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#spspmcqic

Maternity and Children Quality Improvement Collaborative (MCQIC)

MCQIC Webinar

Stillbirth Risk Assessment and Management

30 June 2021

Welcome and introduction

Angela Cunningham (Chair)

MCQIC Maternity Clinical Lead

Healthcare Improvement Scotland

Agenda

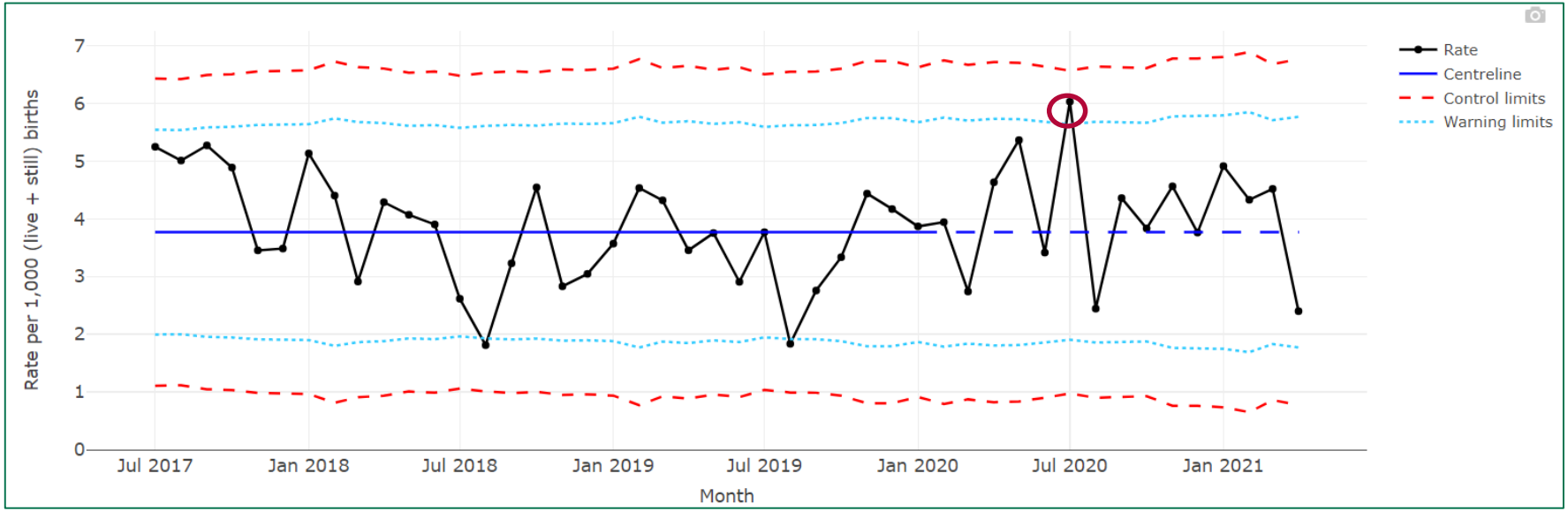
Time	Topic	Lead
11.00-11.05	Welcome and Introductions	Angela Cunningham (Chair) Maternity Clinical Lead, MCQIC Healthcare Improvement Scotland
11.05-11.10	Public Health Scotland Stillbirth Data	Angela Cunningham (Chair)
11.10-11.20	Altered Fetal Movements QI Project	Ruth Bowler Midwife NHS Grampian
11.20-11.30	Risk Assessment on Badger	Dr Brian Magowan Consultant Obstetrician and Gynaecologist NHS Borders
11.30-11.55	Q&A Panel Session	*Panel members:* • Angela Cunningham • Dr Alan Cameron • Ruth Bowler • Dr Brian Magowan
11.55-12.00	Next Steps and Close	Angela Cunningham (Chair)

Aims of the webinar

- To help attendees see the risk assessment as an ongoing process - learning from other boards
- To take the attendees through the QI journey to improved outcomes
- Using BadgerNet for risk assessment

Public Health Scotland Stillbirth Data

Monthly rate of stillbirths per 1,000 total (live + still) births in Scotland – up to April 2021



Presenter introduction

Ruth Bowler

Midwife

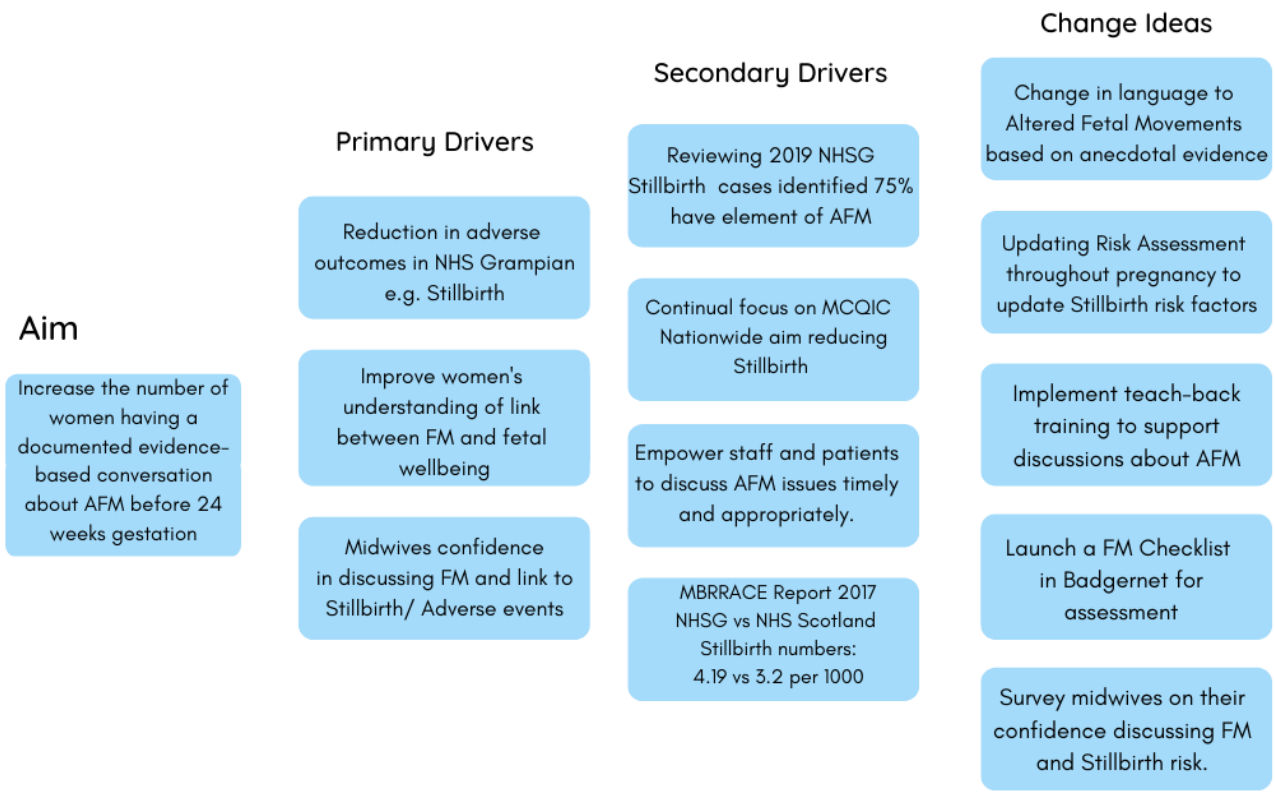
NHS Grampian

Altered Fetal Movements QI Project

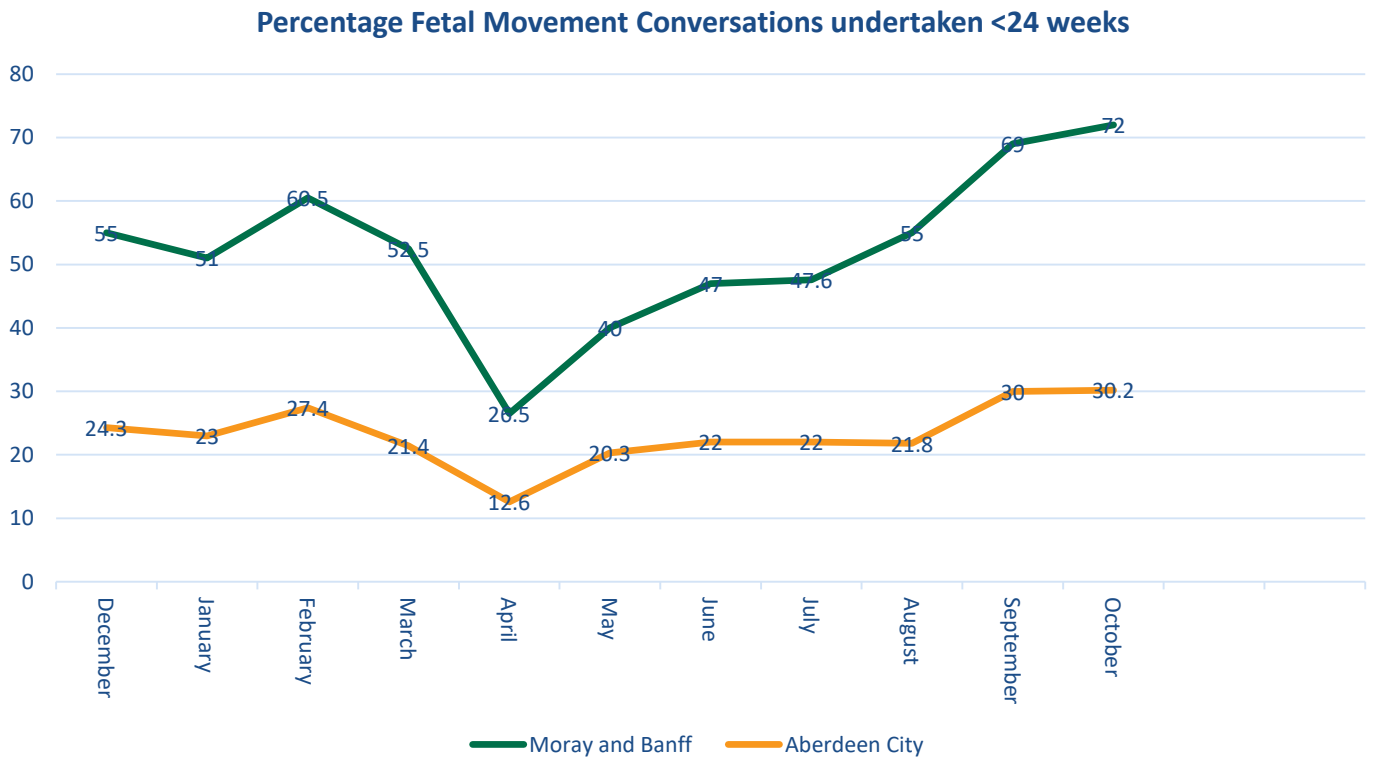
- **Project Scope:** To improve the recognition and management of Altered Fetal Movements (AFM) across NHS Grampian Maternity services
- Linked to MCQIC Fetal Wellbeing Bundle and use of teach-back in fetal movement discussions.

- **Research:**
  - Stillbirth cases in NHS Grampian 2019-2020
  - Current literature and local guidance
  - Charities advice
  - Discussions with service users from Maternity Voices Partnership
  - Survey of Midwives confidence discussing fetal movements and Stillbirth

Driver Diagram



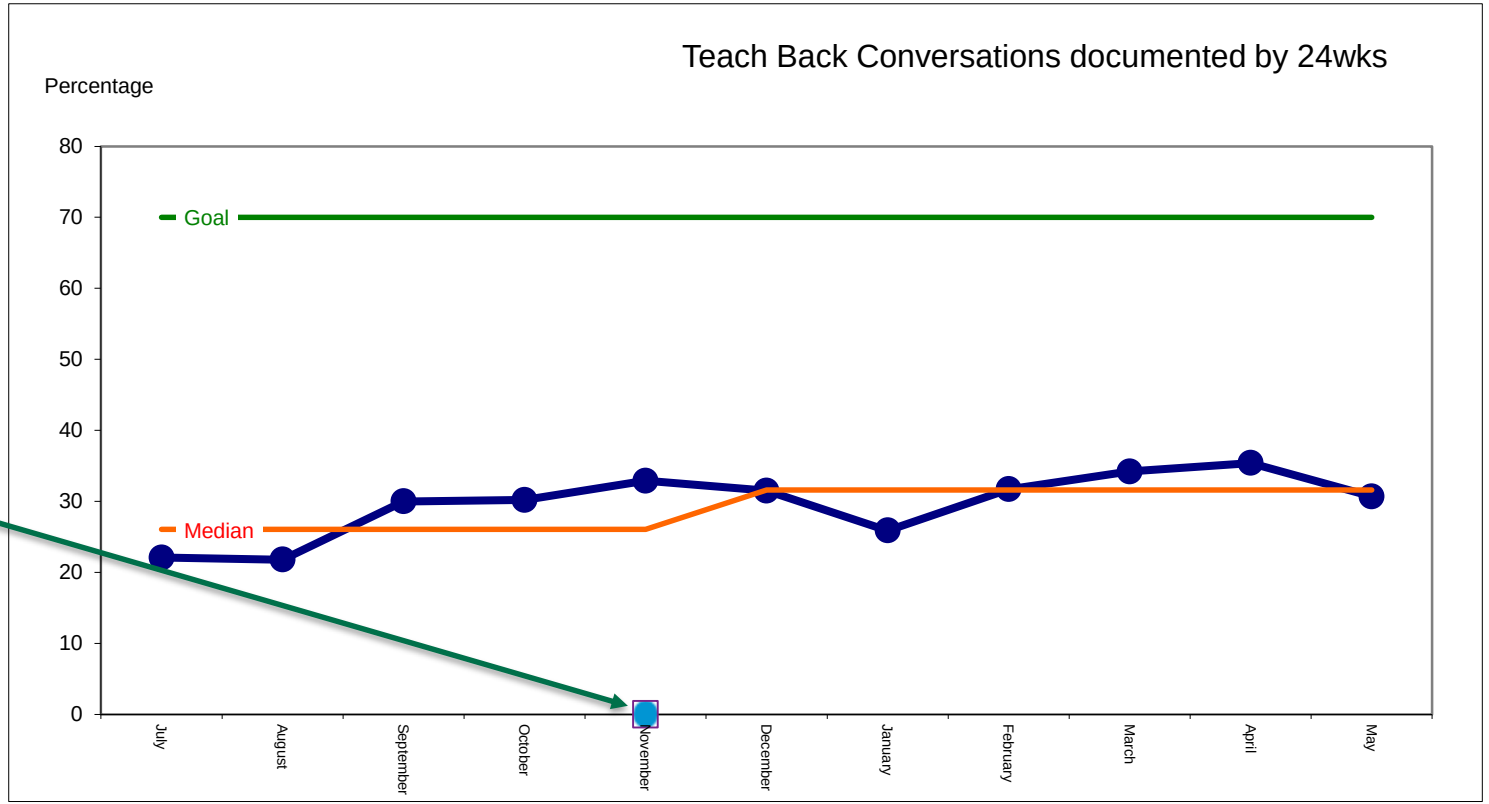
Baseline Data Collection - Dec 2019 – Oct 2020



- **Aim**: Increase the number of women having a documented evidence-based conversation about altered fetal movements prior to 24 weeks gestation.

- **Change Idea**: Implement teach-back training to staff to support discussions about altered fetal movements.

Data- Aberdeen City Community team (by month)



Test of change introduced

Findings and expansion of project

Successes:

- Positive feedback from Midwives using teach-back to structure conversations
- Liked being prompted by Badgernet
- Helped identify language or understanding barriers

Limitations:

- Training was very ad hoc and difficult to disseminate individually
- Staff initially felt this was in addition to conversations rather than reframing discussions
- Small number of midwives didn’t made a significant impact on number of documented discussions for whole city community team

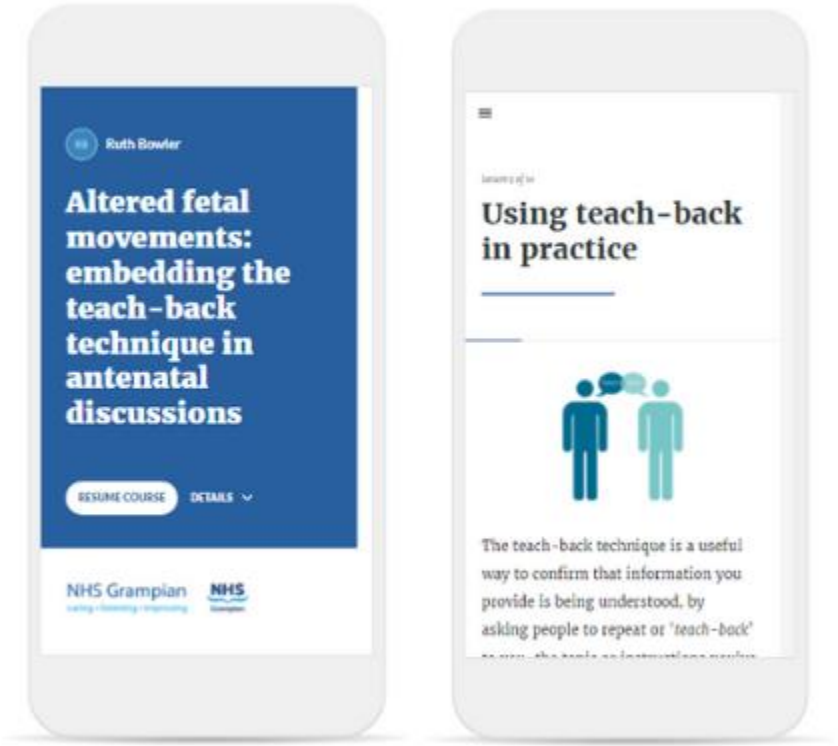
Time to ACT Campaign - Cards and eLearning

An Educational toolbox was created for further training. This will provide structured training to NHSG Community Midwifery teams to increase compliance with using teach-back in fetal movement discussions. A tangible prompt was also created as a training prompt.

The ‘Time to ACT’ card and posters have been created displaying information and examples of teach-back technique.

Launch in NHS Grampian late July 2021.

Time to ACT Campaign – eLearning and card



‘Time to ACT’ and Stillbirth Risk Assessment

The eLearning as part of the Education toolbox, highlights the importance of assessing risk for Stillbirth when discussing fetal movements.
This project has helped to identify areas for further development within the area of fetal movements and preventing stillbirth.

- Updating of risk assessment on Badgernet at each trimester via community midwife
- Updating of risk assessment on Badgernet at every admission for AFM, prompting medical review if recurrent AFM
- Review of current NHSG clinical guidance
- Development of ‘ACT’ card for service users

Thank you

Presenter introduction

Dr Brian Magowan

Consultant Obstetrician and Gynaecologist

NHS Borders

NHS Borders

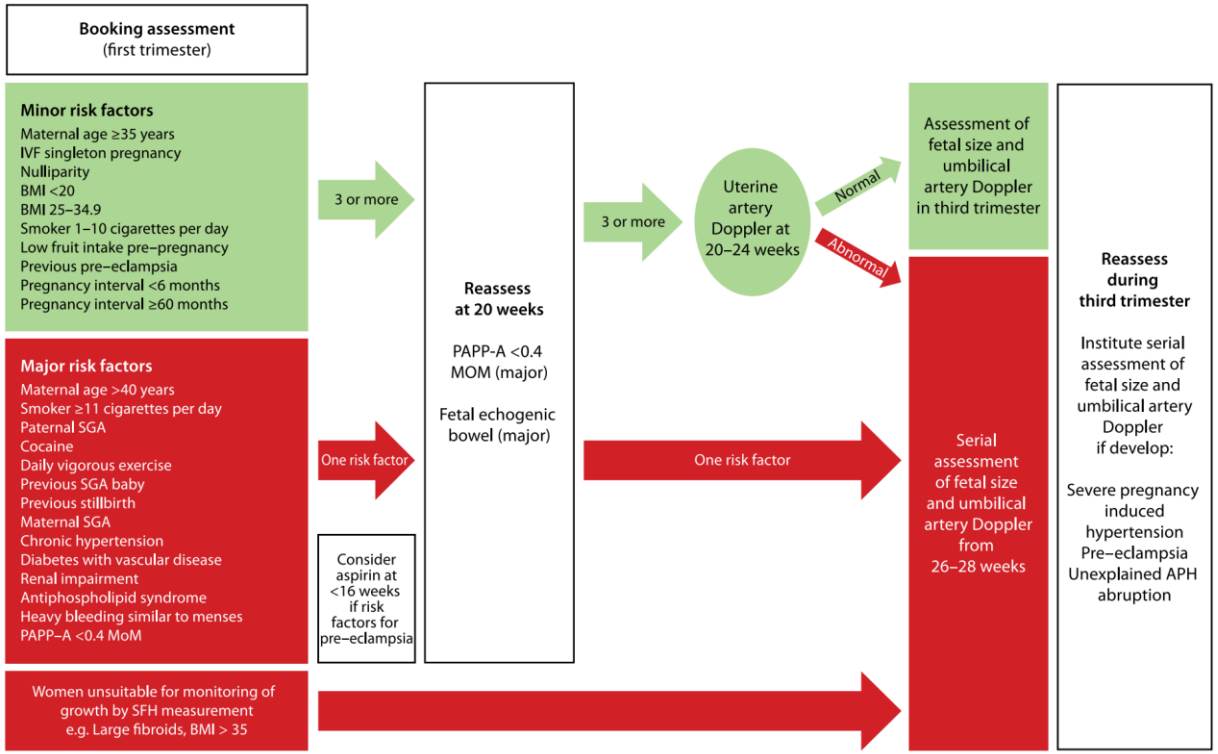
Risk Assessment on Badger

Brian Magowan,
Consultant O and G, NHS Borders

Declaration of interests:

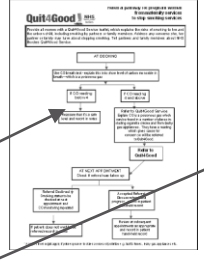
- Co-chair of RCOG GreenTop Guideline committee (non remunerated)
- Consultancy work for Clevermed (Badger) around guidelines (remunerated)

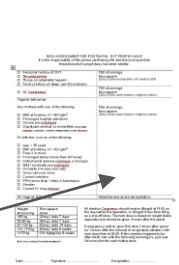
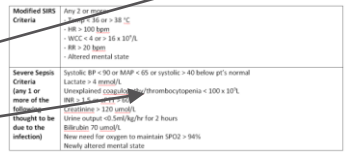
APPENDIX II: Screening for Small–for–Gestational–Age (SGA) Fetus

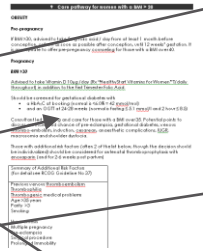
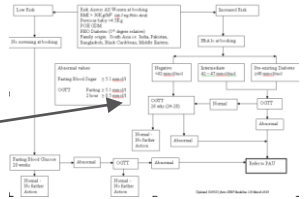
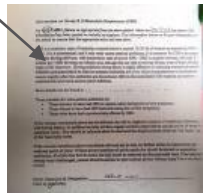
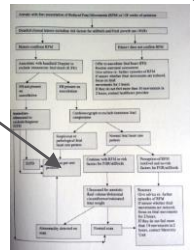
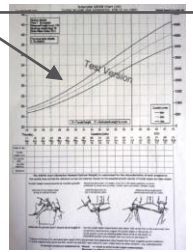
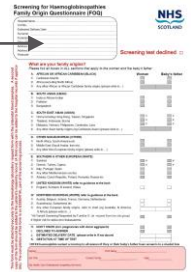


Risk assessment must always be individualised (taking into account previous medical and obstetric history and current pregnancy history). Disease progression or institution of medical therapies may increase an individual's risk.

- PPH prevention
- PPH management
- Smoking
- VTE prevention
- Sepsis
- Induction of Labour
- Growth Assessment Program
- Affirm Study
- BMI risk Assessment
- Diabetes screening
- Haemoglobinopathy screening
- Group B strep

Current Date	16/04/2014	EDD	10.06.2014
	CHI		1390869745
	Name		Josephine Bloggs
	Gestation		32 Weeks 1 Days

NHS BORDERS MATERNITY SCREENING CHART

Early Pregnancy		Late Pregnancy	
Age	41	Hb (g/l)	99
Height (m)	1.6	Pre-eclampsia	Severe
Weight (kg)	120		
BMI	46.9		
Has Thrombophilia	No		
Personal history of DVT	No	Labour / Delivery	
Family history of DVT	No	Estimated big baby	No
Parity	2	Induction of labour	No
Medical co-morbidities	No	Recent abruption this pregnancy	Yes
Current bed rest ≥24 hours	No	Praevia / Accreta	No
Gross varicose veins	No	Pyrexia in labour (>38oC)	No
Multiple pregnancy	No	Episiotomy or >2nd degree tear	No
Maternal bleeding disorder	Yes		
Previous PPH >1000mls	No		
Family origin	Caucasian	Post natal	
Previous gestational diabetes	No	Elective cesarean section	No
FH diabetes	Yes	Emergency cesarean section	No
Any previous baby > 4.5 Kg	No	Retained placenta (>30 mins)	No
CO level at booking	5	Operative vaginal delivery	No
Still smoking at 20 weeks	No		
Currently has hyperemesis	No	Labour >12 hours	No
Current IV drug misuser	Yes	Post partum haemorrhage >1000	No
Current infection	No		

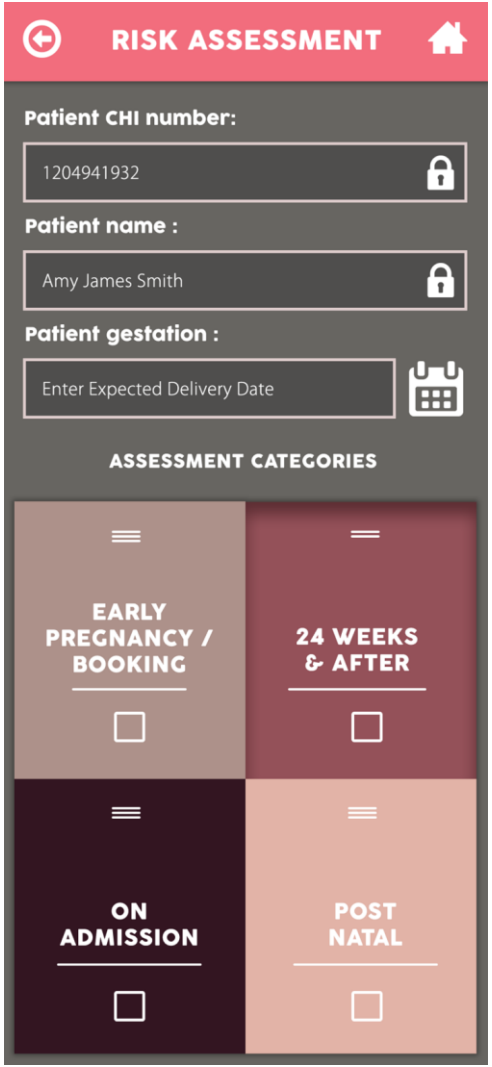
MANAGEMENT PLAN

Folic Acid	Increased Folic Acid (5mg/day)	
Vitamin D	Vitamin D (10 micrograms /day)	
Screening for diabetes	HbA1C at booking and an OGTT at 24-28 weeks	
Smoking Cessation	Refer Smoking Cessation	
Iron treatment	Oral Iron	
Growth assessment	Growth scans at 28 and 34 weeks	
AN VTE prophylaxis outpatient	No action	
AN VTE prophylaxis if inpatient	Needs TED stockings and Enoxaparin	60mg daily 14 days
P N VTE prophylaxis	Needs TED stockings and Enoxaparin	60mg daily 14 days
PPH prevention	Syntometrine 1 Amp IM, 5 IU Syntocinon IV, Consider 40IU Synto IM	

Review of case noted 400 notes

- Better antenatal VTE booking assessment ($p<0.001$)
- Better antenatal inpatient VTE assessment ($p<0.001$)
- Better post-natal VTE assessment ($p<0.01$)
- BMI risk assessment was more likely to be completed correctly ($p<0.01$)
- Testing of HbA1c and OGTT ($p<0.001$)
- Vitamin D and folic acid were also both more likely to be prescribed ($p<0.001$)
- Correct gestational diabetes screening ($p<0.001$)
- IUGR trend towards improved accuracy of assessment ($p=0.06$)


MATERNITY
RISK ASSESSMENT
NHS
Borders
Username
Password
SIGN IN
Forgotten your password?


RISK ASSESSMENT
Patient CHI number:
1204941932
Patient name :
Amy James Smith
Patient gestation :
Enter Expected Delivery Date
ASSESSMENT CATEGORIES
EARLY PREGNANCY / BOOKING
24 WEEKS & AFTER
ON ADMISSION
POST NATAL


MATERNAL MANAGEMENT PLAN
Folic Acid
Routine Folic Acid (0.4mg/day)
BMI > 29.9 0
Mult Preg 0
Total 0
Aspirin
Not Required
Smoking Cessation

Iron treatment

Growth assessment
SFH 2-3 weekly from 28 weeks
Antenatal, keep hydrated and mobile

Antenatal inpatient, consider heparin prophylaxis (not early labour or IOL)
20mg daily
Postnatal, early mobilisation and avoid dehydration

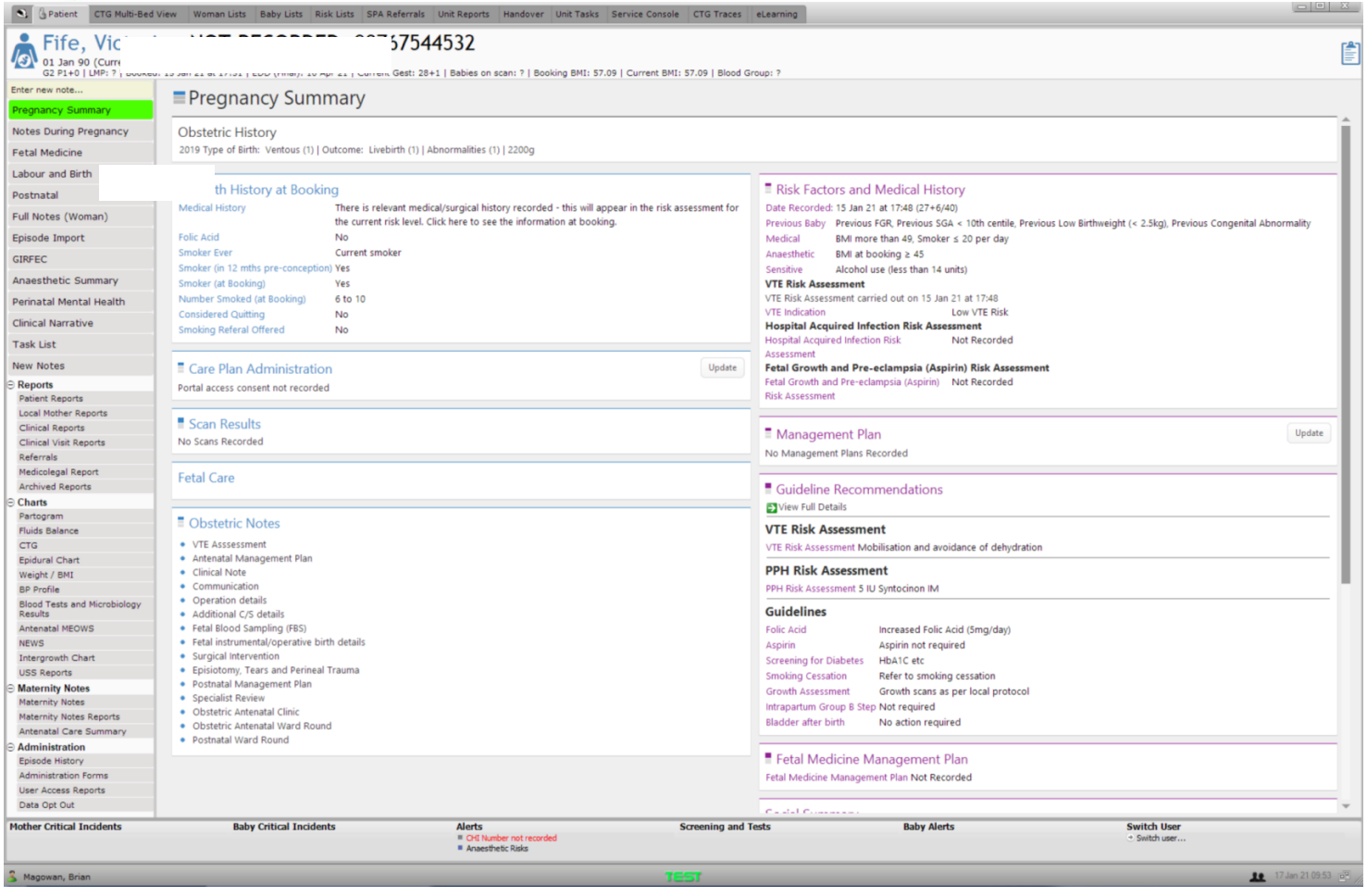
PPH prevention

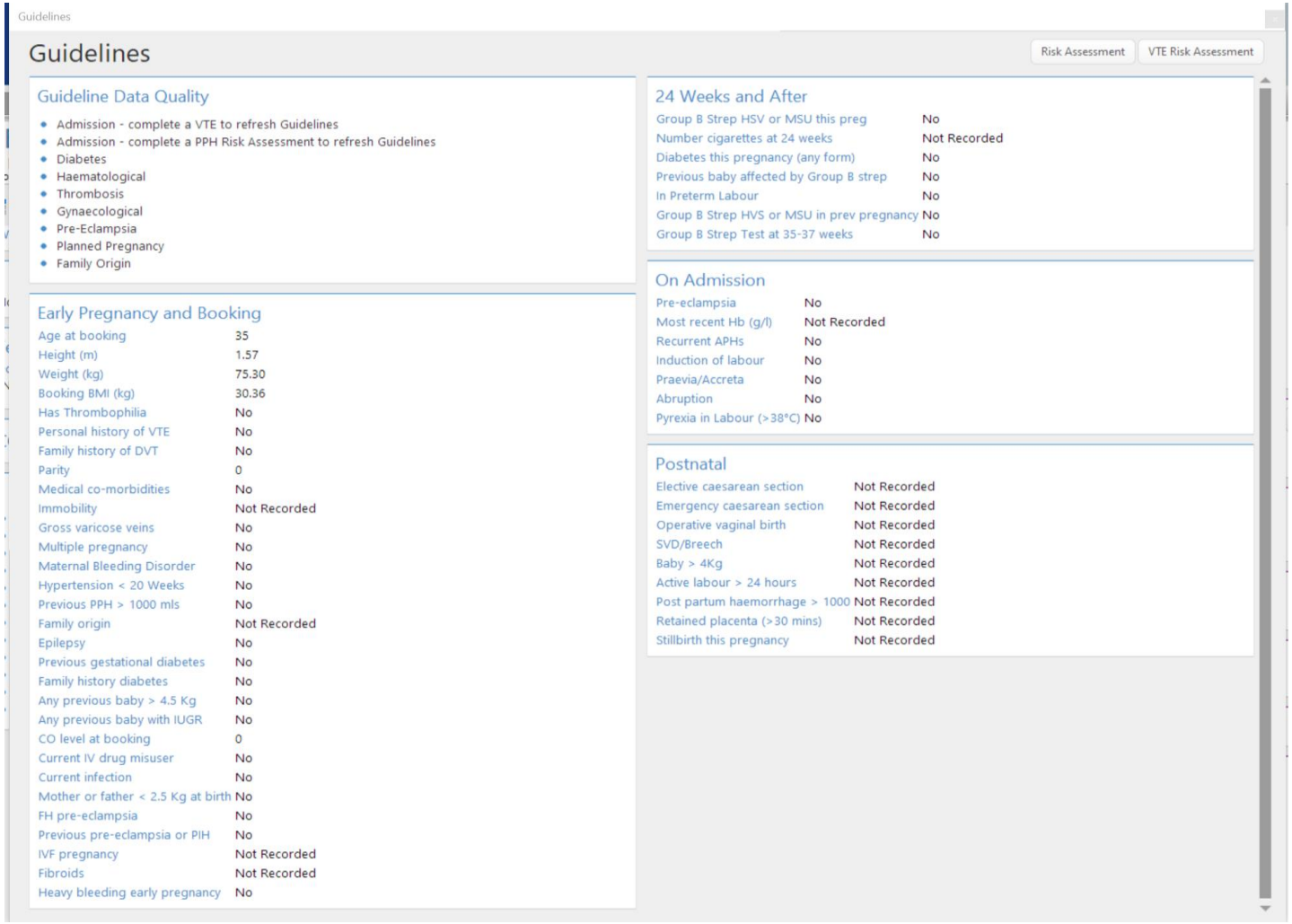
Intrapartum Group B Strep Rx
Not required
Bladder after delivery
Encourage spontaneous voiding
Free Text Notes:
Enter notes

NHS Borders

Maternity

NHS Borders




Guidelines
Guidelines
Risk Assessment
VTE Risk Assessment
Guideline Data Quality
Admission - complete a VTE to refresh Guidelines
Admission - complete a PPH Risk Assessment to refresh Guidelines
Diabetes
Haematological
Thrombosis
Gynaecological
Pre-Eclampsia
Planned Pregnancy
Family Origin
Early Pregnancy and Booking
Age at booking 35
Height (m) 1.57
Weight (kg) 75.30
Booking BMI (kg) 30.36
Has Thrombophilia No
Personal history of VTE No
Family history of DVT No
Parity 0
Medical co-morbidities No
Immobility Not Recorded
Gross varicose veins No
Multiple pregnancy No
Maternal Bleeding Disorder No
Hypertension < 20 Weeks No
Previous PPH > 1000 mls No
Family origin Not Recorded
Epilepsy No
Previous gestational diabetes No
Family history diabetes No
Any previous baby > 4.5 Kg No
Any previous baby with IUGR No
CO level at booking 0
Current IV drug misuser No
Current infection No
Mother or father < 2.5 Kg at birth No
FH pre-eclampsia No
Previous pre-eclampsia or PIH No
IVF pregnancy Not Recorded
Fibroids Not Recorded
Heavy bleeding early pregnancy No
24 Weeks and After
Group B Strep HSV or MSU this preg No
Number cigarettes at 24 weeks Not Recorded
Diabetes this pregnancy (any form) No
Previous baby affected by Group B strep No
In Preterm Labour No
Group B Strep HVS or MSU in prev pregnancy No
Group B Strep Test at 35-37 weeks No
On Admission
Pre-eclampsia No
Most recent Hb (g/l) Not Recorded
Recurrent APHs No
Induction of labour No
Praevia/Accreta No
Abruption No
Pyrexia in Labour (>38°C) No
Postnatal
Elective caesarean section Not Recorded
Emergency caesarean section Not Recorded
Operative vaginal birth Not Recorded
SVD/Breech Not Recorded
Baby > 4Kg Not Recorded
Active labour > 24 hours Not Recorded
Post partum haemorrhage > 1000 Not Recorded
Retained placenta (>30 mins) Not Recorded
Stillbirth this pregnancy Not Recorded

Guideline Recommendations

View Full Details

VTE Risk Assessment

VTE Risk Assessment	Three risk factors: prophylaxis from 28 weeks
Medication Dosage	Dalteparin - 10,000 units daily

PPH Risk Assessment

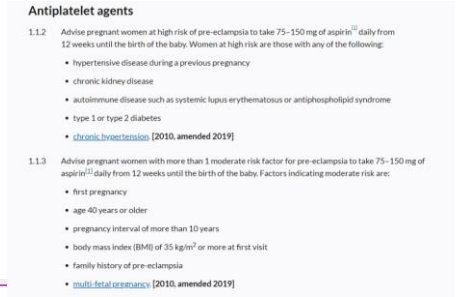
PPH Risk Assessment	5 IU Syntocinon IM

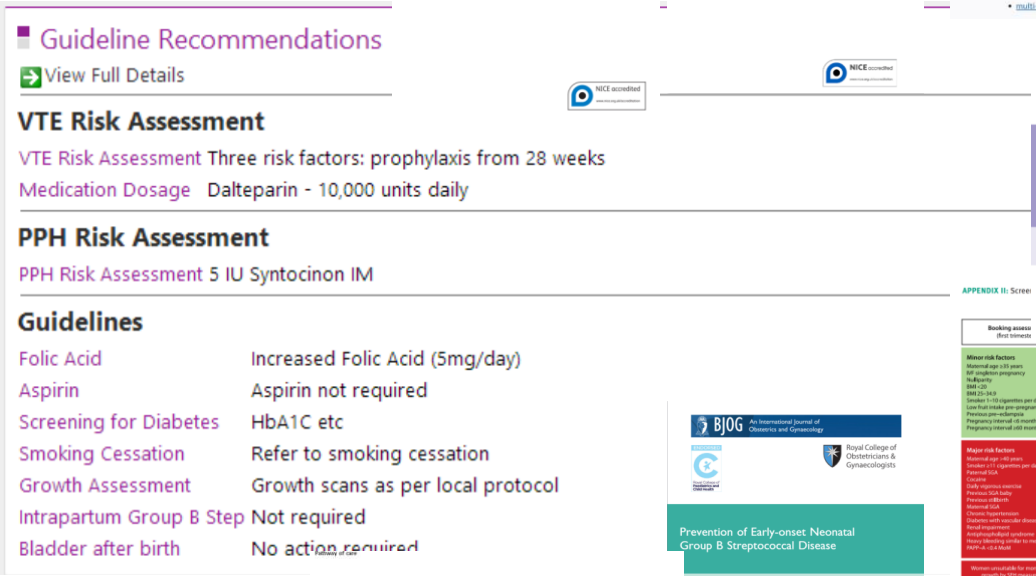
Guidelines

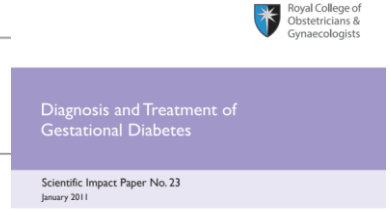
Folic Acid	Increased Folic Acid (5mg/day)
Aspirin	Aspirin not required
Screening for Diabetes	HbA1C etc
Smoking Cessation	Refer to smoking cessation
Growth Assessment	Growth scans as per local protocol
Intrapartum Group B Step	Not required
Bladder after birth	No action required

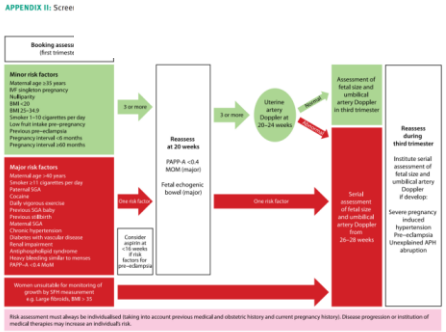

Royal College of Obstetricians & Gynaecologists
Reducing the Risk of Venous Thromboembolism during Pregnancy and the Puerperium
Green-top Guideline No. 37a
April 2015

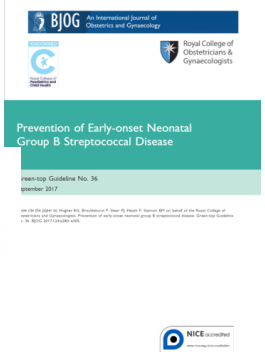
BJOG An International Journal of Obstetrics and Gynaecology
Royal College of Obstetricians & Gynaecologists
Prevention and Management of Postpartum Haemorrhage
Green-top Guideline No. 52
December 2016


Antiplatelet agents
1.1.2 Advise pregnant women at high risk of pre-eclampsia to take 75–150 mg of aspirin daily from 12 weeks until the birth of the baby. Women at high risk are those with any of the following:
• hypertensive disease during a previous pregnancy
• chronic kidney disease
• autoimmune disease such as systemic lupus erythematosus or antiphospholipid syndrome
• type 1 or type 2 diabetes
• chronic hypertension [2010, amended 2019]
1.1.3 Advise pregnant women with more than 1 moderate risk factor for pre-eclampsia to take 75–150 mg of aspirin daily from 12 weeks until the birth of the baby. Factors indicating moderate risk are:
• first pregnancy
• age 40 years or older
• pregnancy interval of more than 10 years
• body mass index (BMI) of 35 kg/m² or more at first visit
• family history of pre-eclampsia
• multi-fetal pregnancy [2010, amended 2019]


Guideline Recommendations
View Full Details
VTE Risk Assessment
VTE Risk Assessment Three risk factors: prophylaxis from 28 weeks
Medication Dosage Dalteparin - 10,000 units daily
PPH Risk Assessment
PPH Risk Assessment 5 IU Syntocinon IM
Guidelines
Folic Acid Increased Folic Acid (5mg/day)
Aspirin Aspirin not required
Screening for Diabetes HbA1C etc
Smoking Cessation Refer to smoking cessation
Growth Assessment Growth scans as per local protocol
Intrapartum Group B Step Not required
Bladder after birth No action required


Royal College of Obstetricians & Gynaecologists
Diagnosis and Treatment of Gestational Diabetes
Scientific Impact Paper No. 23
January 2011


APPENDIX II: Scree
Booking assess
Minor risk factors
Major risk factors
Reassess at 20 weeks
PAPP-A <0.4 MOM (major)
Fetal echogenic bowel (major)
Uterine artery Doppler at 20–24 weeks
Assessment of fetal size and umbilical artery Doppler in third trimester
Serial assessment of fetal size and umbilical artery Doppler from 26–28 weeks
Reassess during third trimester
Institute serial assessment of fetal size and umbilical artery Doppler if develop:
Severe pregnancy induced hypertension
Pre-eclampsia
Unexplained APH
abruption
Consider aspirin at <16 weeks if ≥1 risk factors for pre-eclampsia
Women unsuitable for monitoring of growth by SFH measurement e.g. Large Recess, BMI > 35
Risk assessment must always be individualised (taking into account previous medical and obstetric history and current pregnancy history). Disease progression or institution of medical therapies may increase an individual's risk.


BJOG An International Journal of Obstetrics and Gynaecology
Royal College of Obstetricians & Gynaecologists
Prevention of Early-onset Neonatal Group B Streptococcal Disease
Green-top Guideline No. 36
December 2017

Risk Factors and Medical History

Date Recorded: 15 Jan 21 at 17:48 (27+6/40)

Previous Baby	Previous FGR, Previous SGA < 10th centile, Previous Low Birthweight (< 2.5kg), Previous Congenital Abnormality
Medical	BMI more than 49, Smoker ≤ 20 per day
Anaesthetic	BMI at booking ≥ 45
Sensitive	Alcohol use (less than 14 units)

VTE Risk Assessment

VTE Risk Assessment carried out on 15 Jan 21 at 17:48

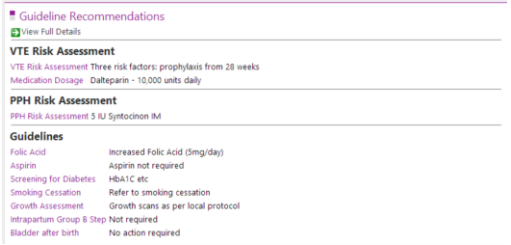
VTE Indication	Low VTE Risk

Hospital Acquired Infection Risk Assessment

Hospital Acquired Infection Risk Assessment	Not Recorded

Fetal Growth and Pre-eclampsia (Aspirin) Risk Assessment

Fetal Growth and Pre-eclampsia (Aspirin) Risk Assessment	Not Recorded



Guideline Recommendations

View Full Details

VTE Risk Assessment

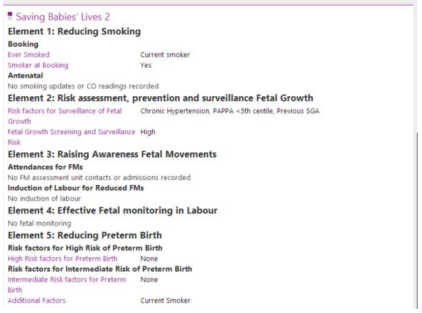
VTE Risk Assessment	Three risk factors: prophylaxis from 28 weeks
Medication Dosage	Dalteparin - 10,000 units daily

PPH Risk Assessment

PPH Risk Assessment	5 IU Syntocinon IM

Guidelines

Folic Acid	Increased Folic Acid (5mg/day)
Aspirin	Aspirin not required
Screening for Diabetes	HbA1C etc
Smoking Cessation	Refer to smoking cessation
Growth Assessment	Growth scans as per local protocol
Intrapartum Group B Step	Not required
Bladder after birth	No action required



Saving Babies' Lives 2

Element 1: Reducing Smoking

Booking

Ever Smoked	Current smoker
Smoker at Booking	Yes

Antenatal

No smoking updates or CO readings recorded

Element 2: Risk assessment, prevention and surveillance Fetal Growth

Risk factors for Surveillance of Fetal Growth	Chronic Hypertension, PAPPA <5th centile, Previous SGA
Fetal Growth Screening and Surveillance Risk	High

Element 3: Raising Awareness Fetal Movements

Attendances for FMs

No FM assessment unit contacts or admissions recorded

Induction of Labour for Reduced FMs

No induction of labour

Element 4: Effective Fetal monitoring in Labour

No fetal monitoring

Element 5: Reducing Preterm Birth

Risk factors for High Risk of Preterm Birth

High Risk factors for Preterm Birth	None

Risk factors for Intermediate Risk of Preterm Birth

Intermediate Risk factors for Preterm Birth	None
Additional Factors	Current Smoker

Risk factors and Medical History

Risk assessment labels to remain the same

VTE Risk Assessment

VTE RISK	Low VTE RISK

Hospital Acquired Infection Risk

Risk Factors Present	Yes

Fetal Growth and Pre-eclampsia (Aspirin) Risk Assessment

Pre-eclampsia risk	Low
FGR risk	Low

PPH Risk Assessment

PPH Risk	Increased

Clinical Guidelines

View Full Details

VTE Antenatal Recommendation:	Mobilisation and avoidance of hydration
VTE Postnatal Recommendation:	Mobilisation and avoidance of hydration
VTE Dose recommendation:	Dalteparin: 5,000 units daily (the high prophylactic dose for women weighing 50-90kgs is 5,000 units 12 hourly)
PPH Recommendation:	10IU Syntocinon IM, or 5IU slow IV if caesarean, +/- 4. hour syntocinon infusion
Pre-eclampsia Recommendation:	Advise 75-150mg aspirin (in line with your local guidance from 12 weeks until birth
Growth Recommendation:	Growth scans as per local protocol
Folic Acid Recommendation:	[Display FIELD From SAFER]
Screening for diabetes Recommendation:	[Display FIELD From SAFER]
Smoking cessation Recommendation:	[Display FIELD From SAFER]
Iron Treatment Recommendation:	[Display FIELD From SAFER]
Intrapartum Group B Step Recommendation:	[Display FIELD From SAFER]
Bladder after birth Recommendation:	[Display FIELD From SAFER]

Management Plan

Management Plan labels to remain the same

Saving Babies Lives Version 2

View Full Details

[This View Full Details works like the SAFER but Open New Saving Babies Lives 2 page]**

Guidelines

Pros

- Runs algorithms spontaneously
- Evidence from similar system that more likely to implement guidelines effectively

Cons

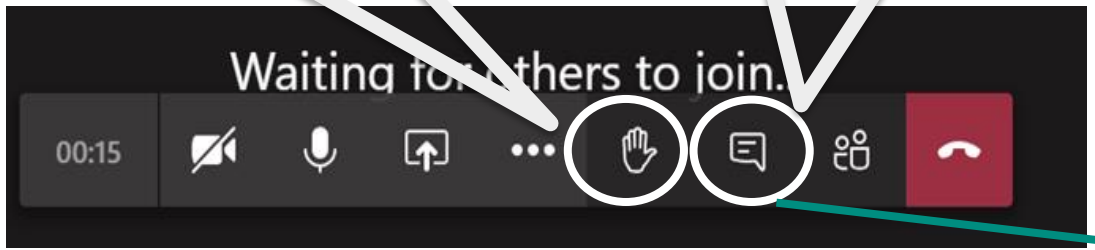
- May stop people thinking
- As with all computer systems it depends on data quality, need ot keep using common sense

Thank you

Q&A Panel Session

Click on the **raise hand** bubble to indicate you wish to speak

Click on the speech bubble to open the **chat box**.



Next steps

Upcoming confirmed MCQIC Webinars:

Date	Programme/s	Topic
12 August 2021	Maternity and Neonatal Care	Neonatal Admission Hypothermia
15 September 2021	Maternity and Neonatal Care	Stillbirth PMRT Learning

World Patient Safety Day 17 September

More info on 17 September 2021 World Patient Safety Day available here.

Keep in touch

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Thank you all for taking the time to attend MCQIC webinar.

MCQIC Team