University Hospitals Sussex
NHS Foundation Trust

BSOTS

Maternity Protocol: MP026

Agreed Date: February 2022

Triage of Maternity Patients Protocol

Maternity Protocol	**MP026**
Version	1
Approval Date:	28/02/2022
Approval Committee	Women's Safety and Quality committee
Review date:	February 2025
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Key Principles:	A protocol is a set of measurable, objective standards to determine a course of action. Professional judgment may be used in the application of a protocol.
Purpose:	To provide guidance for all maternity staff involved in the non-elective admission of maternity patients ensuring admissions are seen by the most appropriate person, in the most appropriate area and in a safe and appropriate timeframe based on robust BSOTS assessment.
Key related documents:	**UH Sussex (SRH&WH) Maternity Guidelines:** • MP024 Reduced Fetal Movements • MP019 Hypertensive Disorders During Pregnancy • MP053 Obstetric Haemorrhage • MP032 Pre-labour Rupture of Membranes • MO031 Preterm Labour • MP030 Latent Phase of Labour • MP035 Care of Women in Labour • MP045 Pyrexia in Labour and Sepsis • MP071 Provisions and Schedules of Postnatal Care

Contents

Aims:

- This operational policy will facilitate services for women and people requiring an urgent non-scheduled obstetric assessment, usually when attending Maternity Triage in MAU at RSCH or DAU/Triage at PRH.
- Assessment by using BSOTS© (Birmingham Symptom specific Obstetric Triage System) will standardise and clinically prioritise care, reduce time to initial assessment and reduce need for inappropriate tests, treatments and reviews.
- The use of the BSOTS© system enables an overview of the workload in Maternity Triage and ensures appropriate escalation should that be required. It also ensures those who require medical attention receive it in a timely way and that those women and people for whom it is appropriate, are discharged by the midwife.

Scope:

This guideline is for use by:

- Midwives
- Obstetricians
- Maternity and Health Care Assistants

Responsibilities:

It is the responsibility of all Midwives and obstetricians to:

- Access, read, understand, and apply this guidance.
- Attend any mandatory training pertaining to this guidance
- To use their professional judgement in the application of his protocol

It is the responsibility of the division to:

- Ensure the guideline is reviewed as required in line with Trust and National recommendations.
- Ensure the guideline is accessible to all relevant staff.

Abbreviations used within this guideline

BSOTS - Birmingham Symptom specific Obstetric Triage System	**MEOWS –** Modified Early Obstetric Warning Score
TAC - Triage Assessment Card	**MAU** – Maternity Assessment Unit
DAU - Day Assessment Unit	**APH –** Antepartum Haemorrhage
SROM – Spontaneous Rupture of Membranes	**ANC –** Antenatal Clinic
IOL – Induction of Labour	**CMW –** Community Midwife

1 Introduction and key points

Maternity Triage systems are designed to ensure that women and people receive the level and quality of care appropriate to their clinical need and that the resources available to the unit are used effectively. Failure to appropriately identify, prioritise and treat pregnant women and people in an emergency situation has resulted in adverse outcomes within the UK as highlighted by the Confidential Enquiry reports into Maternal Deaths. This, together with information from local audit at Birmingham Women's NHS Foundation Trust (BWNFT) led to development of a specific system for women who attend Maternity Triage (BSOTS©).
The Birmingham Symptom Specific Obstetric Triage System (BSOTS) is based on established triaging systems used in Emergency Medicine and is a process of prioritising the order in which women and people receive obstetric and/or midwifery attention on arrival to the Maternity Services guiding their treatment according to clinical need. It includes a standardised initial assessment by a midwife, ideally within 15 minutes of attendance, and the allocation of a category of clinical urgency using prioritisation algorithms. The system also guides timing of subsequent assessments and care (by an obstetrician if required). This appropriate prioritisation of care should improve safety for women and people and babies by identifying those who require more urgent attention and reducing the time to treatment commencing.

Standardised symptom-specific algorithms are used for allocation of clinical priority and the immediate care and further investigations of the eight most common reasons for attendance: Abdominal pain, Antenatal bleeding, Hypertension, Ruptured membranes, Reduced fetal movements, Suspected labour, Unwell/other and postnatal.

2 Duties and Responsibilities

2.1 Midwives

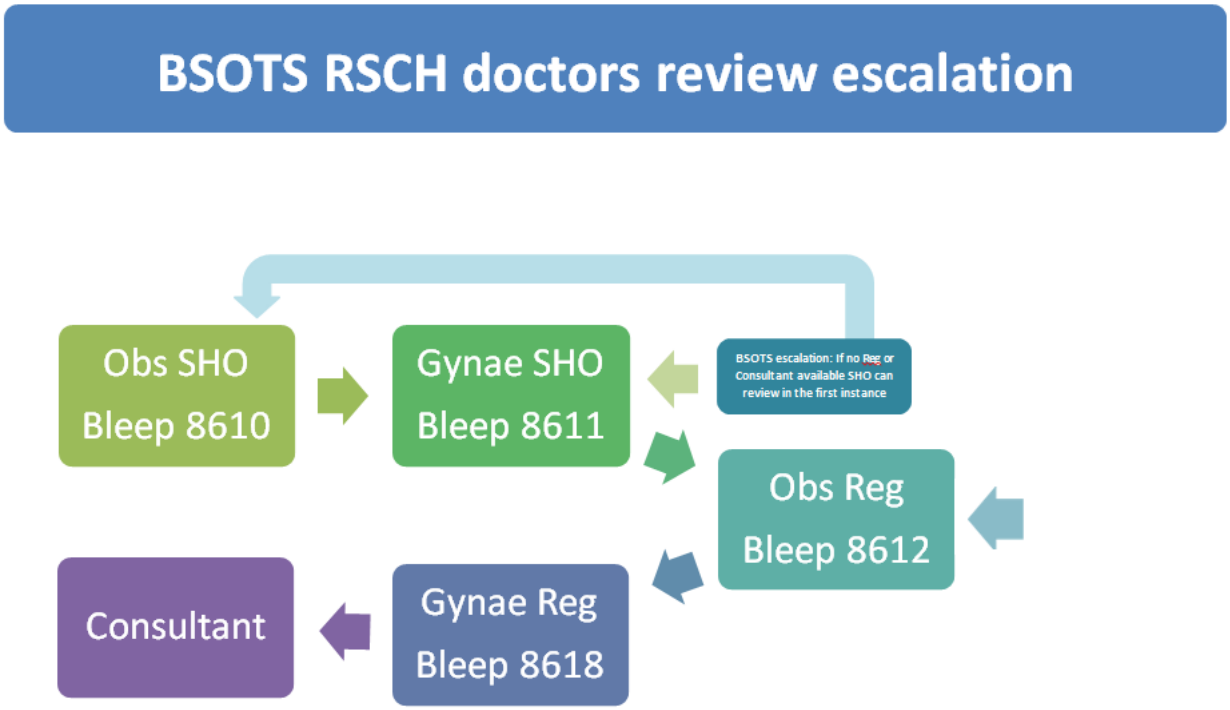
- Midwives provide the majority of care for women and people during initial assessment and immediate care in Triage and should do so in accordance with NMC standards.

- Midwives should carry out the initial assessment which includes baseline maternal or parental observations, fetal heart auscultation, abdominal palpation and urinalysis within 15-30 minutes of a woman or person's arrival in the department.
- Midwives are required to continue to use their clinical judgement whilst using the BSOTS© algorithms and immediate care guidance.
- Midwives can allocate subsequent duties to an MCA after initial assessment (bloods, further observations) but MUST undertake the initial assessment and observations themselves.
- Midwives should inform the obstetric registrar if woman or person is deemed to have "orange" clinical priority, and expect review within 15 minutes. If the registrars on duty are unable to attend then the SHO can review in the first instance or escalate to the Obstetric consultant if required.
- The triage midwife should escalate to the Delivery Suite shift leader if they are unable to triage women and people within 30 minutes of arrival – this should be recorded as a red flag event and appropriate action taken such as utilisation of the escalation policy to provide extra midwifery staffing support.
- Care provided on admission should be recorded on the specific BSOTS© area of Badgernet.
- Midwives should be familiar with or received the training package for the use of the BSOTS© and the associated paperwork.

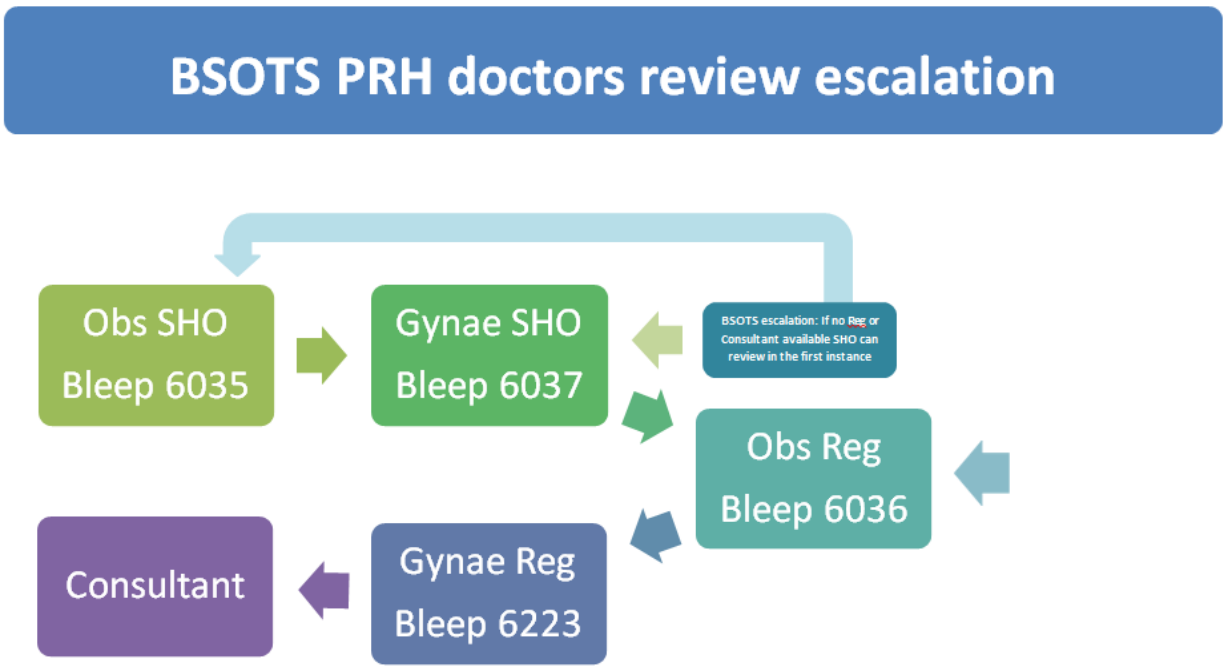
2.2 Medical staff

- Obstetric staff should respond promptly to requests to review women and people and assess them in accordance with GMC good medical practice standards.
- On-call teams should inform Triage of any telephone referrals taken
- Be familiar with the BSOTS© system for prioritising women's care in triage
- Continue to use their clinical judgement whilst using the BSOTS© algorithms and immediate care guidance
- Care provided should be recorded on the specific BSOTS© area of Badgernet detailing ongoing plan of care.
- Escalate to senior members of the medical team if concerned about an individual woman's or person's clinical condition or if unable to attend Triage if busy elsewhere in the hospital, or if workload exceeds capacity leading to excessive delays for review of women and people in the department.

2.3 Escalation for Obstetric review RSCH



2.4 Escalation for Obstetric review PRH



3 Referral Criteria

3.1 Referral criteria

Women and people booked at UHSussex who are pregnant; ≥14+0 weeks gestation or postnatal presenting with the following criteria and requiring urgent assessment:

- Abdominal Pain,
- Antenatal Bleeding,
- Hypertension,
- SROM,
- Reduced Fetal Movements,
- Suspected Labour,
- Unwell/Other and
- Significant postnatal concerns

3.2 Additional reasons:

- Complications following operation or procedure undertaken within Maternity Directorate during the pregnancy.
- Women and people **not** booked at UHSussex NHS Foundation Trust who are pregnant; ≥14+0 weeks gestation, or postnatal (within 6 weeks of birth) requiring urgent assessment and visiting the area.

3.3 Referral Exclusion Criteria

Women and people presenting with the following symptoms will **not be** suitable Maternity Triage:

- Non obstetric problems (rash, mild UTI symptoms, migraine/headache)
- Any woman or person presenting with early pregnancy (≤14 weeks gestation) related problems → EPAU
- Any non-pregnant woman or person who are greater than 6 weeks beyond birth
- Complications following operation or procedure undertaken within Gynaecology Directorate.

3.4 Referral Pathway for Women and people

Women and people can attend MAU/DAU/Triage via self-referral (phone-call to the department, discussion with midwife and advised to attend), referral from antenatal clinic, community midwife or GP. Women and people should never be encouraged to just 'turn up' in MAU/Triage.

Women and people are advised to attend should be given a recommended timeframe or if appropriate be given an appointment in the assessment unit diary.

4 Patient Assessment and Treatment Plan

4.1 Initial Assessment

Once the woman or person has presented to the department, the triage process is started and the **time of arrival must be noted**.

The initial triage assessment to determine the urgency with which women and people will need to be seen will be carried out in the dedicated initial triage assessment area. (Exceptions to this are during quieter times in the day or overnight when it may be appropriate to so all assessments in a bay or room)

Based on reason for attendance, the midwife will identify the appropriate symptom specific Triage Assessment Card (TAC) to be used for the assessment (there is a TAC for each of the eight BSOTS reasons for attendance: abdominal pain, antenatal bleeding, reduced fetal movements, suspected labour, hypertension, spontaneous rupture of the membranes, unwell/other and postnatal) see example *see appendix 3.*

4.2 Midwifes responsibilities

4.2.1 The midwife will then complete a standard clinical triage assessment within 15-30 minutes of the woman or person arriving on the unit:

- This includes taking a brief maternal or parental history and reason for attending,
- Observing general appearance
- MEOWS assessment (temperature, pulse, blood pressure, respirations, oxygen saturation (if applicable), urine output, neurological response, amniotic fluid loss or other vaginal discharge/ PV loss (if applicable), lochia (if applicable)
- Assessment of pain levels: none, mild, moderate, severe
- Abdominal palpation and fundal height if appropriate
- Auscultation of the fetal heart (if antenatal)

4.2.2 Using this information *and* the BSOTS algorithm specific to the woman or person's presenting condition; the midwife will then be able to:

- Ascertain Level of urgency and prioritise care using BSOTS© symptom specific algorithms
- Plan of immediate care

4.3 Prioritisation

This initial triage assessment should take about 5-10 minutes and is used to define a category of clinical urgency Red, Orange, Yellow or Green using symptom specific algorithms which indicates when women or people should be next seen, with each category clearly stating the

timing of subsequent assessment and care some of which is midwifery led and some which will need an Obstetrician.

BSOTS category	Maximum time until treatment	By whom?
Red	Immediate	Reg+
Orange	15 minutes	Reg+
Yellow	1 hour	Midwife/SHO+
Green	4 hours	Midwife/SHO+

**It is important that clinical staff can exercise their clinical judgement when deciding on the women or person's category of urgency, but this should only be used to increase the category of urgency. Clinical indicators such as maternal or parental blood pressure or pulse should not be overridden*.

Doctors should be contacted via the bleep system and any communication issues should be escalated to the labour ward coordinator with the highest level of urgency (red) should be seen immediately ideally on delivery suite for ongoing 1:1 care.
Women and people identified as orange should be seen within 15 minutes and immediately moved from the initial triage area to a bed space.
Women and people identified as yellow can return to the waiting room and be seen within an hour and women and people identified as green seen within 4 hours for further assessment.
Midwife will need to bleep relevant person and escalate if they are unable to attend.

4.4 Subsequent immediate care

BSOTS algorithms detail the immediate subsequent care and tasks required for each of the 8 reasons for attendance.

4.5 Role of the MCA

- The MCA assigned to MAU/Triage should primarily assist the BSOTS midwife but wherever possible should also help with phone calls and observations and bloods generated from care in the assessment unit. Clear communication between MCAs and midwives is imperative.
- The MCA should *NOT* carry out initial triaging observations. Subsequent observations and blood tests can be carried out by the MCA.
- Of utmost importance with BSOTS is time of arrival and time of initial assessment and subsequent care timings and the MCA will be expected to assist with this

4.6 On-going Care

Handover and transfer of care should be from one health care professional (midwife or medical staff) to another directly, ideally in person, but if this is not possible, by telephone.
Effective communication is central to promoting patient safety. A structured and consistent handover and transfer of care between staff can be achieved using the SBAR tool that covers details on the woman or person's Situation, Background, Assessment, and Recommendations

Situation	What is the woman or persons gestation, gravida, parity and reason for admission/presenting problem?
Background	What is the woman or persons history, e.g. obstetric risk factors, MH, CP etc…?
Assessment	What assessment have you made? Use MEOWS, CTG, blood and urine results, concerns about physical or mental health as well as holistic assessment.
Recommendations	What is your plan? Further tests, treatments, reviews, escalation or discharge? What is the timeframe?

4.7 Discharge and Follow up
Following review women and people may be admitted and transferred to Labour Ward or antenatal ward or will be discharged with appropriate follow-up appointments arranged if necessary.

4.8 Results and Further Management
The results of any pending tests undertaken during the Triage assessment should be entered into the results diary which is checked on the night shift and actioned the following day.

4.9 Escalation
Any delays or breaches to BSOTs initial assessments or waiting times must be escalated to the MAU/TRIAGE Lead or Labour Ward Co-ordinator and a DATIX completed.

5 Communication with the Woman or Person

5.1 The BSOTs midwife should:

- Manage expectations by communicating clearly what is happening next, timeframes and who they are waiting to see.
- Re-assure that their information has been passed on from their previous provider.
- Consider re-capping the history to reassure the woman or person that you have the appropriate information. Ensure a holistic assessment of the woman or person's condition is undertaken.
- Provide appropriate advice on discharge and arrange follow up appointments if necessary and results are in the results diary to be actioned later.

5.2 The Obstetrician should:

- Re-assure that their information has been passed on from their previous provider.
- Consider re-capping the history to reassure the woman or person that you have the appropriate information.

5.3 An appropriate translation service should be used for non-English speaking patients

https://nww.bsuh.nhs.uk/working-here/equality-diversity-and-human-rights/communications-support-and-translation-services/

6 BSOTS Staffing requirements

Local midwifery and medical staffing numbers and skill mix will depend on how busy the maternity triage department is and may vary with different shift times throughout the day. The priority must be to undertake the initial triage within 15-30 minutes of arrival.

6.1 Midwifery staffing:

6.1.1 Maternity Triage is one experienced midwife and one Maternity Care Assistant (MCA).

6.1.2 Where MAU and Triage are run from the same area, another midwife working should be allocated to run the maternity/day assessment unit (MAU/DAU) booked appointments.

- Both midwives are responsible for telephone calls.
- The expectation is that midwives will help each other out where possible without compromising their own workload.
- Allocation of duties such as daily checks and checking/actioning blood/other results will be discussed at handover.

- Midwives are expected to facilitate each other's breaks.
- The MCA will primarily be allocated to the BSOTS triage midwife but may also help with phone calls and MAU/DAU duties.

6.1.3 If either the BSOTS or MAU/DAU midwife is re allocated to other areas due to staffing shortages then the remaining midwife will not be expected to adhere to BSOTS timeframes but should still endeavour to risk asses using TAC and algorithms.

6.1.4 Reallocation of Triage or MAU/DAU midwife should be DATIX'd.

6.2 Obstetric staffing

MAU/Triage falls under the remit of the obstetric SHO and Registrar. When they are busy it is appropriate to escalate to the Gynae SHO and Registrar (see section 2.3). The consultant on call can also be called if all others are busy and a breach of BSOTS timings is likely. Any breaches of timings should be DATIX.

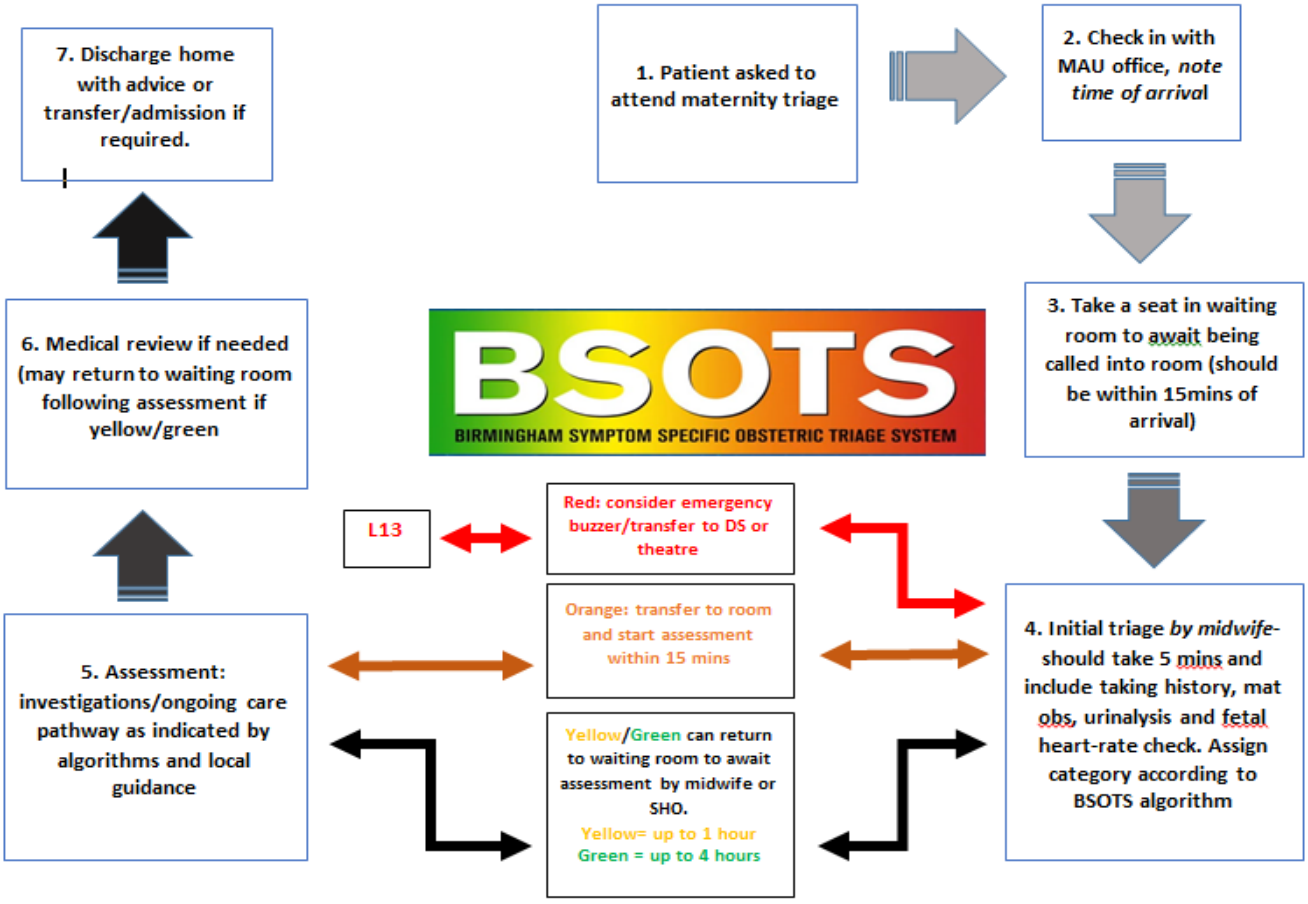
7 Audit

Monitoring	**Method**	**Frequency**
BSOTS suspended due to relocation of BSOTS midwife	Audit	Annual
Number of women and people seen within 30 minutes	Audit	Annual
Number of women and people seen within timeframe for red, orange, yellow and green	Audit	Annual
Number of red flags – women and people not triaged within 30 minutes from time of arrival – due to midwifery staffing	Audit	Annual

Appendix 1:

Triage BSOTS	**Day assessment appointments**
Abdominal pain	BP profile
PVB	?OC/OC follow up
Hypertension > 140/90	SROM assessments >37/40
PPROM	OP IOLs
Mec SROM	Ferinject
RFM	Bloods
Suspected established labour	Ongoing management PIH and PET
PN unwell	Scan reviews
Beeline	Reg reviews
Unwell/other (r.g. hyperemesis)	High risk sweeps
	Planned CTGs

Appendix 2: Patient Journey



Appendix 3: Example of Algorithm & Assessment Card

THIS IS NOT AN EXHAUSTIVE LIST OF INVESTIGATIONS: CLINICAL JUDGEMENT IS REQUIRED

PLEASE ENTER ALL OBSERVATIONS ONTO MEWS & DOCUMENT ADDITIONAL NOTES ON NEXT PAGE

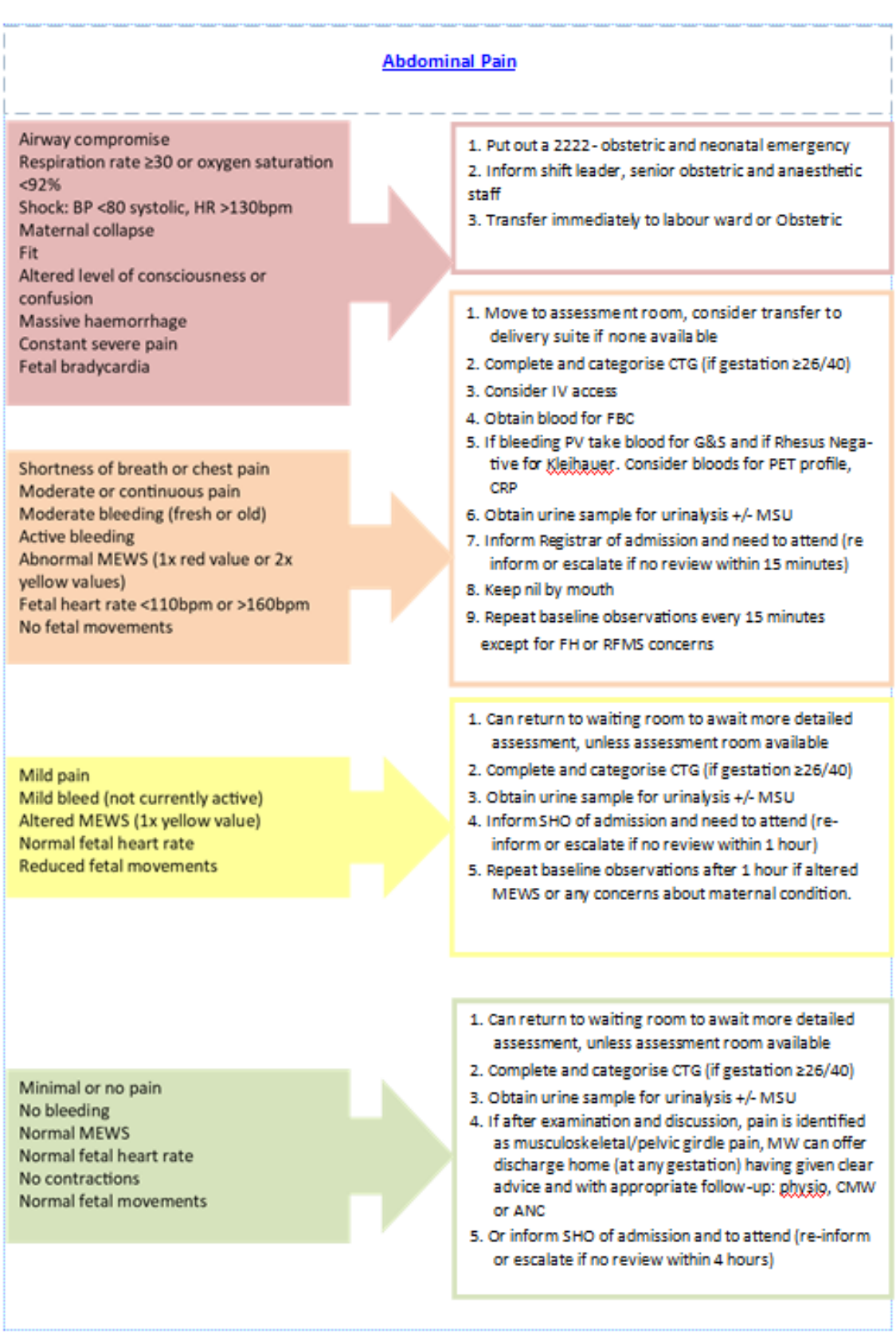
ORANGE (15 mins) Move to assessment room, consider transfer to Delivery Suite if none available			
Investigations required (state time & print initials when done)	Complete and categorise CTG (if gestation ≥ 26/40)	Time	Initials
	Consider IV access	Time	Initials
	Obtain blood for FBC	Time	Initials
	If bleeding PV, take blood for G&S and if Rhesus Negative for Kleihauer	Time	Initials
	Consider bloods for PET profile/CRP	Time	Initials
	Obtain urine sample for urinalysis +/- MSU	Time	Initials
	Inform Registrar of admission and to attend	Time	Initials
	Keep nil by mouth and repeat baseline observations every 15 minutes		

YELLOW (1 hour) Can return to waiting room to await more detailed assessment unless assessment room available			
Investigations required (state time & print initials when done)	Complete and categorise CTG (if gestation ≥26/40)	Time	Initials
	Obtain urine sample for urinalysis +/- MSU	Time	Initials
	Inform Registrar of admission and to attend	Time	Initials
	Repeat baseline observations after 1 hour		

GREEN (4 hours) Can return to waiting room to await more detailed assessment unless assessment room available			
Investigations required (state time & print initials when done)	Complete and categorise CTG (if gestation ≥26/40)	Time	Initials
	Obtain urine sample for urinalysis +/- MSU	Time	Initials
	If after examination & discussion, pain is identified as musculoskeletal/ pelvic girdle pain, MW can offer discharge home (at any gestation) having given clear advice and with appropriate follow-up with physio, CMW or ANC	Time	Initials
	If not appropriate for MW to discharge, inform SHO of admission and ask to attend	Time	Initials

Assessing midwife	Print name & PIN	Signature	Date	Time assessment started
Request for medical staff	Name of medic bleeped	Date and time bleeped	Responded (Y/N)	Can attend (Y/N)

Appendix 3 (cont): Example of Algorithm & Assessment Card


Abdominal Pain
Airway compromise
Respiration rate ≥30 or oxygen saturation <92%
Shock: BP <80 systolic, HR >130bpm
Maternal collapse
Fit
Altered level of consciousness or confusion
Massive haemorrhage
Constant severe pain
Fetal bradycardia
1. Put out a 2222 - obstetric and neonatal emergency
2. Inform shift leader, senior obstetric and anaesthetic staff
3. Transfer immediately to labour ward or Obstetric
Shortness of breath or chest pain
Moderate or continuous pain
Moderate bleeding (fresh or old)
Active bleeding
Abnormal MEWS (1x red value or 2x yellow values)
Fetal heart rate <110bpm or >160bpm
No fetal movements
1. Move to assessment room, consider transfer to delivery suite if none available
2. Complete and categorise CTG (if gestation ≥26/40)
3. Consider IV access
4. Obtain blood for FBC
5. If bleeding PV take blood for G&S and if Rhesus Negative for Kleihauer. Consider bloods for PET profile, CRP
6. Obtain urine sample for urinalysis +/- MSU
7. Inform Registrar of admission and need to attend (re inform or escalate if no review within 15 minutes)
8. Keep nil by mouth
9. Repeat baseline observations every 15 minutes except for FH or RFMS concerns
Mild pain
Mild bleed (not currently active)
Altered MEWS (1x yellow value)
Normal fetal heart rate
Reduced fetal movements
1. Can return to waiting room to await more detailed assessment, unless assessment room available
2. Complete and categorise CTG (if gestation ≥26/40)
3. Obtain urine sample for urinalysis +/- MSU
4. Inform SHO of admission and need to attend (re-inform or escalate if no review within 1 hour)
5. Repeat baseline observations after 1 hour if altered MEWS or any concerns about maternal condition.
Minimal or no pain
No bleeding
Normal MEWS
Normal fetal heart rate
No contractions
Normal fetal movements
1. Can return to waiting room to await more detailed assessment, unless assessment room available
2. Complete and categorise CTG (if gestation ≥26/40)
3. Obtain urine sample for urinalysis +/- MSU
4. If after examination and discussion, pain is identified as musculoskeletal/pelvic girdle pain, MW can offer discharge home (at any gestation) having given clear advice and with appropriate follow-up: physio, CMW or ANC
5. Or inform SHO of admission and to attend (re-inform or escalate if no review within 4 hours)