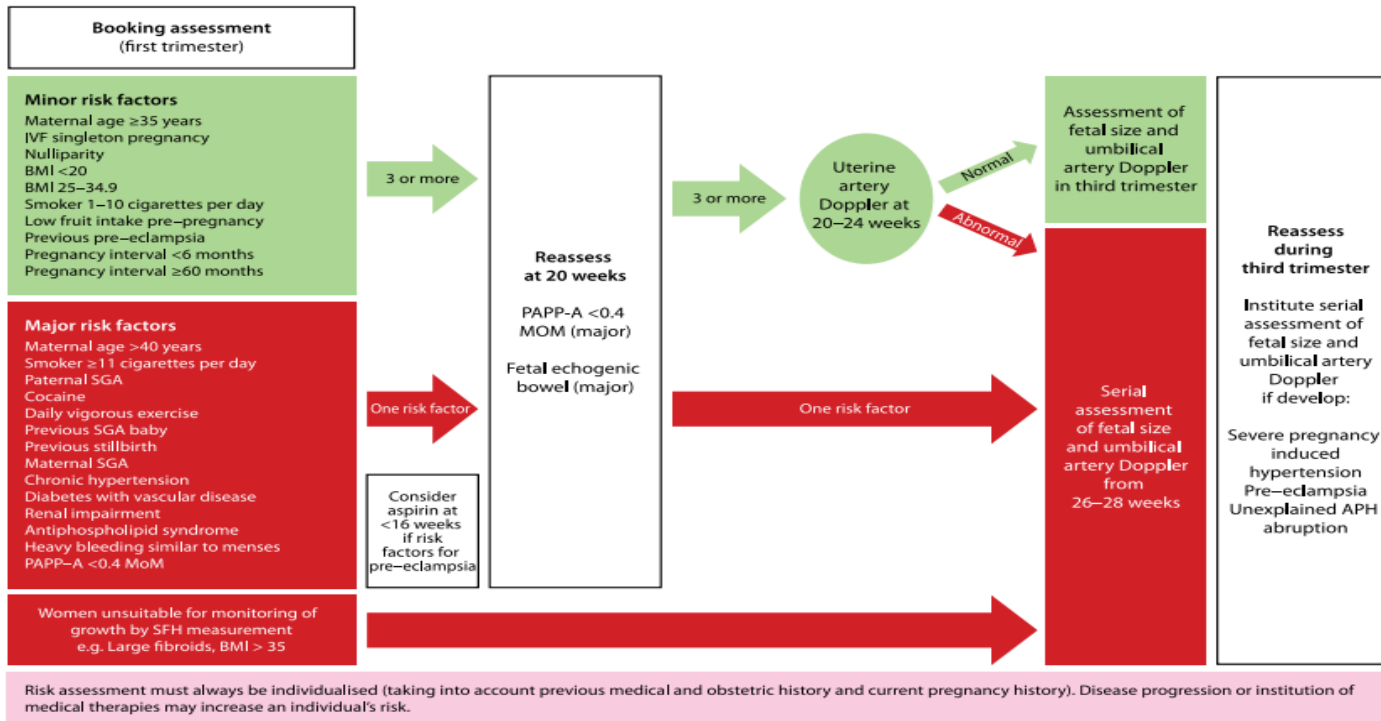


RCOG Guidelines



Booking Risk Assessment

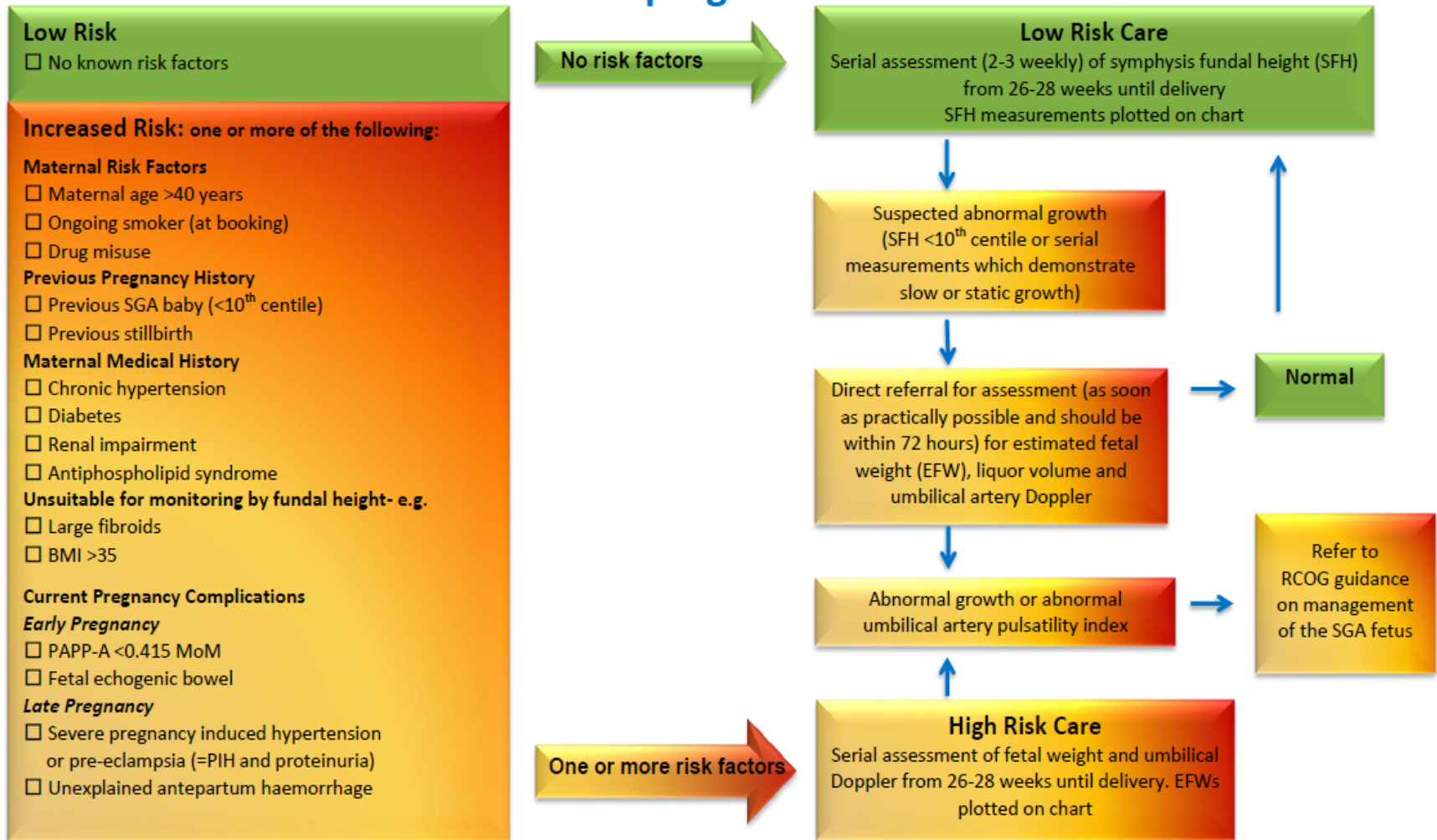
APPENDIX II: Screening for Small-for-Gestational-Age (SGA) Fetus



NHS England -*Saving Babies' Lives: A care bundle for reducing stillbirth (2016)*

- Element 1- Reducing smoking in pregnancy
- Element 2- Risk assessment and surveillance for fetal growth restriction
- Element 3- Raising awareness of fetal movement
- Element 4- fetal monitoring during labour

Algorithm and Risk Assessment Tool: Screening and Surveillance of fetal growth in singleton pregnancies



Saving Babies Lives' Care Bundle

Version 2 (2019)

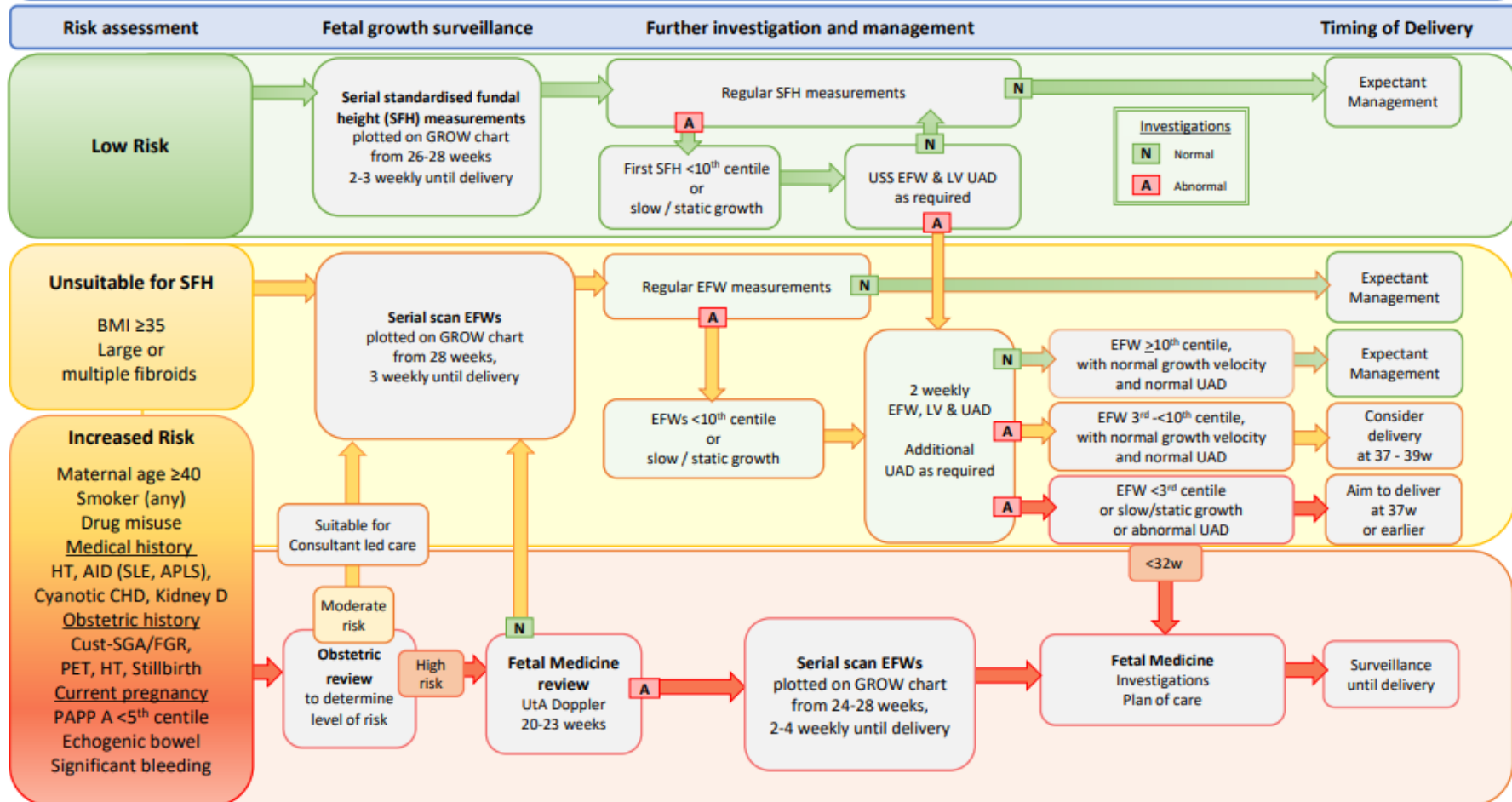
- Reducing smoking in pregnancy
- Risk assessment, prevention and surveillance of pregnancies at risk of fetal growth restriction (FGR)
- Raising awareness of reduced fetal movement (RFM)
- Effective fetal monitoring during labour
- Reducing preterm birth

Risk assessment (Perform at booking and mid-trimester anomaly scan)		Prevention	Screening for early onset FGR and triage to pathway	Screening/surveillance pathway for FGR/SGA	Reassess at 28 weeks and after any antenatal admission
Low risk	No risk factors	Nil	Anomaly scan and EFW $\geq 10^{\text{th}}$ centile [†]	Serial measurement of SFH	Assess for complications developing in pregnancy, e.g. hypertensive disorders or significant bleeding
Moderate risk	Moderate risk factors <u>Obstetric history</u> Previous SGA Previous stillbirth, AGA birthweight <u>Current risk factor</u> Current smoker at booking (any) Drug misuse Women ≥ 40 years of age at booking	Assess for history of placental dysfunction and consider aspirin 150mg at night <16 weeks as appropriate	Anomaly scan and EFW $\geq 10^{\text{th}}$ centile [†]	Serial USS from 32 weeks every 4 weeks* until delivery	
High risk	High risk factors <u>Medical history</u> Maternal medical conditions [chronic kidney disease, hypertension, autoimmune disease (SLE, APLS), cyanotic congenital heart disease] <u>Obstetric history</u> Previous FGR Hypertensive disease in a previous pregnancy Previous SGA stillbirth <u>Current pregnancy</u> PAPPA <5 th centile Echogenic bowel Significant bleeding EFW <10 th centile Women unsuitable for monitoring of growth by SFH measurement (e.g. BMI $\geq 35\text{kg/m}^2$) Fibroids	Assess for history of placental dysfunction and consider aspirin 150mg at night <16 weeks as appropriate	Additional uterine artery Doppler	Serial USS from 32 weeks every 2-4 weeks* until delivery	
			Normal uterine artery Doppler		
			Abnormal uterine artery Doppler and EFW $\geq 10^{\text{th}}$ centile	Serial USS from 28 weeks every 2-4 weeks* until delivery	
			Abnormal uterine artery Doppler and AC or EFW <10 th centile	Discussion with fetal medicine	
Other	Women unsuitable for monitoring of growth by SFH measurement (e.g. BMI $\geq 35\text{kg/m}^2$) Fibroids	Nil	Anomaly scan and EFW $\geq 10^{\text{th}}$ centile [†]	Serial USS from 32 weeks every 4 weeks* until delivery	Serial USS from diagnosis until delivery*

GAP Care Pathway (Phase I)

Risk assessment, surveillance, investigation and management

TO BE USED IN CONJUNCTION WITH EXPLANATORY NOTES

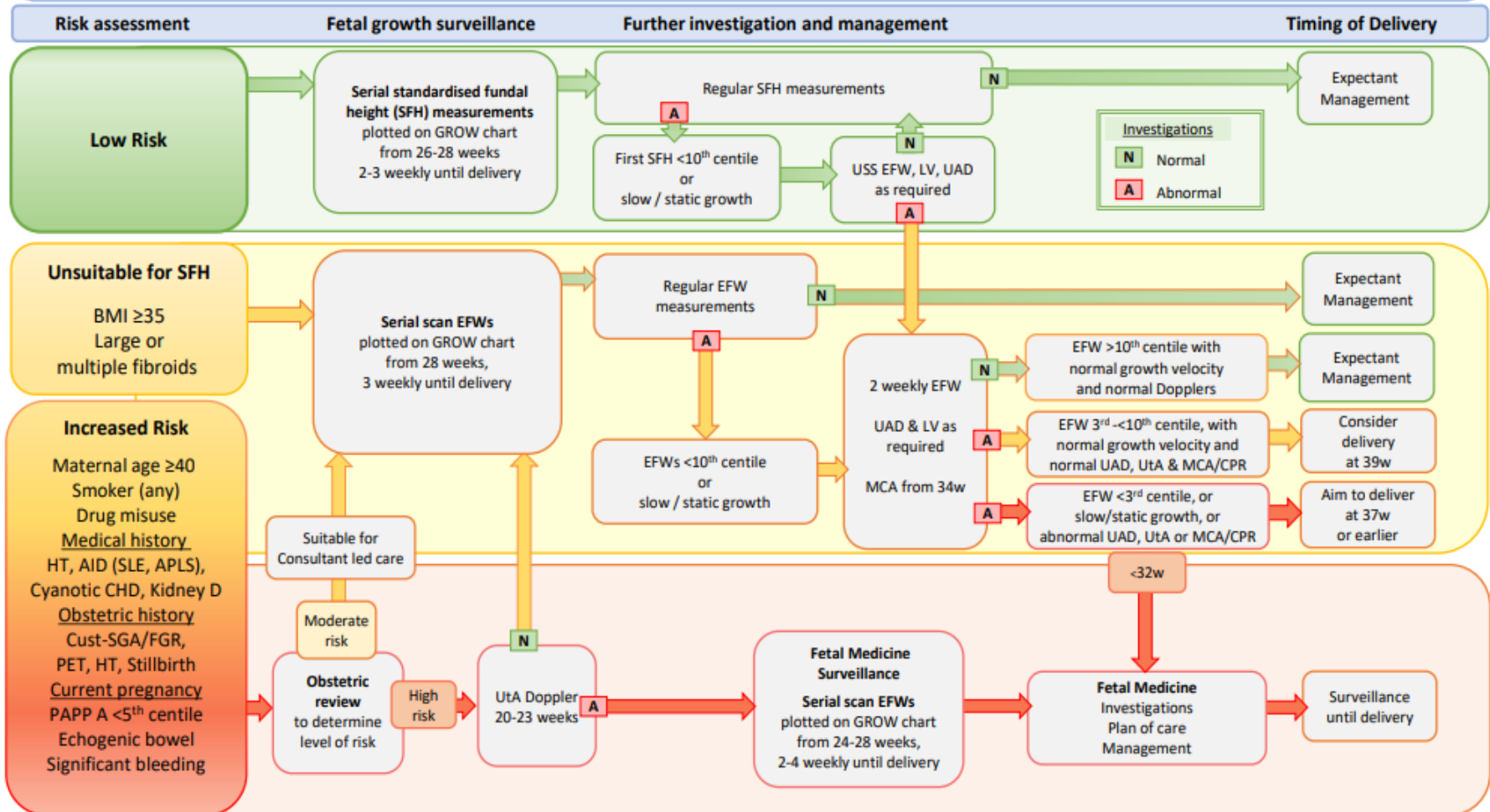


Abbreviations: AID= Autoimmune Disease; APLS= Antiphospholipid Syndrome; BMI= Body Mass Index; CHD= Coronary Heart Disease; CPR= Cerebro-Placental Ratio; EFW= Estimated Fetal Weight; FGR= Fetal Growth Restriction; SFH= Standardised Fundal Height; HT= Hypertension; LV= Liquor Volume; MCA = Middle Cerebral Artery; PET= Pre-eclampsia; SGA= small for gestational age; SLE= systemic lupus erythematosus; UAD= Umbilical Artery Dopplers; UTA = Uterine Artery Doppler. See 'GAP Care Pathway v2 - Explanatory Notes'

GAP Care Pathway (Phase II)

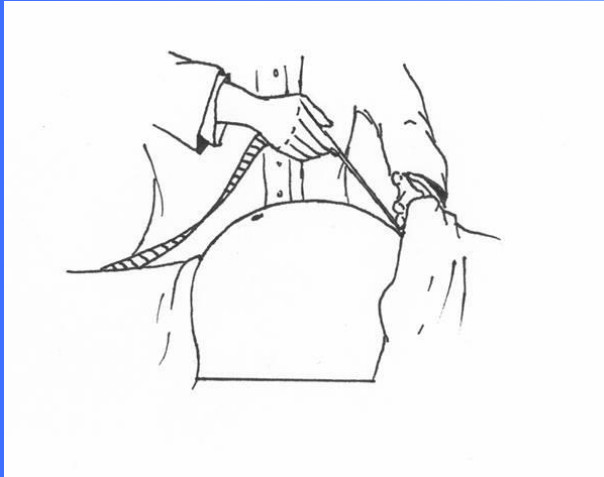
Risk assessment, surveillance, investigation and management

TO BE USED IN CONJUNCTION WITH EXPLANATORY NOTES



Abbreviations: AID= Autoimmune Disease; APLS= Antiphospholipid Syndrome; BMI= Body Mass Index; CHD= Coronary Heart Disease; CPR= Cerebro-Placental Ratio; EFW= Estimated Fetal Weight; FGR= Fetal Growth Restriction; SFH= Standardised Fundal Height; HT= Hypertension; LV= Liquor Volume; MCA = Middle Cerebral Artery; PET= Pre-eclampsia; SGA= small for gestational age; SLE= systemic lupus erythematosus; UAD= Umbilical Artery Dopplers; Uta = Uterine Artery Doppler. See 'GAP Care Pathway v2 - Explanatory Notes'

Risk assessment at booking



'low risk'



'increased risk'

GROW

Gestation Related Optimal Weight

www.perinatal.org.uk



Customised growth chart

- Generate once EDD by scan established

Adjusted for

- Height
- Weight
- Ethnic origin
- Parity

And not for

- Paternal
- Fetal

CONFIDENTIAL This form should be stored in the register and for all times kept for your practice. Please ensure you are knowledgeable as to the correct use for individual maternity unit. **NHS**

Pregnancy Notes

Name _____
Address _____
Postcode _____ Date of birth ____/____/____
Unit No. _____ NHS No. _____

EDD: ____/____/____

Plan of care

Date recorded	Planned place of birth	Lead professional	job title	Reason, if plan changed
/ /				
/ /				
/ /				
/ /				

Primary care

GP: _____ CPD: _____
Address: _____ Telephone: _____
Health visitor: _____
Midwife: _____

Maternity Unit

Hospital: _____ Switch: _____ Delivery suite: _____
Address: _____ Day care: _____ Antenatal clinic: _____
Ward: _____ Ambulance: _____

Next of Kin

Name: _____
Address: _____
Relationship: _____

Emergency Contact

Name: _____
Address: _____
Telephone: _____

T

Mother Ref.

First Name

Last Name

Date of Birth

Ethnic Origin

Parity

Height

Weight

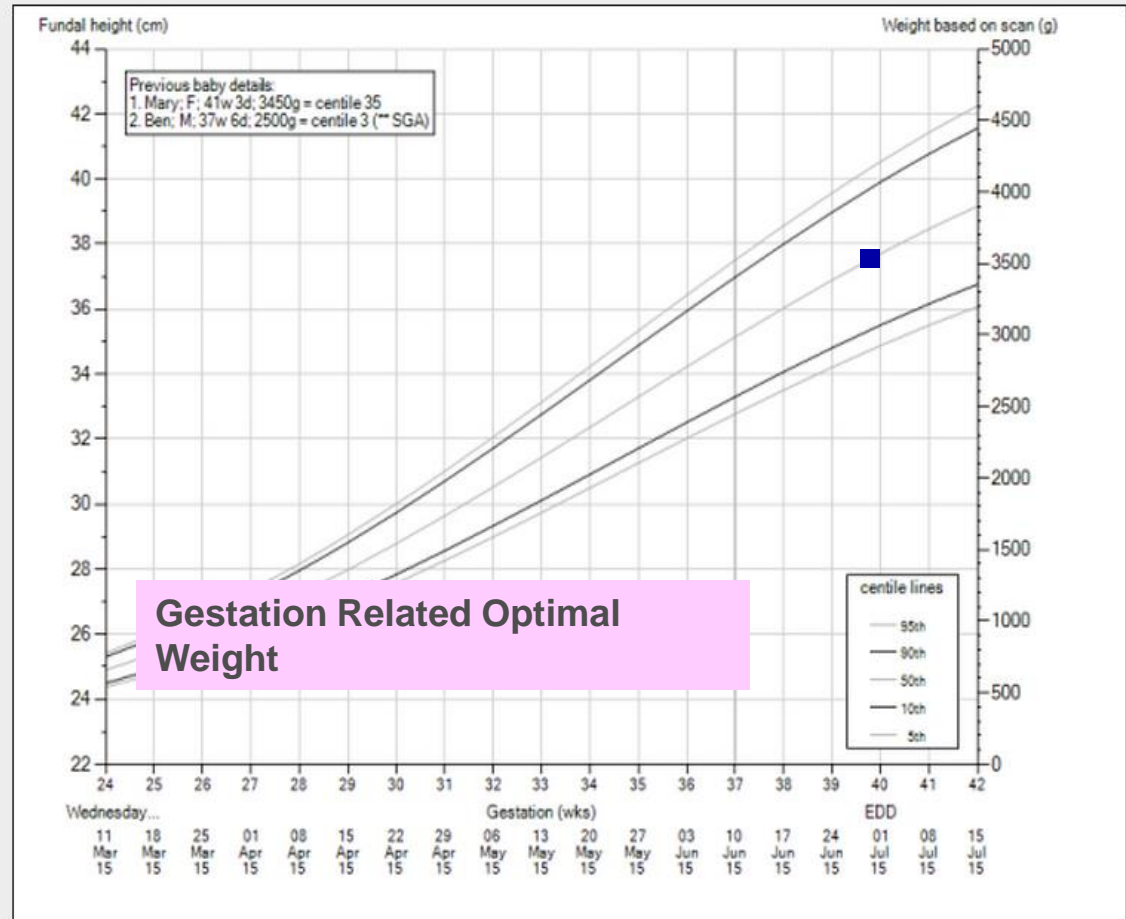
BMI **24.1**

TOW (g) **3570**

EDD known

Calculate EDD

Generate Chart



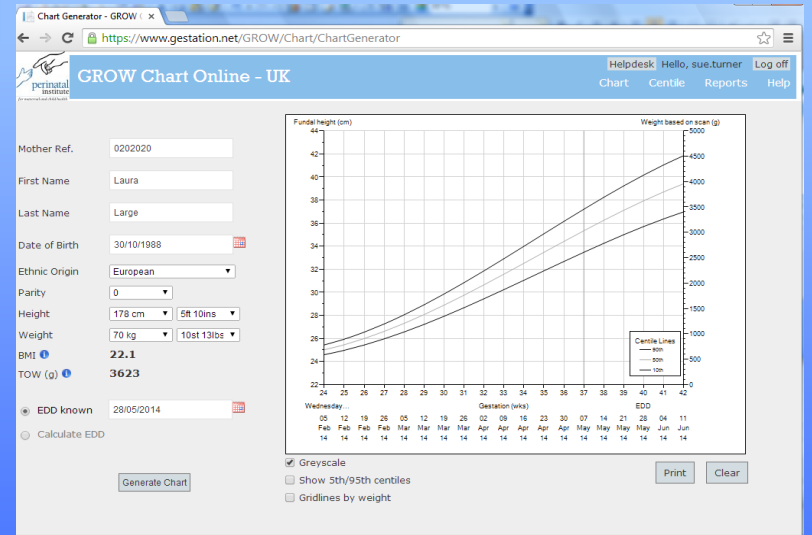
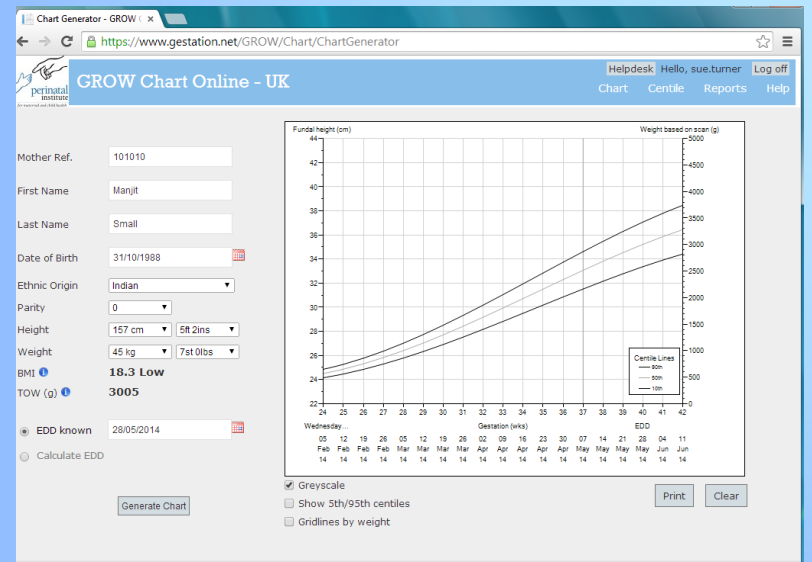
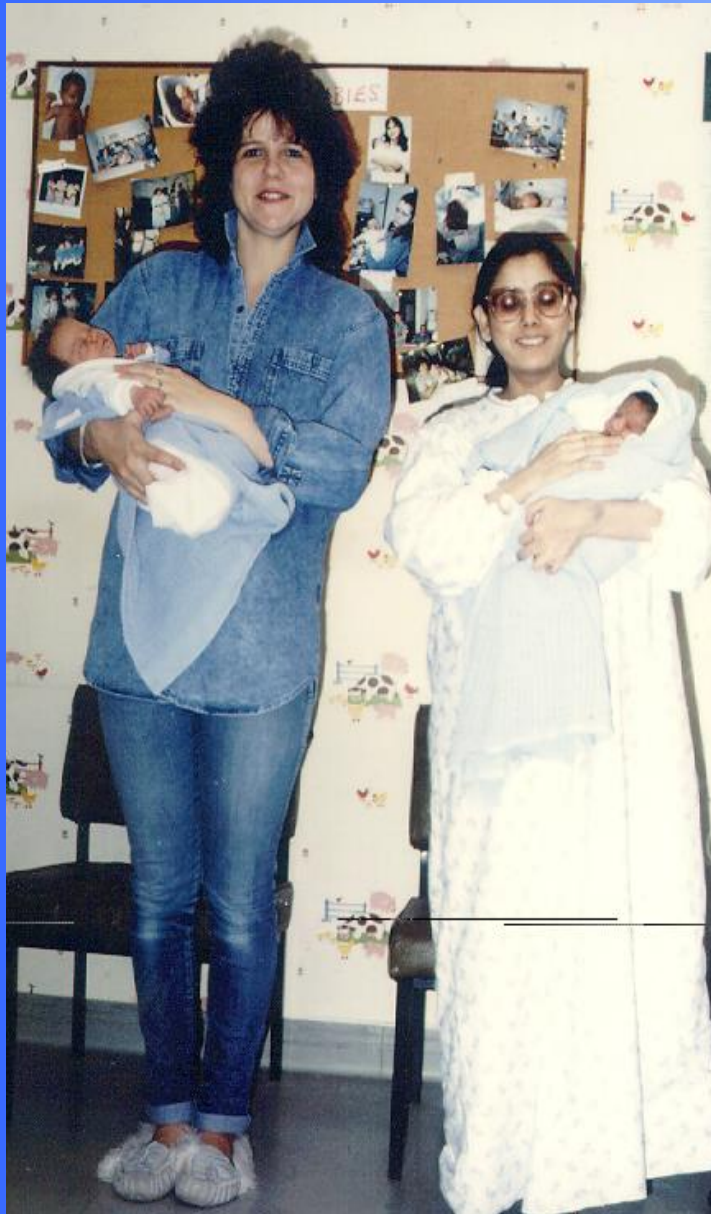
- Greyscale
- Show 5th/95th centiles
- Gridlines by weight

Print **Clear**

Co-efficients for the UK GROW web application

Using a multiple regression model, the term (280) day birthweight for a non-smoking British European primip of average weight (64kg) and average height (163cms) is calculated as 3453.4

When you input individual maternal characteristics the software then “adds on” or “subtracts from” the average we calculate the TERM OPTIMAL WEIGHT





Mother Ref.

First Name

Last Name

Date of Birth

Ethnic Origin

Parity

Height

Weight

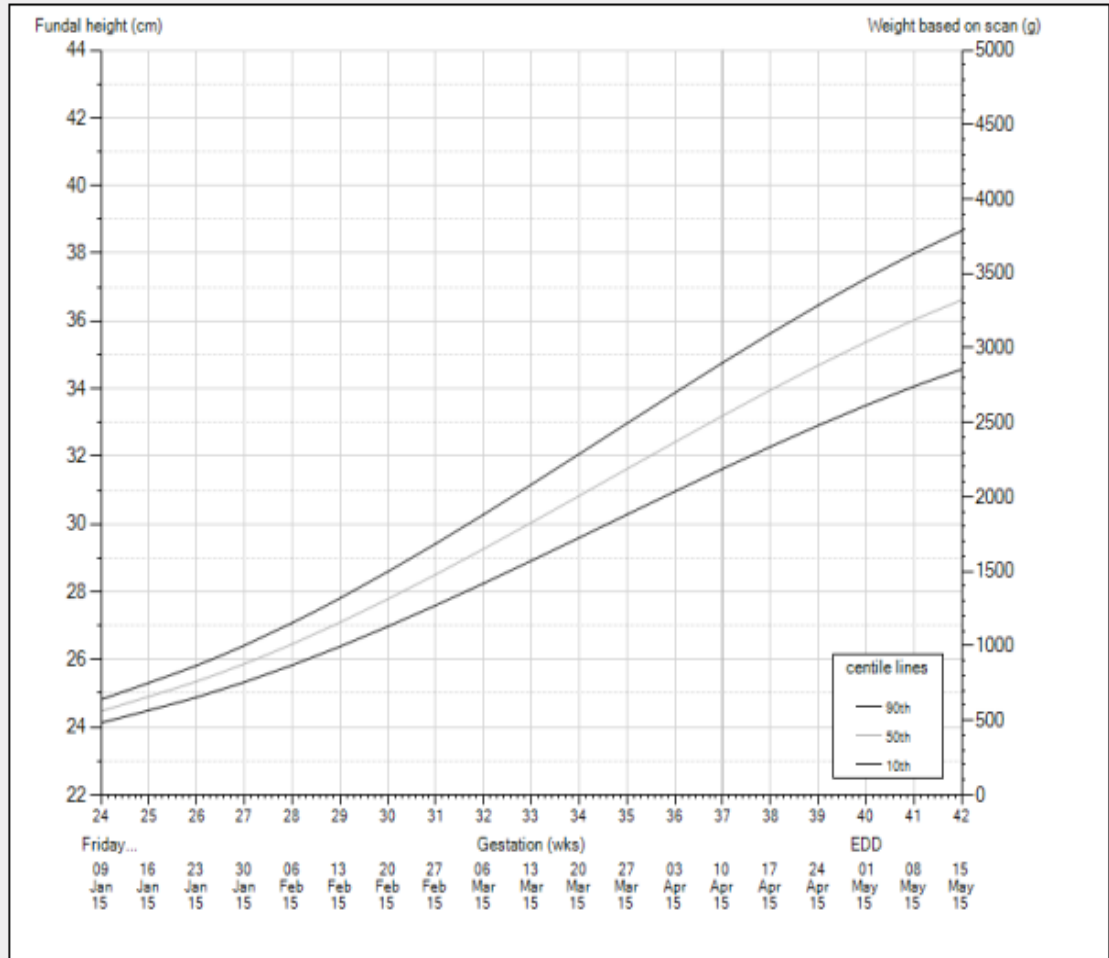
BMI **18.3 Low**

TOW (g) **3042**

EDD known

Calculate EDD

Generate Chart



- Greyscale
- Show 5th/95th centiles
- Gridlines by weight

Print Clear

Mother Ref.

First Name

Last Name

Date of Birth

Ethnic Origin

Parity

Height

Weight

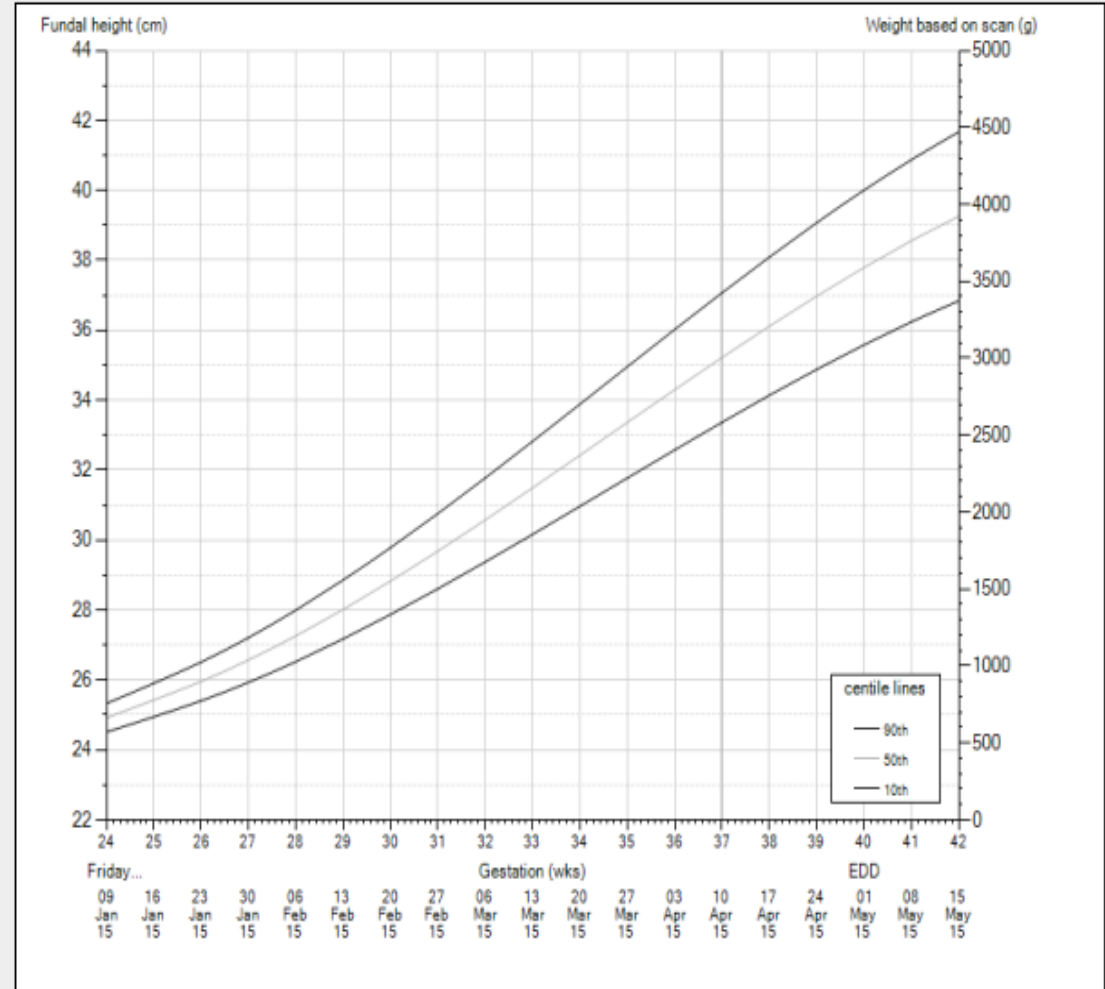
BMI **22.1**

TOW (g) **3590**

EDD known

Calculate EDD

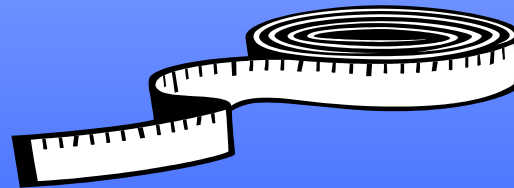
[Generate Chart](#)



- Greyscale**
- Show 5th/95th centiles**
- Gridlines by weight**

[Print](#) [Clear](#)

Standardised Fundal Height Measurement



Fundal Height Measurement

- Primary screening tool
- Acceptable to women
- Easy to perform
- Non-invasive
- Inexpensive

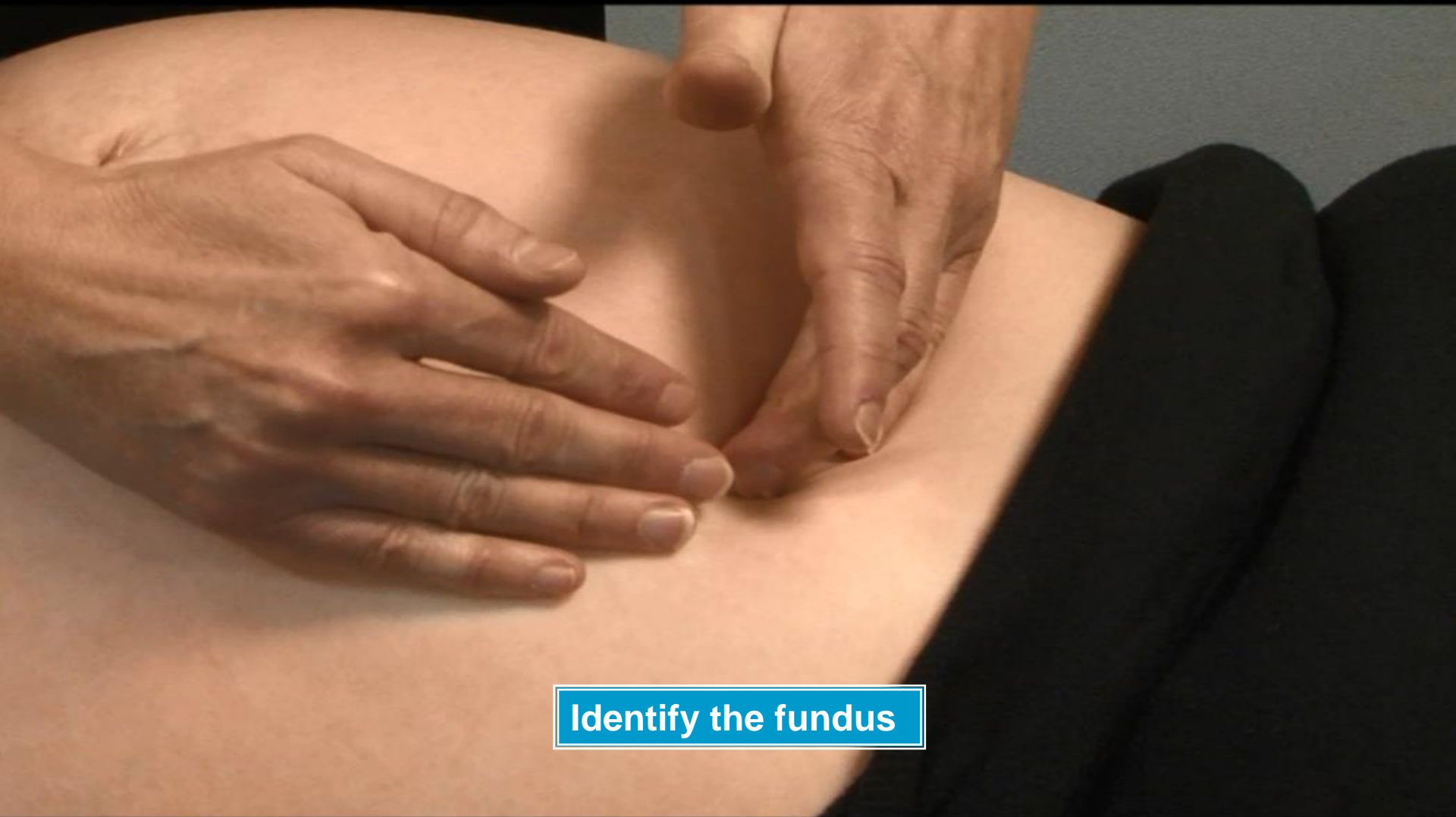
Standardising Practice

- Intra observer variation
- Inter observer variation
- Bladder volume
- Tape measure
- Frequency of assessment

Semi recumbent-empty bladder



Fundal height



Identify the fundus

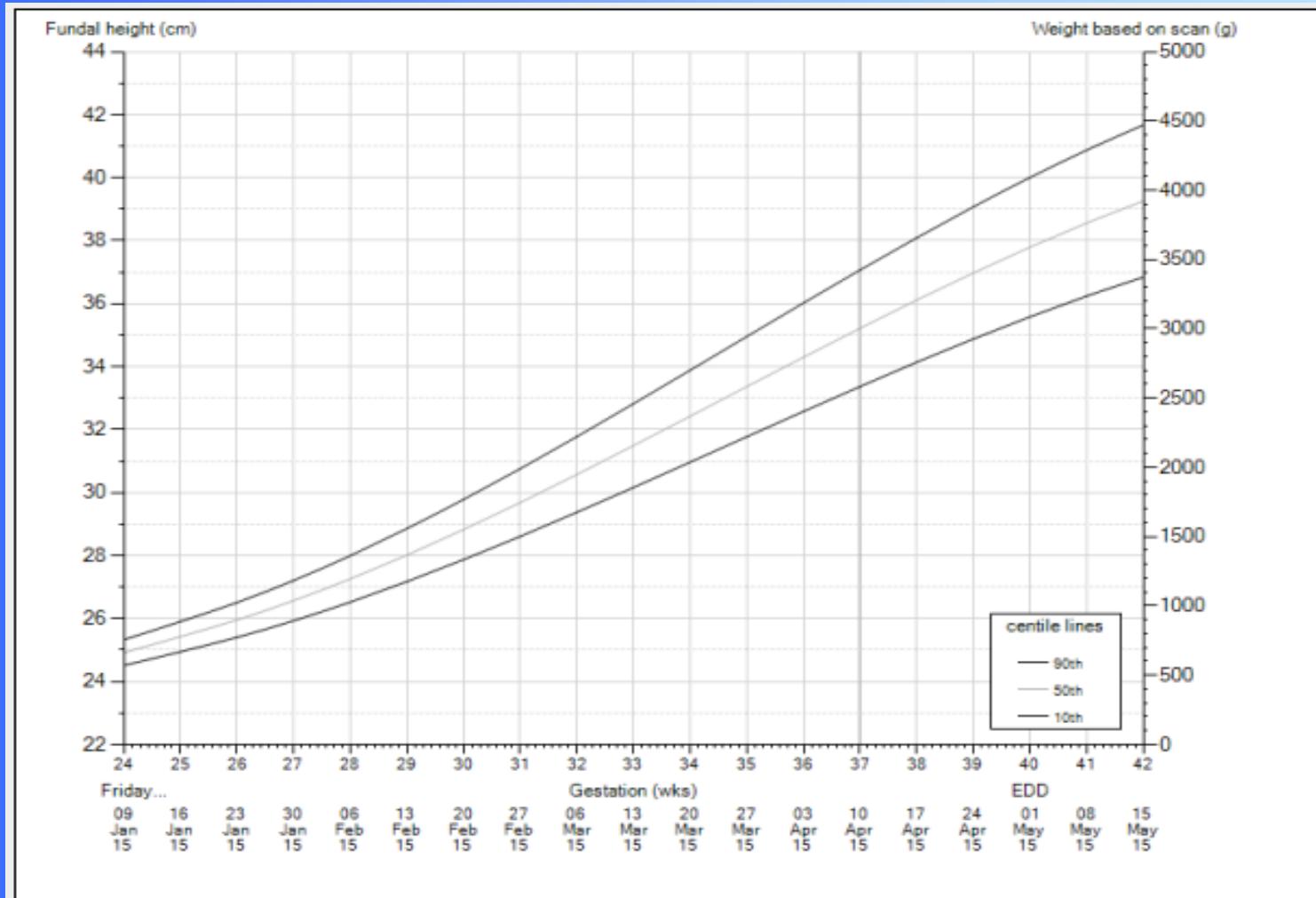


**Identify top of the
symphysis pubis**

Semi recumbent-empty bladder



Measure the longitudinal axis, with a non-elastic tape measure and numbers hidden.

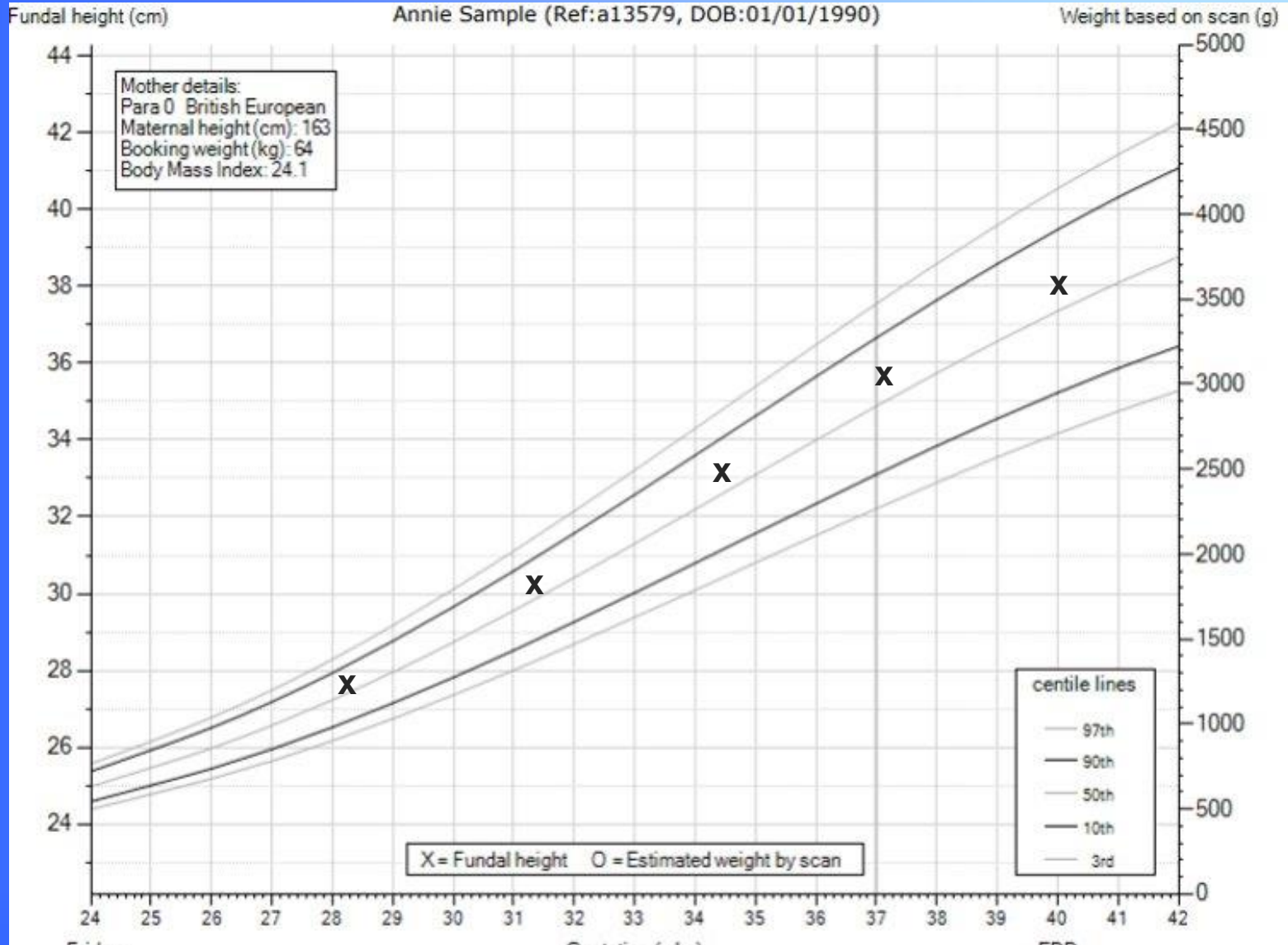


6. Plot measurement on customised growth chart and refer for USS if required

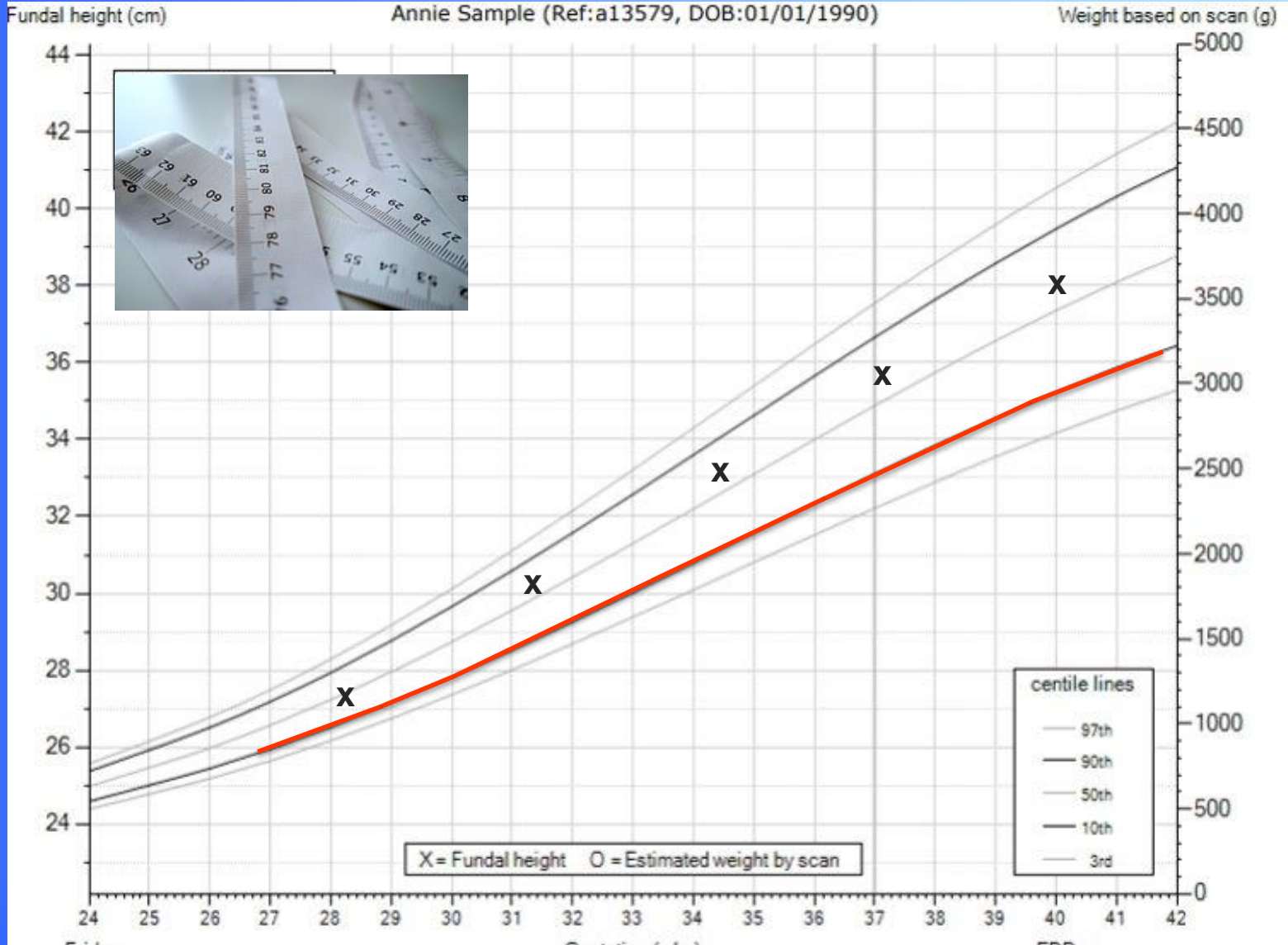
Considerations

- Descent of the head
- Malpresentation
- Multiple Pregnancies
- Already having serial scans – how frequent is serial?
- Obesity

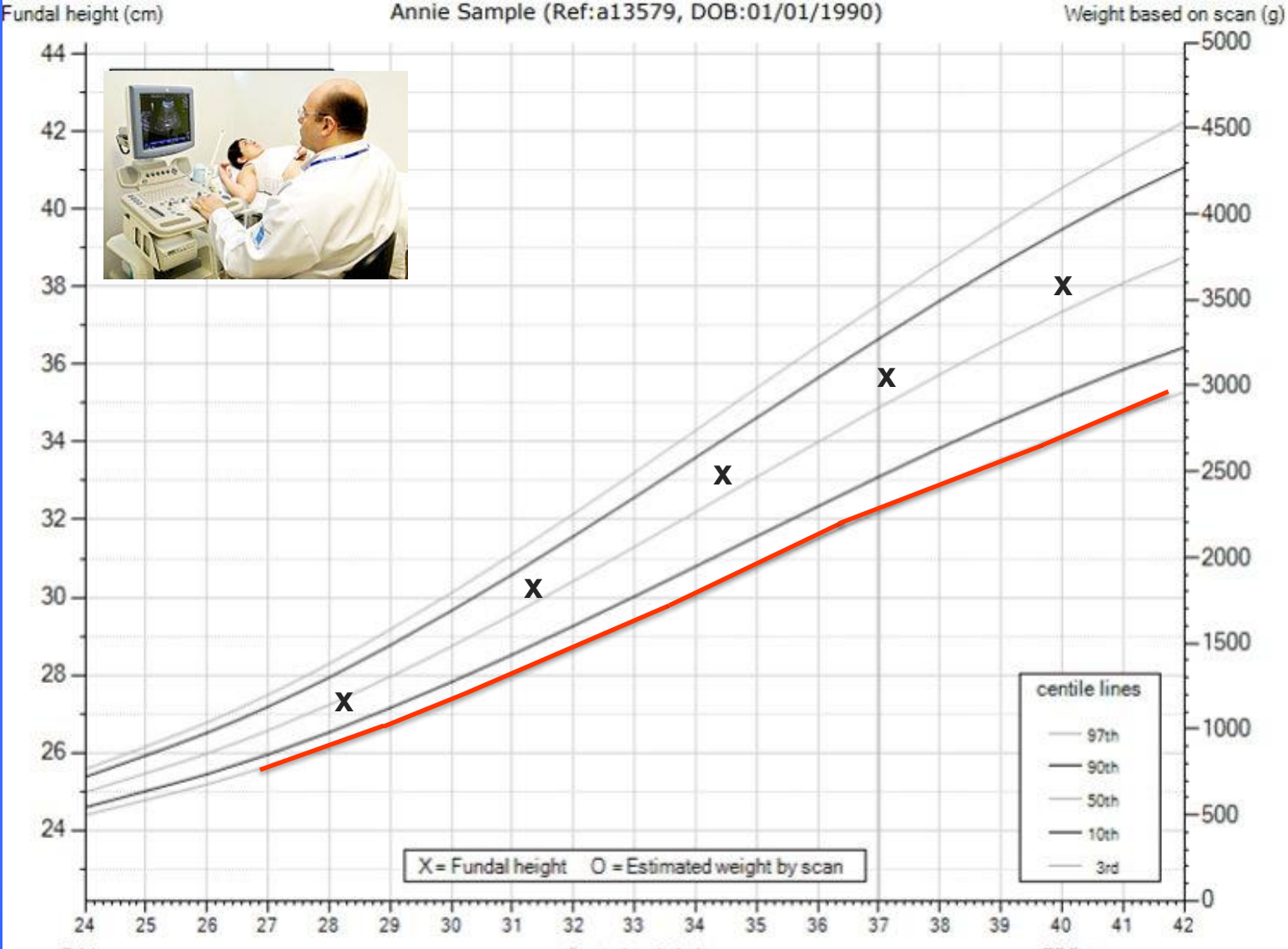
Is this normal growth?



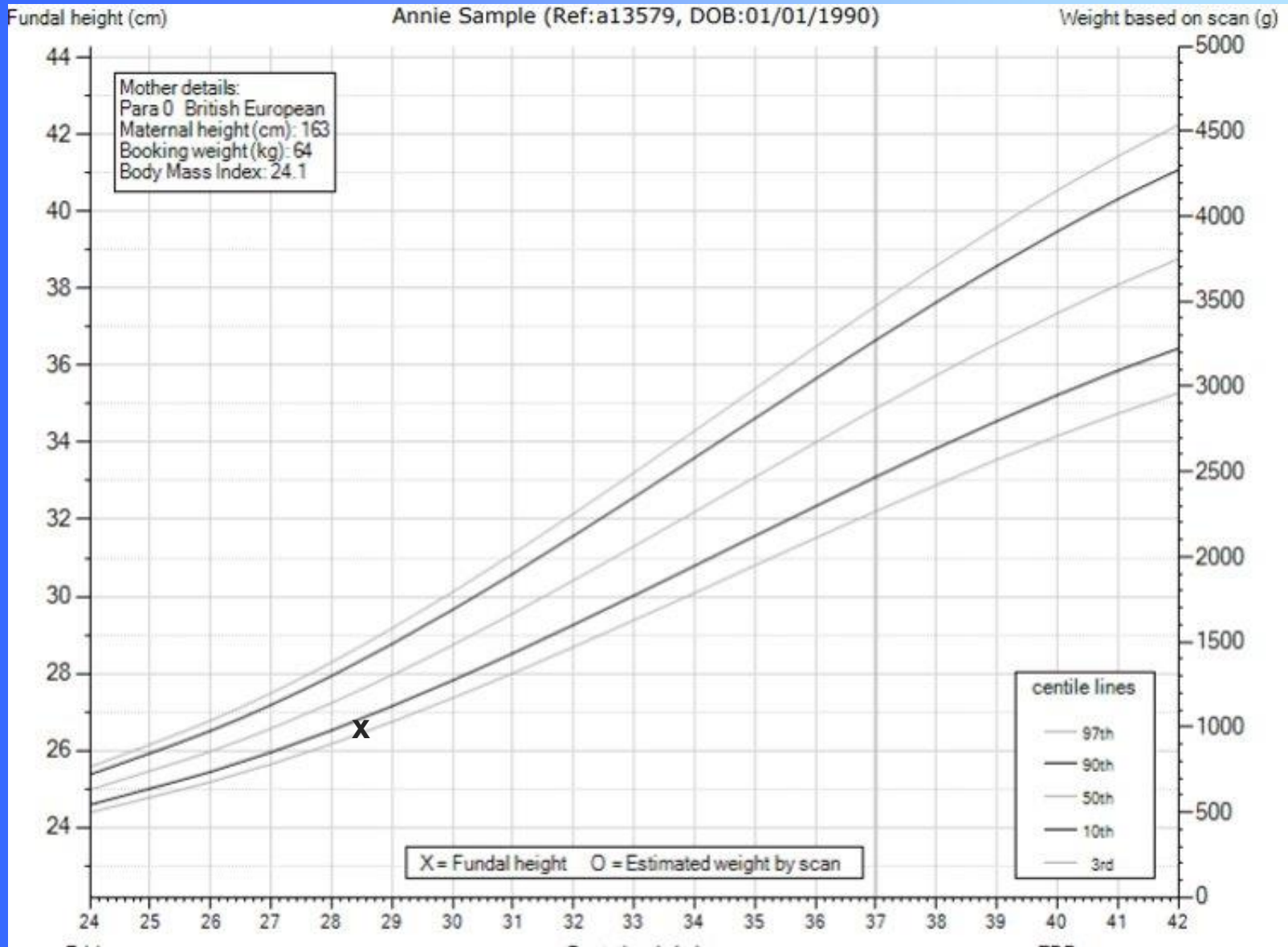
Referral line- fundal height



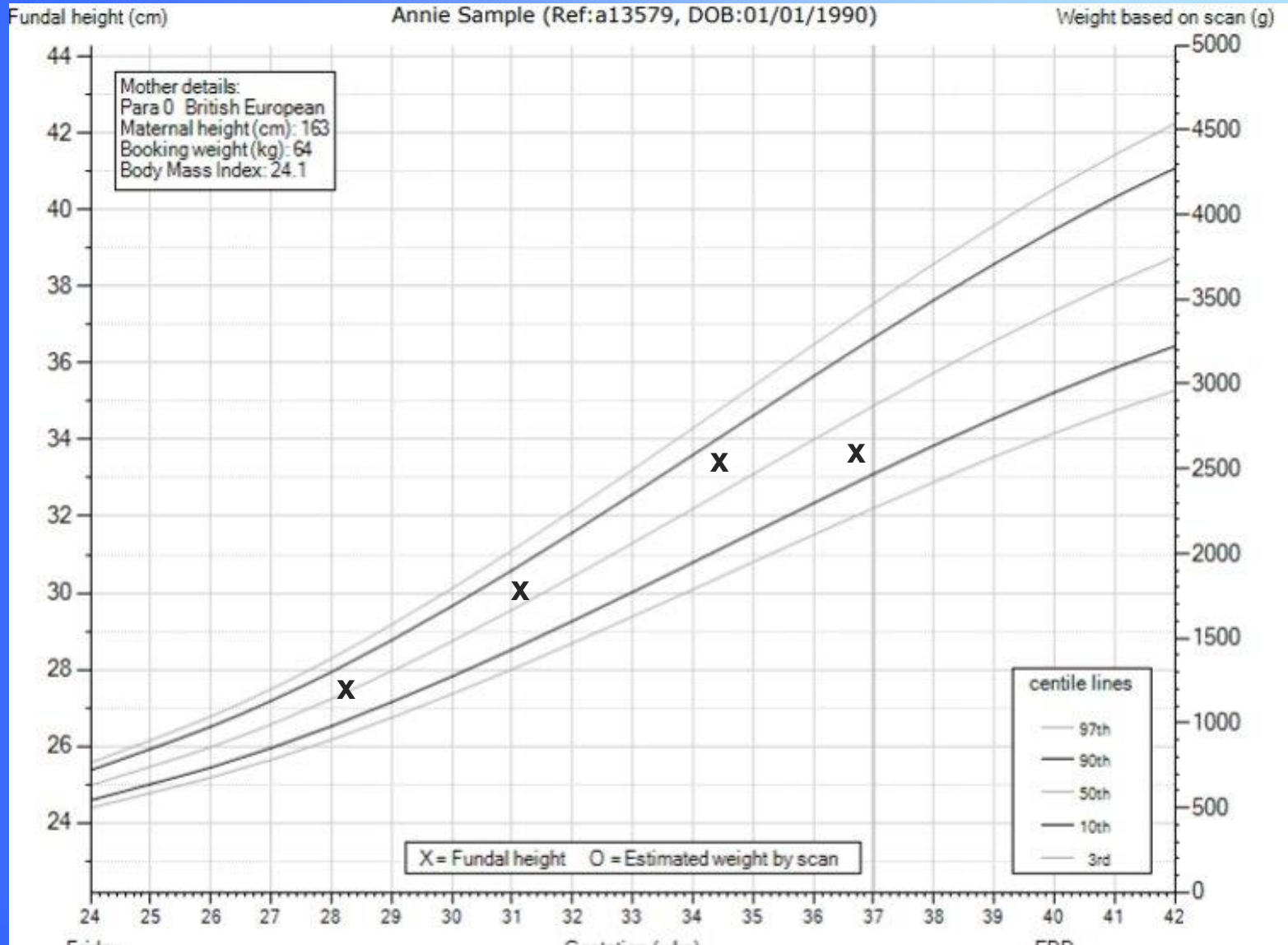
Referral line-EFW



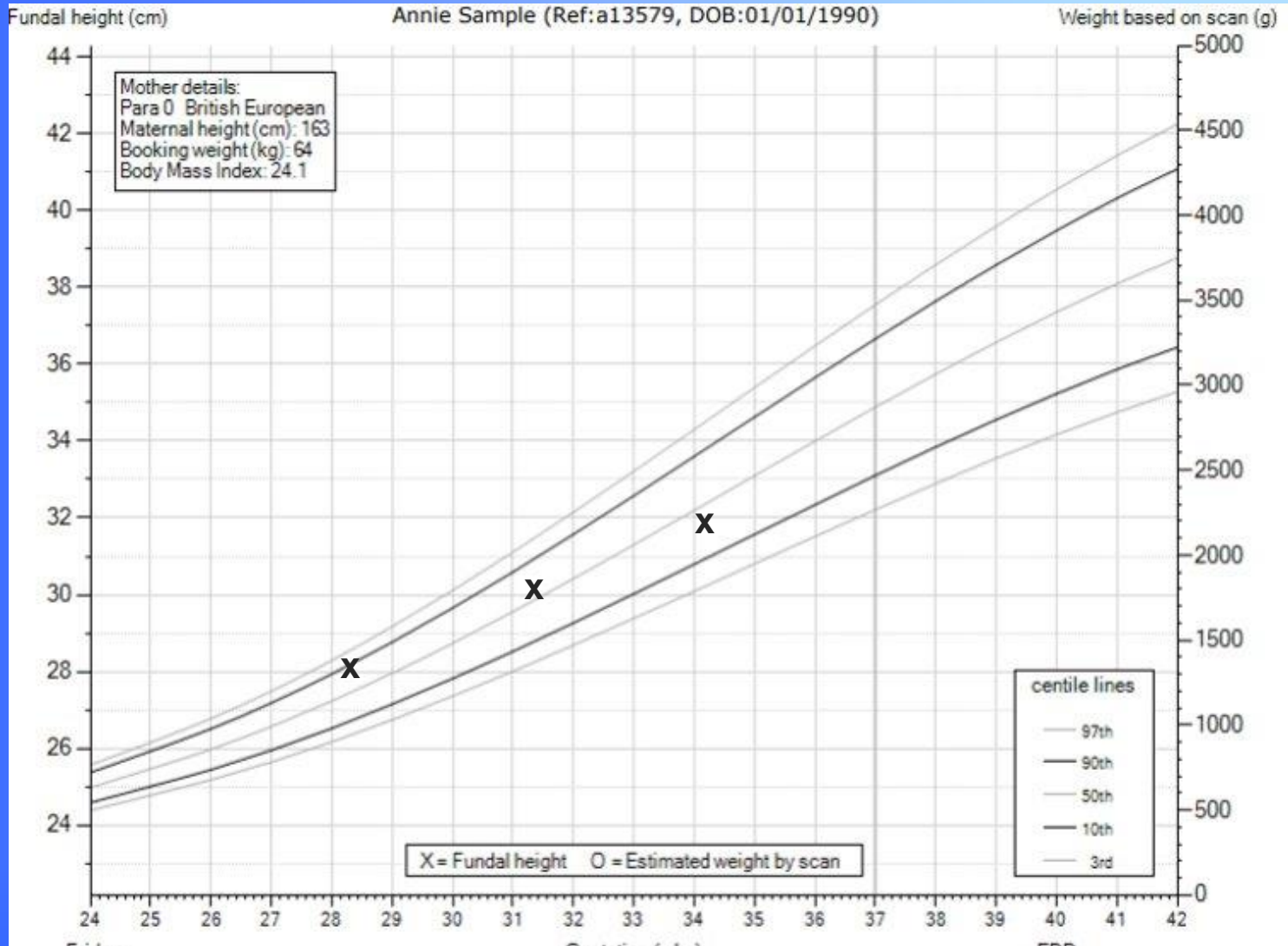
1st plot below 10th centile



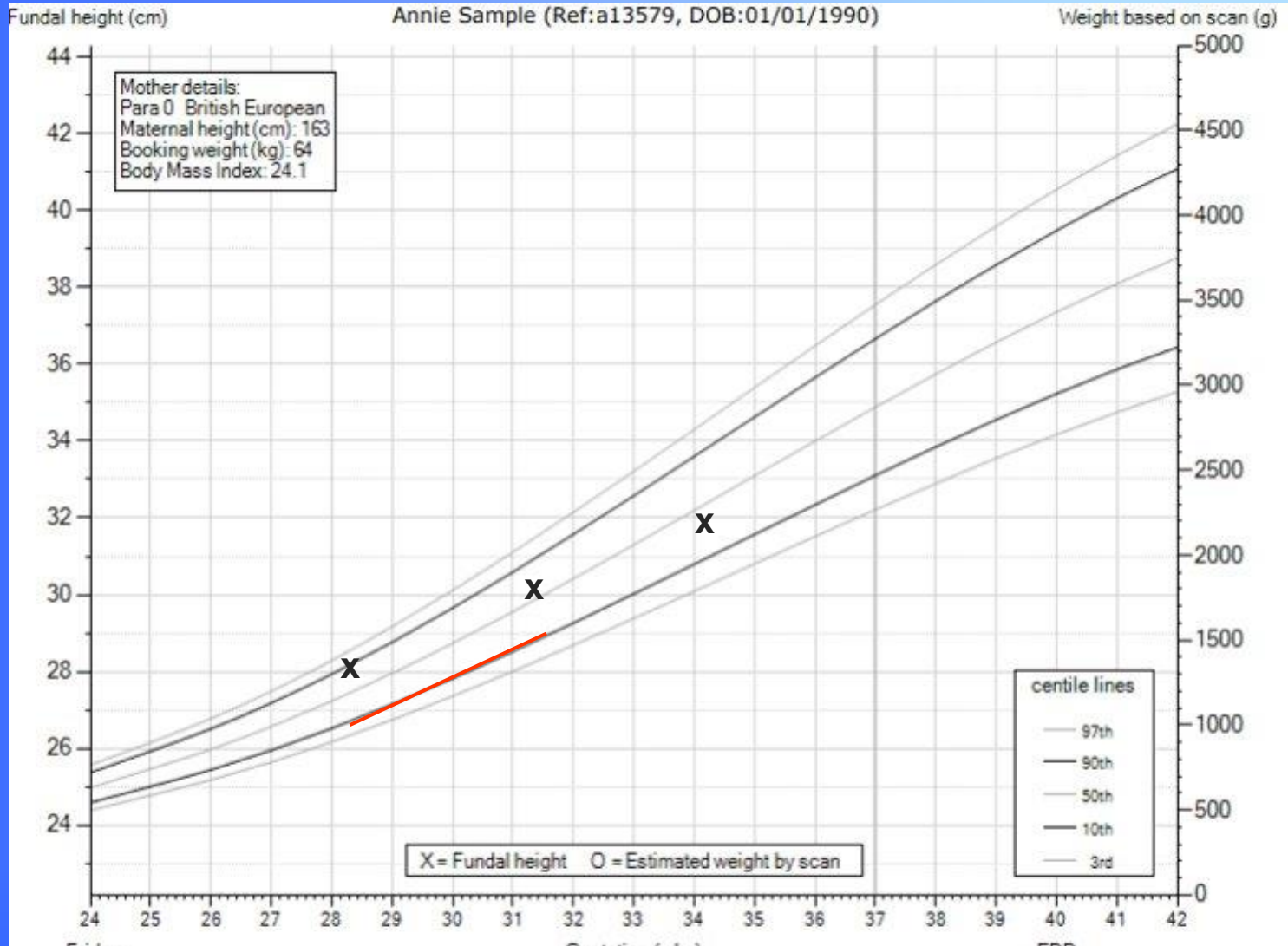
No growth



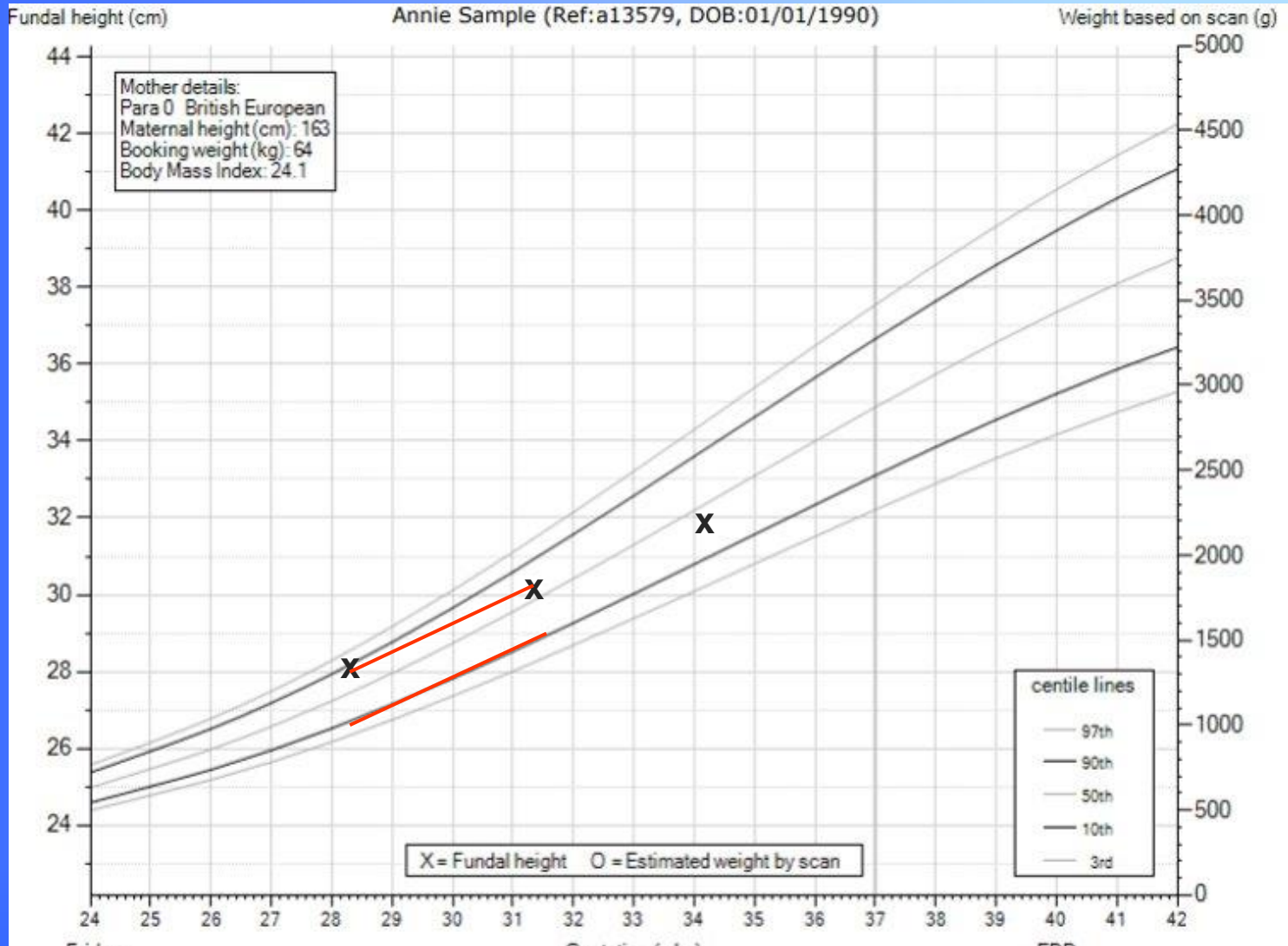
Slow growth



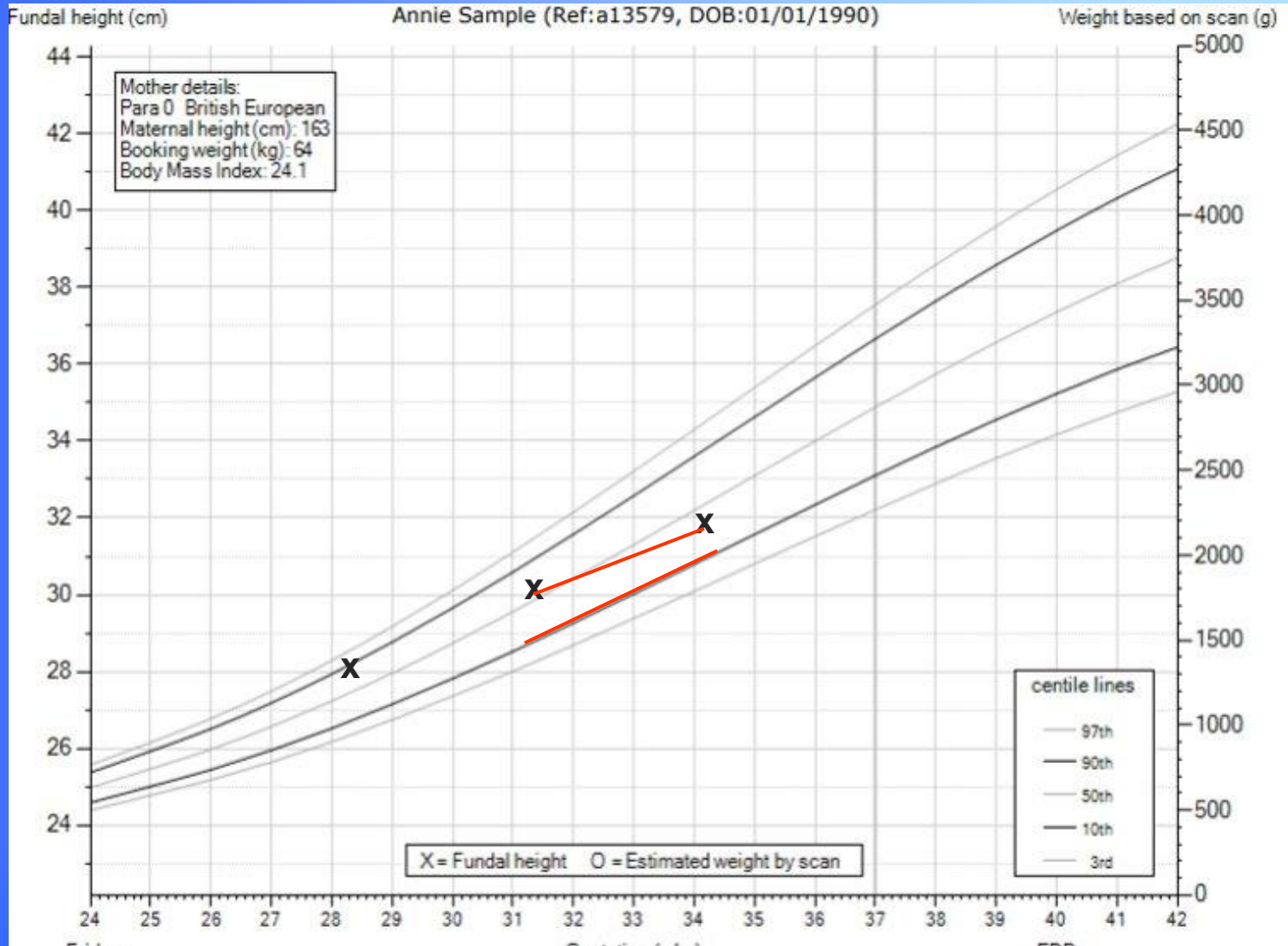
Slow growth



Slow growth



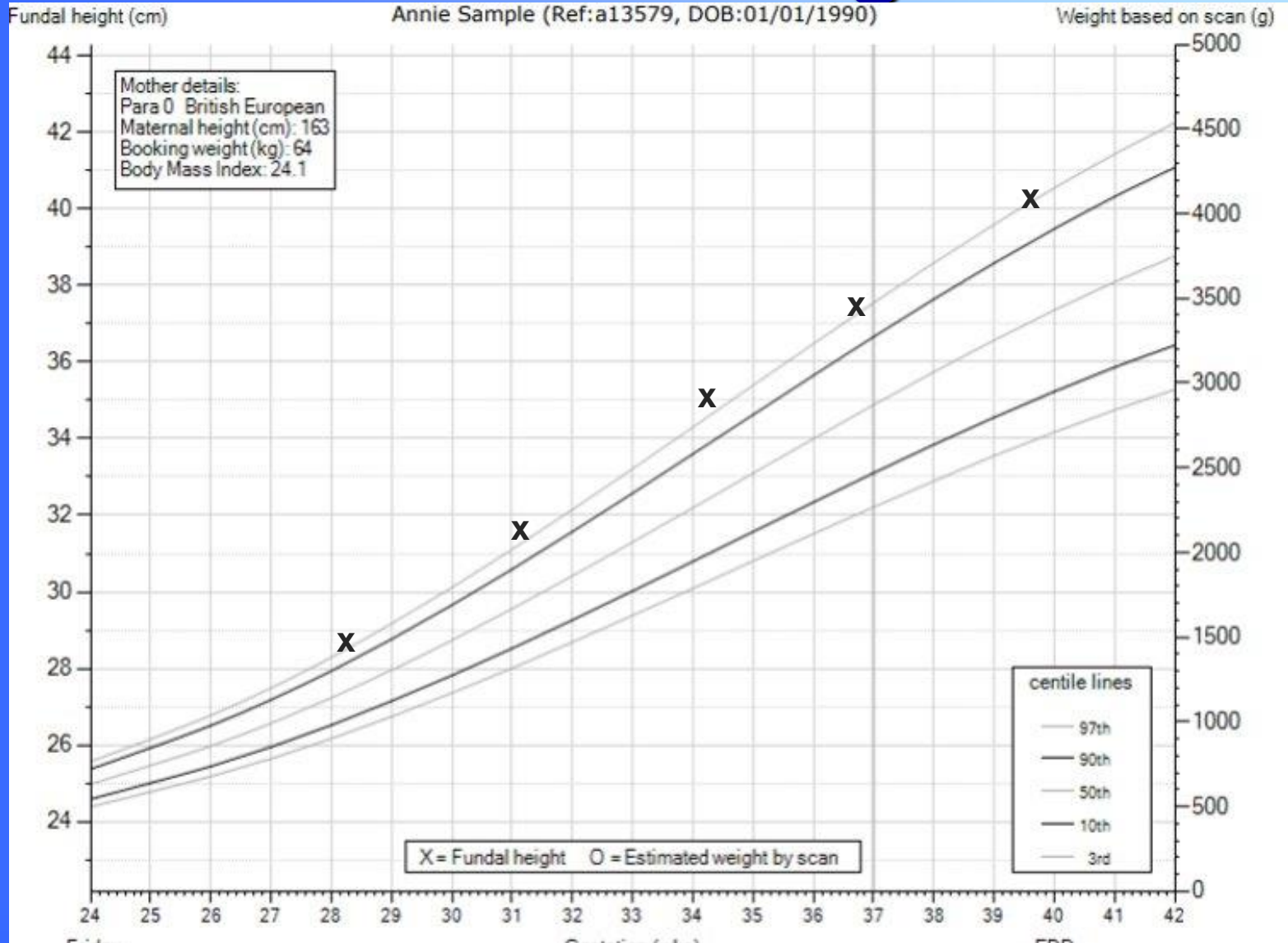
Slow growth



Slow Growth Demonstration

- https://www.perinatal.org.uk/GAP/slow_growth_SFH.mp4

Is this normal growth



Fetal growth screening implementation strategy

- Standardised fundal height measurement
- Serial plotting on customised charts
- Clear referral protocols
- Revolving door policy

Growth Assessment Protocol (GAP)

- Face-to-face training
- E learning
- Completion of baseline audit
- Competency assessments
- Template fetal growth protocol
- Monitoring detection rates
- Audit of non-detected cases of FGR
- GAP leads (midwife, obstetrician, sonographer)
- PI support

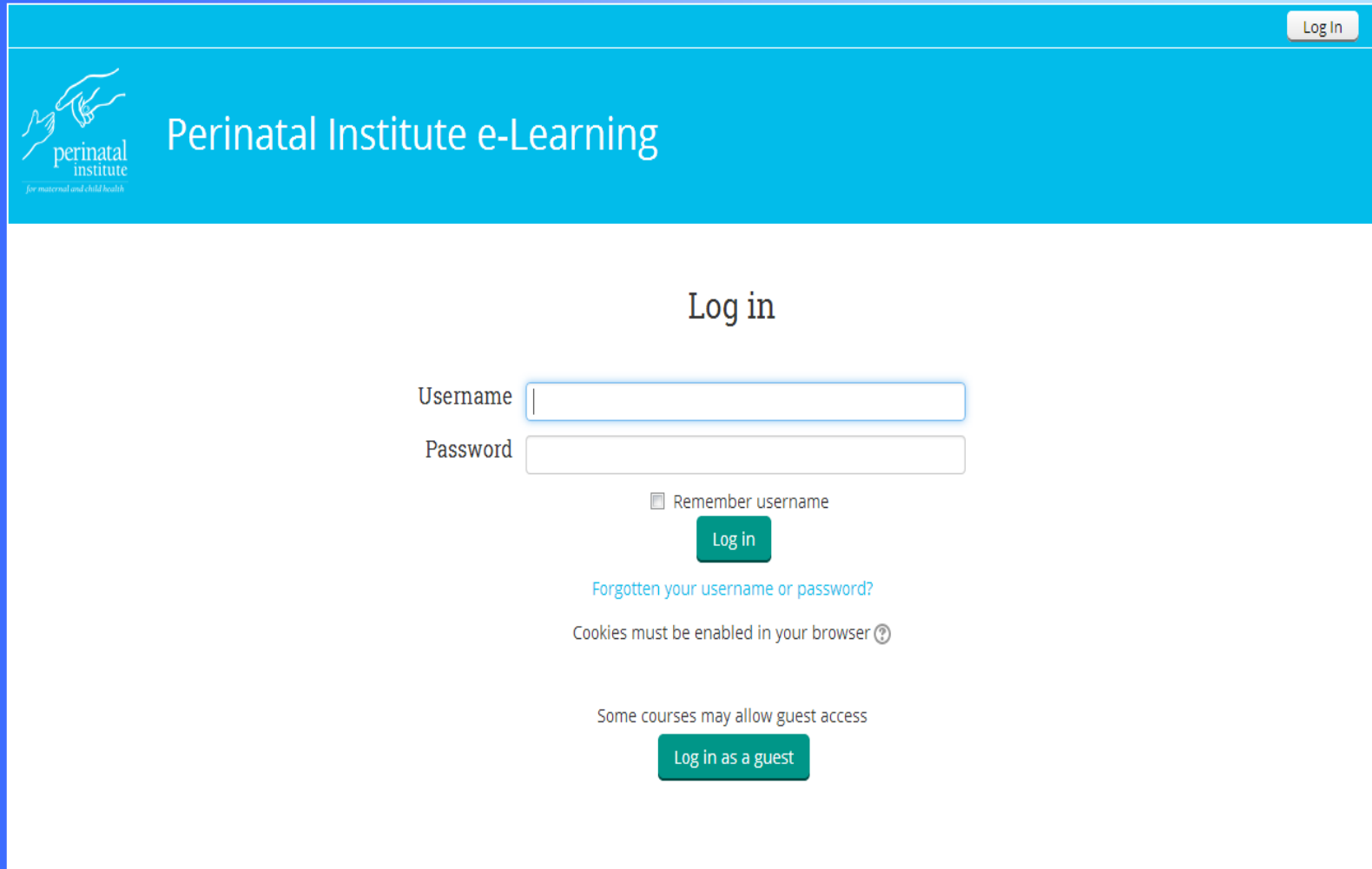


E-learning

Module 1 – Theory Module 2 - Practice

- Can be accessed from anywhere with an internet connection
- Will take approximately 1 hour to complete
- User can update themselves as required
(every 12 months recommended)
- Email address required for every user
Account will be set up and login details emailed to them
- Key leads will have a training log of all users who have completed on line training

Log in Screen



The screenshot shows the login interface for the Perinatal Institute e-Learning system. At the top right, there is a "Log In" button. The header features the Perinatal Institute logo, which consists of two hands holding a heart, and the text "perinatal institute for maternal and child health". The main heading is "Perinatal Institute e-Learning". The central area is titled "Log in" and contains two input fields: "Username" and "Password". Below these fields is a checkbox labeled "Remember username". A green "Log in" button is positioned below the checkbox. Below the button, there are two links: "Forgotten your username or password?" and "Cookies must be enabled in your browser?". At the bottom, there is a note "Some courses may allow guest access" and a green "Log in as a guest" button.

Log In

perinatal
institute
for maternal and child health

Perinatal Institute e-Learning

Log in

Username

Password

Remember username

Log in

[Forgotten your username or password?](#)

Cookies must be enabled in your browser [?](#)

Some courses may allow guest access

Log in as a guest

Log in details will be emailed to users with details of how to access the system

Courses

The screenshot shows a web interface for the Perinatal Institute e-Learning platform. At the top, there is a blue header with the Perinatal Institute logo (a stylized drawing of hands) and the text "perinatal institute for maternal and child health". To the right of the logo is the text "Perinatal Institute e-Learning". In the top right corner, there is a user profile icon labeled "Sue" with a dropdown arrow. Below the header is a navigation bar with icons for "Home", "Dashboard", and "My Courses". On the right side of this bar are icons for a menu and a search function. The main content area is titled "Theory" and is part of a course named "GAP NZ". It lists several activities with progress indicators (checkboxes): "Definitions", "FGR and pregnancy outcome", "Risk assessment", "Screening and surveillance", "Detection rates and effect of training", and "Training and Protocols". The "GAP Theory" activity is marked as complete with a checkmark icon. Below the list, there is a section titled "Not available unless:" followed by a bulleted list of prerequisites: "The activity Definitions is marked complete", "The activity FGR and pregnancy outcome is marked complete", "The activity Risk assessment is marked complete", "The activity Screening and surveillance is marked complete", "The activity Detection rates and effect of training is marked complete", and "The activity Training and Protocols is marked complete". At the bottom of the page, there is a section titled "Practice".

perinatal institute
for maternal and child health

Perinatal Institute e-Learning

Sue

Home Dashboard My Courses

> GAP NZ

Theory Your progress ?

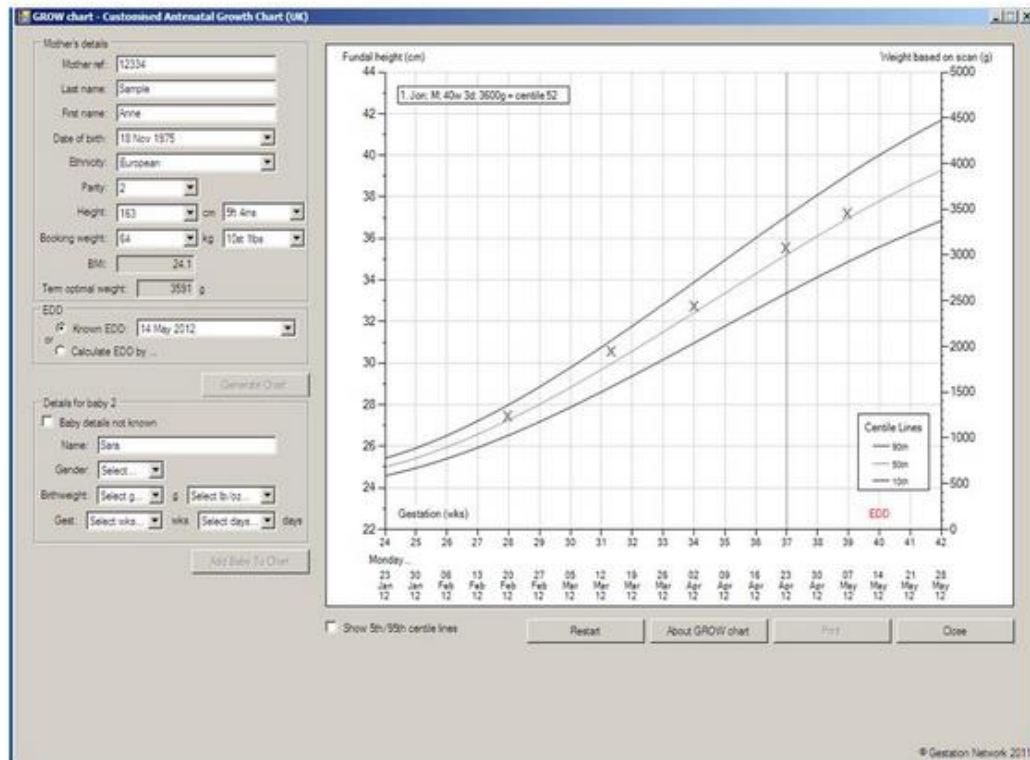
- Definitions
- FGR and pregnancy outcome
- Risk assessment
- Screening and surveillance
- Detection rates and effect of training
- Training and Protocols
- GAP Theory

Not available unless:

- The activity **Definitions** is marked complete
- The activity **FGR and pregnancy outcome** is marked complete
- The activity **Risk assessment** is marked complete
- The activity **Screening and surveillance** is marked complete
- The activity **Detection rates and effect of training** is marked complete
- The activity **Training and Protocols** is marked complete

Practice

What does this chart show?



- A. Accelerated growth
- B. Static growth
- C. Slow Growth
- D. Normal growth

Test at the end of each module

Assists learner to retain information

Can take test as many times as required

Can print own certificate

Next

Competency Assessment

■ Knowledge of:

- Definitions of FGR
- Research evidence
- Risk assessment at booking
- Customised growth chart and referral criteria
- Standardised fundal height
- Customised centile at birth and on going management

■ Demonstration of:

- Production of a GROW chart
- Standardised fundal height
- Plotting measurements on a chart

Criteria for Competence			
END OF COMPETENCY: Undertake fetal growth surveillance			
Date of GROW training:	<input type="text"/>		
Date of E-learning completed:	<input type="text"/>		
Name of Practitioner:	<input type="text"/>		
Name of Supervisor/Peer:	<input type="text"/>		
Please retain the original document within your personal professional profile and forward a copy of this completed document to <input type="text"/> (local GROW link person)			
Element of competence to be achieved	Date achieved	Practitioner signature	Name and signature of Peer/Supervisor of Midwives
1. The practitioner demonstrates knowledge of			
1.1 Definitions of fetal growth restriction / IUGR			
1.2 Research into factors associated with fetal growth restriction			
1.3 Risk assessment at booking for women at risk of developing fetal growth restriction and the RCOG guideline (2013) on at risk groups			
1.4 Customised growth chart and customised birthweight centile			
1.5 Standardised fundal height measurements <ul style="list-style-type: none"> - when to start/finish - how often - procedure 			
1.6 Referral criteria and process of referral <ul style="list-style-type: none"> - First plot below the 10th centile - NO growth (static or flat curve) - SLOW growth (curve not following the slope of previous plots) - EXCESSIVE growth (curve steeper than the expected slope of previous plots) 			
1.7 Plan appropriate ongoing antenatal care following referral and plot			
1.8 Customised centile at birth and referral criteria			

GROW Web App



GROW Chart Online

+44 (0) 121 607 0101 [Log in](#)

[Chart](#) [Centile](#) [Reports](#)

Log in.

User name

Password

[Log in](#)

**Hospital-based
username and password**

Welcome to GROW web-app, the new on-line application for customised assessment of fetal growth and birth weight designed as an intrinsic component of the [GAP](#) programme

The GROW software includes functionality for

- generation of the customised antenatal chart to plot fundal height and estimated fetal weight measurements throughout pregnancy
- calculation of the customised birthweight centile for the baby
- reporting rates of fetal growth restriction and antenatal detection by unit/Trust

Please visit the help section for further details on how to use this application.

The functionality is also available as a web service which can be integrated with existing Maternity Information Systems. If your unit/Trust would prefer to use the web service, please contact the GROW team on 0121 607 0101.

Customised Birthweight Centile. Chart ID - 52754625

Mother / Booking Details		Baby / Birth Details	
EDD	<input type="text" value="31/05/2016"/>	Unit responsible for antenatal care ⁱ	<input type="text" value="No Antenatal Care"/>
Maternal Height	<input type="text" value="163 cm"/> <input type="text" value="5ft 4ins"/>	Baby DOB	<input type="text"/>
Booking Weight	<input type="text" value="64 kg"/> <input type="text" value="10st 1lbs"/>	Gestation at birth	
Maternal Ethnicity	<input type="text" value="British European"/>	Outcome ⁱ	<input type="text" value="Live birth"/>
Parity	<input type="text" value="0"/>	Gender	<input type="text" value="select.."/>
Please check that the Chart ID corresponds with the mother's details		Birth Weight ⁱ	<input type="text" value="grams.."/>
<input type="button" value="Yes"/> <input type="button" value="No - Re-enter Chart ID"/> <input type="button" value="No - Generate new chart"/>		Antenatal referral for suspected SGA or FGR by fundal height ⁱ	<input type="text" value="select.."/>
		SGA or FGR detected antenatally by USS ⁱ	<input type="text" value="select.."/>
		Early pregnancy assessment ⁱ	<input type="text" value="select.."/>
		Birthweight Centile ⁱ	<input type="text"/>

Confirm mother's details are correct. If so select "yes"

If mothers details are incorrect, re enter chart ID number. If details remain incorrect, generate a new chart, and use the new chart ID number.

Input unit responsible for antenatal care

Customised Birthweight Centile. Chart ID - 52754625

Mother / Booking Details

EDD

31/05/2016

Baby / Birth Details

Unit responsible for antenatal care

No Antenatal Care

All maternity units in the United Kingdom are listed with the additional option for 'no antenatal care' or 'other' for care received outside of UK/ private

No Antenatal Care

Other

1-2-1 Midwives North West

Abbey Birthing Centre - Ashford & St Peter's Hospitals NHS Trust

Aberdare Hospital - Cwm Taf NHS Trust

Aberdeen Maternity Hospital - NHS Grampian

Aboyne Birth Unit - NHS Grampian

Airedale General Hospital - Airedale NHS Foundation Trust

Alexandra Hospital - Worcester Acute Hospitals NHS Trust

Alnwick Infirmary - Northumbria Healthcare NHS Foundation Trust

Altnagelvin Hospital - Western Health & Social Care Trust

Andover Birth Centre - Hampshire Hospitals NHS Foundation Trust

Antrim Hospital - Northern Health & Social Care Trust

Arbroath Infirmary - NHS Tayside

Arrowe Park Hospital - Wirral University Teaching Hospital NHS Foundation Trust

Ashcombe Maternity Unit - Weston Area Health NHS Trust

Ayrshire Maternity Unit - NHS Ayrshire & Arran

Balfour Hospital - NHS Orkney

Banff Birth Unit - NHS Grampian

Barking, Havering and Redbridge University Hospitals NHS Trust

Early pregnancy assessment

select...

Birthweight Centile

Information



Unit responsible for antenatal care

In the majority of cases the unit responsible for antenatal care will be your own unit. However, due to some cross-boundary working, some women may have their antenatal care provided by another hospital. Please state which hospital provided the antenatal care as this will affect your reports. Please note, there is also the option to choose "no antenatal care" or "other" (e.g. woman received antenatal care outside of the UK).

Ok

Next

Obtaining a birthweight centile

Customised Birthweight Centile. Chart ID - 52754625

Mother / Booking Details		Baby / Birth Details	
EDD	<input type="text" value="31/05/2016"/>	Unit responsible for antenatal care	<input type="text" value="Other"/>
Maternal Height	<input type="text" value="163 cm"/> <input type="text" value="5ft 4ins"/>	Baby DOB	<input type="text" value="31/05/2016"/>
Booking Weight	<input type="text" value="64 kg"/> <input type="text" value="10st 1lbs"/>	Gestation at birth	40 weeks 0 days
Maternal Ethnicity	<input type="text" value="British European"/>	Outcome	<input type="text" value="Live birth"/>
Parity	<input type="text" value="0"/>	Gender	<input type="text" value="female"/>
Please check that the Chart ID corresponds with the mother's details		Birth Weight	<input type="text" value="2975 g"/>
		Antenatal referral for suspected SGA or FGR by fundal height	<input type="text" value="select..."/>
		SGA or FGR detected antenatally by USS	<input type="text" value="select..."/>
		Early pregnancy assessment	<input type="text" value="select..."/>
		Birthweight Centile	<input type="text"/>
			<input type="button" value="Next"/>

Complete birth details

Input baby birth details

Confirm if SGA / FGR was suspected (from a fundal height) or detected by scan antenatally

Information ✕

Antenatal suspicion of SGA or FGR leading to referral for further investigation is usually on the basis of a fundal height measurement below the 10th centile line, or sequential measurements suggesting no or slow growth.

Ok

Information ✕

Antenatal detection / diagnosis of SGA indicates an ultrasound estimated fetal weight (EFW) below the tenth centile, or sequential measurements with slow or no growth, and/or one or more abnormal Dopplers.

Ok

Chart Centile Reports Help Users Hospitals

Baby / Birth Details

Unit responsible for antenatal care ⓘ	Other
Baby DOB	
Gestation at birth	40 weeks 0 days
Outcome ⓘ	Live birth
Gender	female
Birth Weight ⓘ	2600 g
Antenatal referral for suspected SGA or FGR by fundal height ⓘ	no
SGA or FGR detected antenatally by USS ⓘ	no
Early pregnancy assessment ⓘ	Increased risk of SGA/FGR – no serial scans p
Birthweight Centile ⓘ	2.7 ** SGA/FGR

Edit

a note of the customised centile or print this page for the health records.

Input baby birth details

Identify early pregnancy assessment for low or increased risk *for fetal growth restriction.*

RCOG Guideline and NHS Care Bundle Algorithm recommend serial fundal height measurements for low risk women, and serial ultrasound scans for women at increased risk of SGA or fetal growth restriction. The information requested here will improve the interpretation of referral rates.

Ok

To review the NHS England Saving Babies Lives care bundle algorithmclick here

Chart Centile Reports Help Users Hospitals

Baby / Birth Details

Unit responsible for antenatal care ⓘ	Other
Baby DOB	
Gestation at birth	40 weeks 0 days
Outcome ⓘ	Live birth
Gender	female
Birth Weight ⓘ	2600 g
Antenatal referral for suspected SGA or FGR by fundal height ⓘ	no
SGA or FGR detected antenatally by USS ⓘ	no
Early pregnancy assessment ⓘ	Increased risk of SGA/FGR – no serial scans p
Birthweight Centile ⓘ	2.7 ** SGA/FGR

Edit

a note of the customised centile or print this page for the health records.

New edit function for centile page outcome, gender, birth weight

Customised Birthweight Centile. Chart ID - 52754625

Mother / Booking Details		Baby / Birth Details	
EDD	<input type="text"/>	Unit responsible for antenatal care ¹	Other <input type="text"/>
Maternal Height	163 cm <input type="text"/> 5ft 4ins <input type="text"/>	Baby DOB	<input type="text"/>
Booking Weight	64 kg <input type="text"/> 10st 1lbs <input type="text"/>	Gestation at birth	40 weeks 0 days
Maternal Ethnicity	British European <input type="text"/>	Outcome ¹	Live birth <input type="text"/>
Parity	0 <input type="text"/>	Gender	female <input type="text"/>
Please check that the Chart ID corresponds with the mother's details		Birth Weight ¹	2775 g <input type="text"/>
		Antenatal referral for suspected SGA or FGR by fundal height ¹	no <input type="text"/>
		SGA or FGR detected antenatally by USS ¹	no <input type="text"/>
		Early pregnancy assessment ¹	Increased risk of SGA/FGR – no serial scans p <input type="text"/>
		Birthweight Centile ¹	6.80 **SGA/FGR <input type="text"/>
			<input type="button" value="Edit"/>

Birthweight centile is identified.
<10th centile or >90th centile = red box

Customised Birthweight Centile. Chart ID - 52754625

Mother / Booking Details

EDD	<input type="text"/>
Maternal Height	<input type="text" value="163 cm"/> <input type="text" value="5ft 4ins"/>
Booking Weight	<input type="text" value="64 kg"/> <input type="text" value="10st 1lbs"/>
Maternal Ethnicity	<input type="text" value="British European"/>
Parity	<input type="text" value="0"/>
Please check that the Chart ID corresponds with the mother's details	

Baby / Birth Details

Unit responsible for antenatal care ⁱ	<input type="text" value="Other"/>
Baby DOB	<input type="text"/>
Gestation at birth	40 weeks 0 days
Outcome ⁱ	<input type="text" value="Live birth"/>
Gender	<input type="text" value="female"/>
Birth Weight ⁱ	<input type="text" value="2775 g"/>
Antenatal referral for suspected SGA or FGR by fundal height ⁱ	<input type="text" value="no"/>
SGA or FGR detected antenatally by USS ⁱ	<input type="text" value="no"/>
Early pregnancy assessment ⁱ	<input type="text" value="Increased risk of SGA/FGR – no serial scans p"/>
Birthweight Centile ⁱ	6.80 ** SGA/FGR
	<input type="button" value="Edit"/>

Alterations can be made to:-
Outcome
Gender
Birth weight

Edit function:

Trust reports;

- Show local report on GROW application web page:
- <https://ukaws.growservice.org/App>

Benefits of Data collection

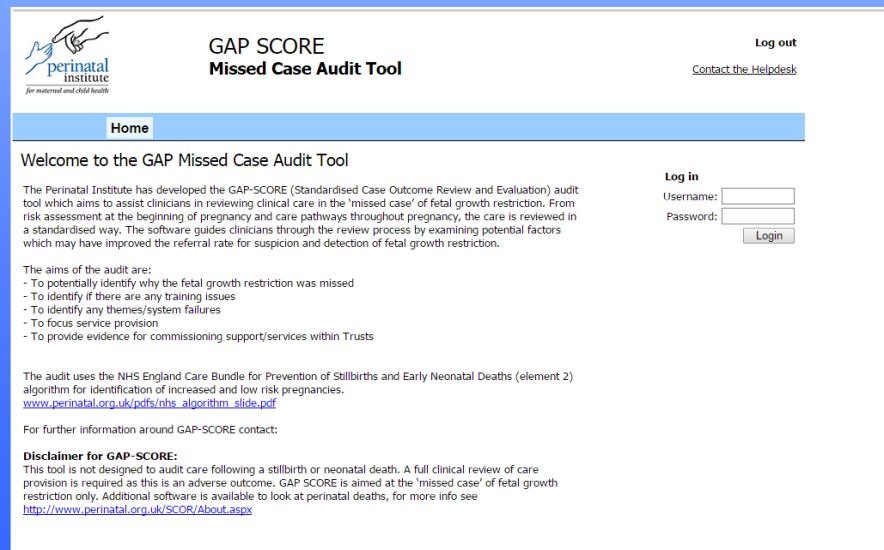
- Baseline FGR and antenatal detection rates
 - Quarterly FGR reports
 - Benchmarking against other units (anonymously)
 - National picture
-
- Can identify missed cases to audit
 - Can monitor performance and improvement
 - Commissioning support – Ultrasound resources
 - PI - Evaluation of GAP

Audit missed cases - Aim

- For each case:
 - To identify why the FGR was missed if possible
 - To identify if there are any training issues
- Overall
 - To identify themes/system failures
 - To focus service provision
 - To provide evidence for commissioning support/services

GAP-SCORE

- We provide an electronic audit tool to audit to missed cases in an standardised manner
- GAP-SCORE = Standardised Case Outcome Review and Evaluation.



The screenshot shows the homepage of the GAP SCORE Missed Case Audit Tool. At the top left is the Perinatal Institute logo with the tagline 'for maternal and child health'. The main title is 'GAP SCORE Missed Case Audit Tool'. In the top right corner, there are links for 'Log out' and 'Contact the Helpdesk'. A blue navigation bar contains a 'Home' button. The main content area is titled 'Welcome to the GAP Missed Case Audit Tool' and contains a paragraph describing the tool's purpose: 'The Perinatal Institute has developed the GAP-SCORE (Standardised Case Outcome Review and Evaluation) audit tool which aims to assist clinicians in reviewing clinical care in the 'missed case' of fetal growth restriction. From risk assessment at the beginning of pregnancy and care pathways throughout pregnancy, the care is reviewed in a standardised way. The software guides clinicians through the review process by examining potential factors which may have improved the referral rate for suspicion and detection of fetal growth restriction.'

The aims of the audit are:

- To potentially identify why the fetal growth restriction was missed
- To identify if there are any training issues
- To identify any themes/system failures
- To focus service provision
- To provide evidence for commissioning support/services within Trusts

The audit uses the NHS England Care Bundle for Prevention of Stillbirths and Early Neonatal Deaths (element 2) algorithm for identification of increased and low risk pregnancies. A link is provided: www.perinatal.org.uk/pdfs/nhs_algorithm_slide.pdf

For further information around GAP-SCORE contact:

Disclaimer for GAP-SCORE:
This tool is not designed to audit care following a stillbirth or neonatal death. A full clinical review of care provision is required as this is an adverse outcome. GAP-SCORE is aimed at the 'missed case' of fetal growth restriction only. Additional software is available to look at perinatal deaths, for more info see <http://www.perinatal.org.uk/SCORE/About.aspx>

On the right side of the page, there is a 'Log in' section with fields for 'Username:' and 'Password:', and a 'Login' button.

GAP-SCORE

- Based on risk at booking/throughout pregnancy and serial scanning
(RCOG guideline, 2014 & NHS England Saving Babies Lives Care Bundle, 2016)
- Use of customised growth chart
- Plotting and referring
- Growth scans
- Provides taxonomies and action plans



Thank You