



**Maternity Education Program**

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# **Sepsis Antenatal Facilitator Resource Kit**

## Maternity Education Program

The resources developed for Maternity Education Program (MEP) are designed for use in any Queensland Health facility that care for patients/women who are pregnant/birthing or postnatal. Each resource can be modified by the facilitator and adapted to the needs of the learner and the environment in which the education is being delivered—from tertiary to rural and remote facilities.



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### Sepsis Antenatal – Facilitator Resource Kit

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## **Who is this resource kit for?**

This resource kit provides healthcare workers with knowledge and skills on assessing and managing maternal sepsis in the antenatal period.

### **Target audience**

Midwifery and medical staff providing maternity care

### **Duration**

45 mins (including setup, simulation and debrief)

### **Group size**

Suited to small groups (6 – 8)

### **Learning objectives**

By the end of the session the learner should be able to:

- Recognise and respond to a clinically deteriorating patient.
- Demonstrate the clinical management of a labouring woman with sepsis.
- Assess the possible cause of the maternal sepsis and management.
- Demonstrate the clinical management of a birth and the fetus in the context of sepsis.

### **Facilitation guide**

1. Provide Participant Resource Kit to the learner.
2. Utilise care of deteriorating patient with antenatal sepsis flowchart.
3. Utilise either standard or advanced scenarios to conduct a simulated antenatal sepsis case.
4. Conduct group debrief following simulation.

### **Supporting documents**

- Participant Resource Kit
- List of further readings
- SOMANZ Flowchart for assessment and management of sepsis in pregnancy
- Sepsis flow diagram
- CTG assessment tool
- Fetal blood sampling values
- Antenatal sepsis simulation (standard and advanced)



# Overview

Despite an overall decline in maternal mortality in Australia, the maternal mortality rate from sepsis has increased. In the period 2008–2012, sepsis accounted for 11.4% of maternal deaths in Australia. Group A beta haemolytic streptococcal (GAS) infection is the most common pathogen, resulting in 25% of maternal deaths from sepsis in Australia. Sepsis continues to be one of the major causes of maternal mortality among Aboriginal and Torres Strait Islander women<sup>1</sup>.

Despite significant advances, understanding of the pathobiology of sepsis remains incomplete and currently no gold standard diagnostic test exists to confirm the presence of sepsis. Sepsis is broadly defined as life-threatening organ dysfunction caused by a dysregulated host response to infection.

Early detection of sepsis is essential for appropriate multidisciplinary management to ensure the best outcomes for the mother and her baby. Septic patients may progress to develop septic shock, multi-organ failure and death.

Recognising the patient with sepsis is paramount and is the first step in appropriate assessment and management.

Screening for maternal sepsis should be performed using the omqSOFA (obstetrically modified quick sepsis related organ failure assessment) which

helps account for some of the changes due to maternal physiology.

Cultures and investigations are ideally done prior to antibiotic administration, waiting for investigations should **NOT** delay therapy. Treatment for suspected sepsis should begin as soon as possible - ideally within the '**Golden Hour**'.

In critically ill pregnant women with sepsis, stabilising the mother is the priority. Once in an ICU environment the obstetric team should liaise with the ICU team to plan fetal monitoring and delivery time. Continuous CTG monitoring is recommended.

Attempting delivery in the setting of maternal instability increases both maternal and fetal mortality<sup>2</sup>.

**Obstetric Emergency** is any clinical situation involving a maternity patient where immediate medical/ midwifery assistance is required.

<sup>1</sup> SOMANZ Guideline for the Management of Sepsis in Pregnancy 2017

<sup>2</sup> Royal College of Obstetricians and Gynaecologists. Bacterial Sepsis in Pregnancy. Green-top Guideline No. 64a. RCOG. 2012. Available from: [www.rcog.org.uk/globalassets/documents/guidelines/gtg\\_64a.pdf](http://www.rcog.org.uk/globalassets/documents/guidelines/gtg_64a.pdf)

## Further Readings

### SOMANZ Guidelines for the Investigation and Management of Sepsis in Pregnancy – Society of Obstetric Medicine Australia and New Zealand

The document addresses the issue of sepsis in the peri-partum period. It contains a number of recommendations to guide clinical practice and improve patient outcomes. We have identified several key outcomes that can be audited allowing individual centres to assess their performance in implementation of these guidelines.

<https://www.somanz.org/downloads/2017SepsisGuidelines.pdf>

### Bacterial Sepsis in Pregnancy Green-top Guideline No. 64a April 2012

The scope of this guideline covers the recognition and management of serious bacterial illness in the antenatal and intrapartum periods, arising in the genital tract or elsewhere, and its management in secondary care.

[https://www.rcog.org.uk/globalassets/documents/guidelines/gtg\\_64a.pdf](https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_64a.pdf)

### SMFM Consult Series #47: Sepsis during pregnancy and the puerperium

The purpose of this guideline is to summarize what is known about sepsis and to provide guidance for the management of sepsis in pregnancy and the postpartum period.

[https://www.ajog.org/article/S0002-9378\(19\)30246-7/pdf](https://www.ajog.org/article/S0002-9378(19)30246-7/pdf)

### The Glasgow Structured Approach to Assessment of the Glasgow Coma Scale

The Glasgow Coma Scale provides a practical method for assessment of impairment of conscious level in response to defined stimuli.

<https://www.glasgowcomascale.org/>

### Queensland Clinical Guideline: Intrapartum fetal surveillance

[https://www.health.qld.gov.au/\\_\\_data/assets/pdf\\_file/0012/140043/g-ifs.pdf](https://www.health.qld.gov.au/__data/assets/pdf_file/0012/140043/g-ifs.pdf)

### Readings for Scenario 1 - Standard

#### Queensland Clinical Guideline: Preterm labour and birth

[https://www.health.qld.gov.au/\\_\\_data/assets/pdf\\_file/0019/140149/g-ptl.pdf](https://www.health.qld.gov.au/__data/assets/pdf_file/0019/140149/g-ptl.pdf)

#### Preterm prelabour rupture of membranes (PPROM)

[https://www.health.qld.gov.au/\\_\\_data/assets/pdf\\_file/0035/736964/g-pprom.pdf](https://www.health.qld.gov.au/__data/assets/pdf_file/0035/736964/g-pprom.pdf)



# Emergency Management

## Sepsis SOMANZ Presentation

<https://bit.ly/3cjOBpt>



### SOMANZ Guidelines for the investigation and management of sepsis in pregnancy 2017

Bowyer L, Robinson H, Barrett H, Crozier T, Giles M, Idel I, Lowe S, Lust K, Marnoch C, Morton M, Said J, Wong M, Makris A  
<http://onlinelibrary.wiley.com/doi/10.1111/ajo.12646/pdf>



Scan me on your phone

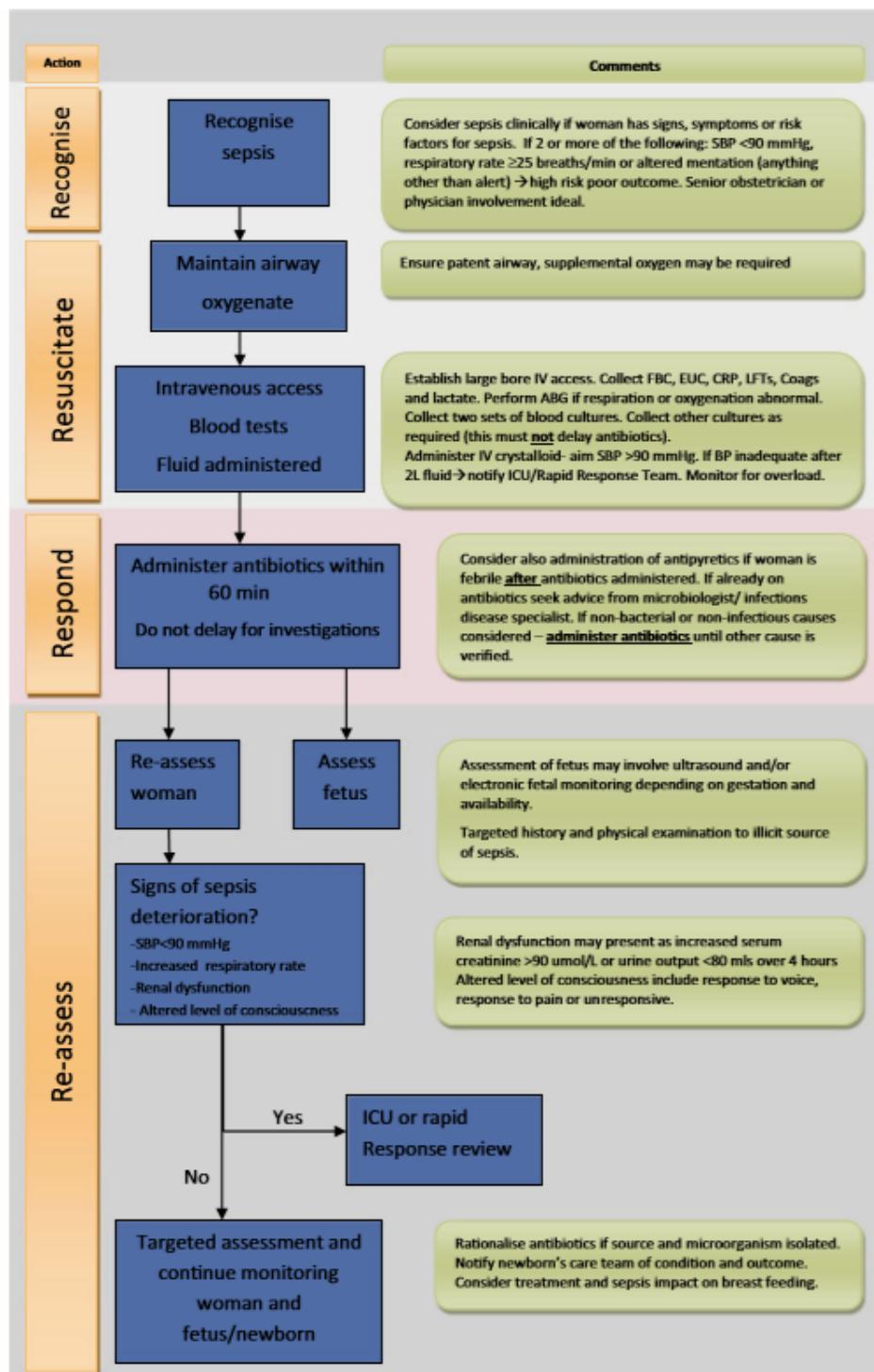
## Glasgow Coma Scale

<https://www.glasgowcomascale.org/downloads/GCS-Assessment-Aid-English.pdf?v=3>



Scan me on your phone

## SOMANZ Flowchart for assessment and management of sepsis in pregnancy





# Specific Management

## Glasgow Coma scale video

<https://www.glasgowcomascale.org/#video>



Scan me on your phone

## Fetal blood sampling results

Interpretation	pH (units)	Lactate (mmol/L)
Normal	$\geq 7.25$	$\geq 4.2$
Borderline: Repeat in 30 minutes	$\geq 7.21 - 7.24$	4.2 – 4.8
Abnormal: Birth expediated	$\leq 7.20$	> 4.8

CTG Classification						
	Classification	Baseline	Variability	Declaration	Acceleration	Action/ Escalation
Normal	Low Probability Fetal compromise	GREEN	110 -160 bpm	6 -25 bpm	Nil 15 bpm for 15 seconds	Nil
	Unlikely Fetal compromise	BLUE	100 – 109 bpm	Early or Late	Absent	Continue CTG MO/TL review
Abnormal	Maybe Fetal compromise	YELLOW	>160 bpm or Rising	3 – 5 bpm for >30 minutes	Complicated variable or Late	Correct reversible causes MO/TL review
	Likely Fetal compromise	RED	< 100 for > 5 minutes	< 3 bpm for > 30 minutes or Sinusoidal	$\geq 2$ YELLOW features = RED	
					Persistent YELLOW = RED	FBS or Expedite Birth Urgent MO review



# Simulation Event

This section contains the following documents:

Pre-simulation briefing poster

## **Scenario 1 – Standard simulation**

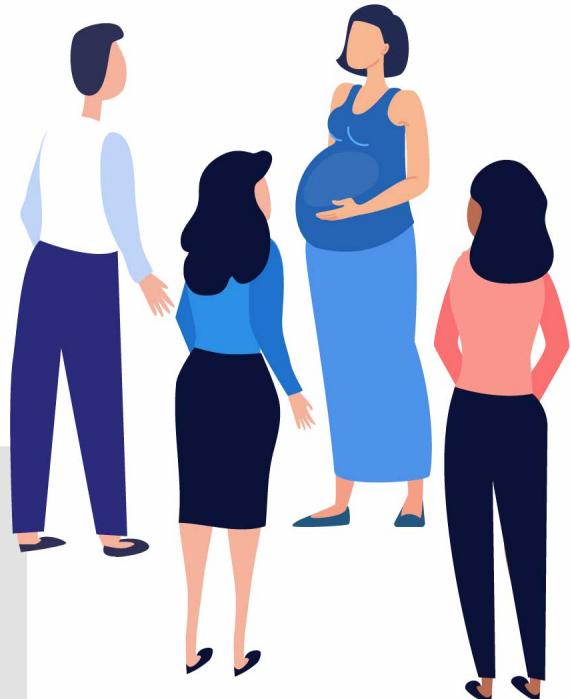
1. Immersive in-situ scenario
2. Physical resources
3. Human resources
4. Simulated patient script information
5. Handover card
6. Additional information
7. Stage 1 – Initial assessment
8. Stage 2 – Ongoing management
9. Stage 3 – Resolution

## **Scenario 2 – Advanced Simulation**

1. Immersive in-situ scenario
2. Physical resources
3. Human resources
4. Simulated patient script information
5. Handover card
6. Additional information
7. Stage 1 – Initial assessment
8. Stage 2 – Ongoing management
9. Stage 3 – Resolution

# Pre-simulation Briefing

Establishing a safe container for learning in simulation.



## Clarify objectives, roles and expectations

1

- Introductions.
- Learning objectives.
- Assessment (formative vs summative).
- Facilitators and learners' roles.
- Active participants vs observers.



2

## Maintain confidentiality and respect

- Transparency on who will observe.
- Individual performances.
- Maintain curiosity.

3

## Establish a fiction contract

Seek a voluntary commitment between the learner and facilitator.

- Ask for buy-in.
- Acknowledge limitations.

4

## Conduct a familiarisation

- Manikin/simulated patient.
- Simulated environment.
- Calling for help.

5

## Address simulation safety

Identify risks.

- Medications and equipment.
- Electrical or physical hazards.
- Simulated and real patients.

**Note:** Adjust the pre-simulation briefing to match the demands of the simulation event, contexts or the changing of participant composition.

Adapted from Rudolph, J., Raemer, D. and Simon, R. (2014). Establishing a Safe Container for Learning in Simulation. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*, 9(6), pp.339-349.

## Immersive in-situ scenario

<b>Target audience</b>	Obstetric medical staff and midwives	
<b>Overview</b>	<p>Birth suite or on a ward, woman with PPROM in early labour</p> <p><b>Situation:</b> G2P1 at 34+2/40 presented a week ago with PPROM, admitted today in possible early labour, feeling unwell.</p> <p><b>Background:</b> 30-year-old:</p> <ul style="list-style-type: none"> <li>• PPROM a week ago, was admitted initially but has been at home for a few days on oral antibiotics. Presented today with mild contractions and was admitted to the ward for observation.</li> <li>• On admission temp. 37.0°C all other obs. QMEWT =0</li> <li>• Pregnancy had been uneventful to date, Shared care with her GP.</li> <li>• X1 previous SVD at 36 weeks gestation.</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Observation Temp 37.5°C, slight tachycardia 100, respiration rate 21</li> <li>• Palpation = 32 weeks</li> <li>• Longitudinal lie, back left and lateral (LOL)</li> <li>• Cephalic presentation 2/5 above</li> <li>• CTG on admission normal – needs CTG</li> <li>• Speculum examination 6 hours ago 3cm dilated (multi Os.). Small amount of yellow/ clear liquor seen.</li> </ul> <p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>• For review due to rising temperature, raising MHR and feeling unwell.</li> <li>• Admit to birth suite due to painful contractions 3:10 lasting 40 seconds.</li> </ul>	
<b>Learning objectives</b>	<p>By the end of the scenario, the learner should be able to:</p> <ul style="list-style-type: none"> <li>• Recognise and respond to a clinically deteriorating patient.</li> <li>• Demonstrate the clinical management of a labouring woman with sepsis.</li> <li>• Assess the possible cause of the maternal sepsis and manage the situation.</li> <li>• Demonstrate the clinical management of a birth and the fetus in the context of sepsis.</li> </ul>	
<b>Duration</b>	Pre-brief: 10 minutes Orientation: 5 minutes Simulation: 15 minutes Debrief: 15 minutes	Total: 45 mins Allow 15 minutes for set up

## Physical resources

<b>Room set up</b>	Standard birth suite set up or assessment area set up.
<b>Simulator/s</b>	Simulated patient in a hospital gown with a 34-week abdomen.
<b>Simulator/s setup</b>	<p><b>If using a simulated patient</b> - simulated patient in a hospital gown with a pregnant pre-term abdomen sitting in bed – CTG is not on.</p> <p><b>If using a Manikin</b> - manikin with pregnant pre-term abdomen with fetus in situ, lying on the bed - CTG is not on.</p>
<b>Clinical equipment</b>	<p>Standard birthing/ assessment room</p> <ul style="list-style-type: none"> <li>• Routine set up</li> <li>• ECG – machine available outside of the room.</li> </ul>
<b>Access</b>	Nil
<b>Other</b>	<ul style="list-style-type: none"> <li>• Paperwork for emergency management – A/N assessment sheet and A/N QMEWT</li> <li>• Patient records on ieMR</li> <li>• Pregnancy Health Record (PHR)</li> </ul>

## Human resources

<b>Faculty</b>	Facilitators x2 to take on roles of scenario lead and primary debriefer (Obstetric Reg/Consultant and midwife with debriefing experience).
<b>Simulation Coordinators</b>	<b>If using a manikin</b> - Sim Co x1 for set up and control manikin software during scenario.
<b>Confederates</b>	<p><b>If using a simulated patient</b> – simulated patient x1.</p> <p>No support person as family at home but have been contacted to come in.</p> <p>Facilitator to provide handover as the midwife is going off shift.</p>
<b>Other</b>	Midwife x1 is present in the simulation room to receive the handover. The other midwives and doctors are outside the room, to be called in as needed.

## Simulated patient script information

You are Ying, you are having your second (2nd) baby.

You presented to the hospital a week ago with preterm premature rupture of membranes (PPROM). You remained in hospital for a couple of days, but you have been at home returning daily for a CTG. You woke this morning with ‘period type’ pain and due to signs of early labour and being 34+2/40 gestation, you did not want to stay at home.

All your family are at home as you were admitted to the ward four hours ago for observation. In the last hour, your contractions are becoming stronger and are now regular. You are feeling increasingly unwell and you are feeling hot. You definitely think labour is now under way.

## Handover card

Handover from the midwife caring for Maria to the next shift.

<b>I</b>	Introduction	This is Ying, this is ... <staff name>
<b>S</b>	Situation	G2 P1 at 34+2/40 presented earlier today in preterm early labour with PPROM a week ago, now in labour.
<b>B</b>	Background	<p><b>30-year-old:</b></p> <ul style="list-style-type: none"> <li>Obs. NAD. Mild contractions only, speculum 3cm multis. Os.</li> <li>Admitted as contraction not settling.</li> <li>Ying had steroids a week ago and has been on oral antibiotics since then.</li> <li>Pregnancy has been uneventful to date, shared care with her GP. Her previous birth 2 years ago was normal at 36 weeks.</li> </ul>
<b>A</b>	Assessment	<ul style="list-style-type: none"> <li>Obs. Temp 37.5°C, slight tachycardia 100, respiration rate 21,</li> <li>Palpation = dates,</li> <li>Longitudinal lie, back left and lateral (LOL),</li> <li>Cephalic presentation 2/5 above.</li> <li>CTG on admission normal (3 hours ago).</li> <li>Speculum examination 3 hours ago, 3cm dilated (multi.Os.)</li> </ul>
<b>R</b>	Recommendations	<ul style="list-style-type: none"> <li>Repeat CTG. Panadol for raised temperature.</li> <li>To be discussed with the MO a plan of care as contractions becoming stronger, plus obs. changing.</li> </ul>

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Additional information

Name	Ying Wong (Chinese, interpreter not required)
Age	30 years old
Sex	Female
Weight	60 kg
Allergies	Nil known
Medications	Elevit
Medical/Surgical	Nil
History	Nil
Social History/Employment	Accountant – on maternity leave
Partner's name	Wei
Pregnancy history	G2P1
Blood Group	A Pos antibodies Neg
Hb	109 – 36 weeks
Serology	Neg
Rubella	Immune
GBS	Negative – 1 week ago X1 previous SVD no complications at 36/40 weeks gestation.

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

State 1: Initial assessment				
Vital signs		Script	Details	Expected actions
RR	18	<b>Ying (Mum)</b> 'I'm becoming more uncomfortable. I may need some pain relief soon. I am really starting to feel hot.'	<b>I Introduction</b> This is Jane, this is <staff name>  <b>S Situation</b> G3P2 at 39+2/40 presented in early labour and feeling unwell  <b>B Background</b> 38-year-old: family all had colds. O/A Temp. 37.5°C. No obvious cause for temperature, Panadol x 2 given. Pregnancy uneventful to date. Shared care with her GP. X2 previous SVDs. Last labour 3 hours.  <b>A Assessment</b> Obs. Temp 37.5°C, MHR 100 all other obs. NAD. Palpation = dates Longitudinal lie, back left and lateral (LOL) Cephalic presentation 2/5 above. CTG on admission normal (3 hours ago). Vaginal examination 3 hours ago 3cm dilated (multi Os).  <b>R Recommendation</b> Admission 4 hourly observation, admit to birth suite when in labour.	<input type="checkbox"/> Establishes rapport with woman <input type="checkbox"/> Listens/asks for history <input type="checkbox"/> Performs full A/N assessment <input type="checkbox"/> Discusses pain and plan of care <input type="checkbox"/> Calls the MO to assess the woman <input type="checkbox"/> Makes a plan <input type="checkbox"/> Performs a CTG <input type="checkbox"/> Once recognises the Obs. are deteriorating calls for more assistance – informs the TL
SPO2	96%			
BP	100/70			
HR	106			
Temp	37.8°C			
Consciousness sedation score	Alert but hot QMEWT = 3			
Palpation	= dates, Lie Longitudinal (ROT), 2/5 head above			
FH	162 bpm on CTG reduced variability			

## SCENARIO 1 - STANDARD

State 2: On going management								
Vital signs		Script	Details	Expected actions				
RR	24	<b>Ying (Mum)</b> The contractions are 'really painful, can I have something for the pain?' 'I am really hot but I also feel shivery'.	<ul style="list-style-type: none"> <li>• Ying is shivering between contraction</li> <li>• Contractions becoming stronger and more painful</li> <li>• Wanting to lay down but can't settle due to contractions</li> <li>• CTG abnormal maybe</li> <li>• Registrar review</li> </ul>	<input type="checkbox"/> Inform TL <input type="checkbox"/> Call MO to review – CTG review and plan re-labour management <input type="checkbox"/> Explanation to mother <input type="checkbox"/> 2 <sup>nd</sup> IVC- if not already performed <input type="checkbox"/> Bloods to lab <ul style="list-style-type: none"> <li>○ FBC/ Chem 20/ Coags/ CRP</li> <li>○ Blood cultures</li> <li>○ Blood gases</li> </ul> <input type="checkbox"/> Urine to lab <input type="checkbox"/> Speculum examination <input type="checkbox"/> Commence antibiotic therapy <ul style="list-style-type: none"> <li>○ Ampicillin 2gm</li> <li>○ Metronidazole 500mg</li> <li>○ Gentamycin 300mg (5mg/kg)</li> </ul> <input type="checkbox"/> Fluid bolus – for CTG and clinical picture <input type="checkbox"/> Strict fluid balance <input type="checkbox"/> Consider an IDC <input type="checkbox"/> MERT call <input type="checkbox"/> Facial O <sup>2</sup> if sats. drop <input type="checkbox"/> Consider pain relief <input type="checkbox"/> Observe CTG <input type="checkbox"/> Left lateral with 15° tilt				
SPO <sub>2</sub>	95%							
BP	90/45							
HR	122							
Temp	38.6°C							
Consciousness sedation score	Alert now shivering QMEWT = 9	5 Minute Obs. see next page.						
Contractions	2:3 – 10 lasting 50 sec. stronger							
Speculum	Cervix 5cm, green/yellow discharge seen							
CTG	165 reduced variability Abnormal maybe							

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

State 2: Ongoing management				
5-min OBS.				
Vital signs	5 mins QMEWT = 11	10 mins QMEWT = 10	15 mins QMEWT = 6	20 mins QMEWT = 4
RR	28	26	18	14
SPO <sup>2</sup>	94	96%	97%	98%
O <sub>2</sub> Flow	2L	2L	RA	RA
BP/ART	88/40	90/50	100/60	110/70
HR	122	120	115	105
TEMP	39.9°C	39.6°C	39°C	38.5°C
GCS Consciousness	Hot uncomfortable	Sleepy rousable	Sleepy but rousable	Awake
BSL	5.6			
ECG	Sinus Tachycardia	Sinus Tachycardia		

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

State 3: Resolution					
Vital signs		Script	Details	Expected actions	
RR	16	<b>Ying (Mum)</b> In established labour, now contraction 3-4:10 lasting 60 sec. using N <sub>2</sub> O <sup>2</sup> effective. Not so sleepy now, feeling better, shivering has stopped.	Labouring on the bed.	<input type="checkbox"/> Recap of treatment and care <input type="checkbox"/> Explanation to Ying of what happened and why <input type="checkbox"/> Documentation of events <input type="checkbox"/> Plan of care for after birth where should that take place <input type="checkbox"/> ICU <input type="checkbox"/> Birth suite <input type="checkbox"/> IV antibiotics to continue	
SPO <sub>2</sub>	97%				
BP	100/45				
HR	103				
Temp	38.0°C				
Consciousness sedation score	Alert				

## Immersive in-situ scenario

Target audience	Obstetric medical staff and midwives.	
Overview	<p>Birth suite or on a ward, woman in early labour.</p> <p><b>Situation:</b> G3P2 at 39+2/40 presented today in early labour and feeling unwell.</p> <p><b>Background:</b> 38-year-old:<ul style="list-style-type: none"> <li>• Her family have all had colds for the last week.</li> <li>• On admission mild pyrexia 37.5°C, no obvious cause seen for temperature. Treated with Panadol x 2.</li> <li>• Pregnancy has been uneventful to date, shared care with her GP.</li> <li>• X2 previous SVDs, last labour was 3 hours.</li> </ul></p> <p><b>Assessment:</b><ul style="list-style-type: none"> <li>• Observation Temp 37.5°C, slight tachycardia 100, all other obs. NAD</li> <li>• Palpation = dates,</li> <li>• Longitudinal lie, back right and lateral (ROL),</li> <li>• Cephalic presentation 2/5 above.</li> <li>• CTG on admission normal (3 hours ago)</li> <li>• Vaginal examination 3 hours ago, 3cm dilated soft and stretchy cervix.</li> </ul></p> <p><b>Recommendations:</b><ul style="list-style-type: none"> <li>• Admission due to raised temperature.</li> <li>• 4 hourly observation</li> <li>• Admit to birth suite when in established labour.</li> </ul></p>	
Learning objectives	<p>By the end of the scenario, the learner should be able to:</p> <ul style="list-style-type: none"> <li>• Recognise and respond to a clinically deteriorating patient</li> <li>• Demonstrate the clinical management of a labouring woman with sepsis</li> <li>• Assess the possible cause of the maternal sepsis and manage the situation</li> <li>• Management of the fetus and delivery with sepsis.</li> </ul>	
Duration	Pre-brief: 10 minutes Orientation: 5 minutes Simulation: 15 mins Debrief: 15 mins	Total: 45 mins Allow 15 minutes for set up

## Physical resources

<b>Room set up</b>	Standard birth suite set up or assessment area set up.
<b>Simulator/s</b>	Simulated patient in a hospital gown with part task manikin with fetus or Manikin (including software).
<b>Simulator/s setup</b>	If using a simulated patient - simulated patient in a hospital gown with a pregnant abdomen sitting in bed – CTG is not on. (The part task manikin has the fetus inside ready for birth and placed to one side until ready to progress scenario). If using a Manikin - manikin with pregnant abdomen with fetus in situ and birthing perineum, lying on the bed - CTG is not on.
<b>Clinical equipment</b>	Standard birthing/ assessment room <ul style="list-style-type: none"> <li>• Routine set up</li> <li>• ECG – machine available outside of the room.</li> </ul>
<b>Access</b>	Nil
<b>Other</b>	<ul style="list-style-type: none"> <li>• Paperwork for emergency management – A/N assessment sheet &amp; A/N QMEWT</li> <li>• Patient records on ieMR</li> <li>• Pregnancy Health Record (PHR).</li> </ul>

## Human resources

<b>Faculty</b>	Facilitators x2 to take on roles of scenario lead and primary debriefer (Obstetric Reg/Consultant and midwife with debriefing experience).
<b>Simulation Coordinators</b>	If using a manikin - Sim Co x1 for set up and control manikin software during scenario.
<b>Confederates</b>	<ul style="list-style-type: none"> <li>• If using a simulated patient – simulated patient x1.</li> <li>• Midwife as a support person – husband is home with ill children as he is also unwell.</li> <li>• Facilitator to provide handover as the midwife is going off shift.</li> </ul>
<b>Other</b>	Midwife x1 is present in the simulation room to receive the handover. The other midwives and doctors are outside the room, to be called in as needed.

## Simulated patient script information

You are Jane, you are having your third (3<sup>rd</sup>) baby. You presented to the hospital four (4) hours ago due to signs of early labour and due to a ‘fast’ labour last time, you did not want to stay at home too long.

All your family have been unwell with flu. Your husband is at home caring for the children and he is also sick. You had a show in the early hours and was contracting 2:10 mild to moderate. You do not have ruptured membranes and in the last hour your contractions are becoming stronger. You are feeling increasingly unwell and feeling hot. You definitely think labour is now under way.

## Handover card

Handover from the midwife caring for Jane to the next shift.

<b>I</b>	Introduction	This is Jane, this is ... <staff name>
<b>S</b>	Situation	G3P2 at 39+2/40 presented today in early labour and feeling unwell.
<b>B</b>	Background	38-year-old: Jane’s family have all had colds for the last week. On admission mild pyrexia 37.5°C. No obvious cause seen for temperature, treated with Panadol x 2. Pregnancy has been uneventful to date, shared care with her GP. X2 previous SVDs. Last labour was 3 hours.
<b>A</b>	Assessment	<ul style="list-style-type: none"> <li>• Obs. Temp 37.5°C, slight tachycardia 100, respiration rate 20.</li> <li>• Palpation = dates,</li> <li>• Longitudinal lie, back Right and lateral (ROL),</li> <li>• Cephalic presentation 2/5 above.</li> <li>• CTG on admission normal (3 hours ago).</li> <li>• Vaginal examination 3 hours ago 3cm dilated soft and stretchy cervix.</li> </ul>
<b>R</b>	Recommendations	Admission due to raised temperature. 4 hourly observation, admit to birth suite when in established labour. Thanks for looking after her.

## Additional information

Name	Jane Hill
Age	38 years old
Sex	Female
Weight	80 kg
Allergies	Nil known
Medications	Elevit Ventolin - seasonal
Medical/Surgical	Mild asthma
History	Nil
Social History/Employment	Part time childcare worker – on maternity leave
Partner's name	Simon
Pregnancy history	G3P2
Blood Group	AB Pos antibodies Neg
Hb	112 – 36 weeks
Serology	Neg
Rubella	Immune
GBS	Unknown  X2 previous SVDs no complications

## SCENARIO 2 - ADVANCED

State 1: Initial assessment				
Vital signs		Script	Details	Expected actions
RR	22	<b>Jane (Mum)</b> ‘I’m becoming more uncomfortable. I may need some ‘gas’ soon, but I am really starting to feel very hot as well’.	I Introduction This is Jane, this is <staff name>	<input type="checkbox"/> Establishes rapport with woman <input type="checkbox"/> Listens/asks for history <input type="checkbox"/> Performs full A/N assessment <input type="checkbox"/> Discusses pain and plan of care <input type="checkbox"/> Calls for assistance as situation becomes more intense <input type="checkbox"/> Makes a plan including next set of Obs. IVC. Blood cultures <input type="checkbox"/> Plan for antibiotic therapy <input type="checkbox"/> Perform a CTG once recognises the Obs. are abnormal
SPO <sub>2</sub>	98%		S Situation Jane presented 3 hours ago in early labour and feeling unwell.	
BP	100/70		B Background G3P2 39+2/40 uneventful pregnancy, X2 previous SVDs last labour 3 hours	
HR	106		A Assessment Obs. need to be taken	
Temp	38.3°C		R Recommendations Set of Obs. required +/- CTG.	
Consciousness sedation score	Alert but hot			
Palpation	= dates, Lie Longitudinal LOT 2/5 head above			
FH	158bpm on CTG reduced variability			
Contractions	2:10 lasting 45 sec			
PV loss	Pink show			

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

State 2: Ongoing management				
Vital signs		Script	Details	Expected actions
RR	24	<b>Jane (Mum)</b> "This is so hard I feel terrible and the contractions are really painful. Can I have something for the pain and my headache?"  Becoming more vocal during contractions.  Feeling overwhelmed by all the activity.  5-minute obs. see next page.	<ul style="list-style-type: none"> <li>● Jane is shivering between contraction</li> <li>● Contractions becoming stronger and more painful</li> <li>● Complaining of a headache</li> <li>● Wanting to lay down but can't settle due to contractions</li> <li>● CTG abnormal maybe</li> <li>● Registrar review</li> </ul>	<input type="checkbox"/> Inform TL <input type="checkbox"/> Call MO to review – CTG review and plan re-labour management <input type="checkbox"/> Explanation to mother <input type="checkbox"/> IVC- if not already performed <input type="checkbox"/> Bloods to lab <ul style="list-style-type: none"> <li>○ FBC/ Chem 20/ Coags.</li> <li>○ Blood cultures</li> </ul> <input type="checkbox"/> Urine to lab <input type="checkbox"/> VE - ARM <input type="checkbox"/> Venous blood gas <input type="checkbox"/> Commence antibiotic therapy <ul style="list-style-type: none"> <li>○ Cephazolin 1gm</li> <li>○ Metronidazole 500mg</li> <li>○ Gentamycin 500mg</li> </ul> <input type="checkbox"/> Fluid bolus – for CTG and clinical picture <input type="checkbox"/> Strict fluid balance <input type="checkbox"/> Facial O <sup>2</sup> if sats. drop <input type="checkbox"/> Consider pain relief <input type="checkbox"/> Observe CTG <ul style="list-style-type: none"> <li>○ Left lateral with 15° tilt</li> </ul>
SPO <sub>2</sub>	96%			
BP	90/45			
HR	122			
Temp	38.6°C			
Consciousness sedation score	Alert now shivering.			
Contractions	2:3 – 10 lasting 50 sec stronger			
CTG	165 reduced variability Abnormal maybe			
VE	4cm dilated Fully effaced, PP -2cm ARM MEC liquor.			

## SCENARIO 2 - ADVANCED

State 2: Ongoing management (continued)				
Vital signs		Script	Details	Expected actions
RR	24	<b>Jane (Mum)</b> Shivering between the contractions but since the ARM the contractions are much stronger now. Wanting to lay down as really tired now using N <sub>2</sub> O <sup>2</sup> effectively.	<ul style="list-style-type: none"> <li>● Jane shivering between contractions</li> <li>● Contractions becoming stronger and more painful</li> <li>● CTG abnormal maybe</li> <li>● Laying on left side feeling exhausted</li> <li>● Registrar review</li> <li>● Prepared for CAT 1 C/S</li> <li>● Just before moving Jane to OT feeling pressure/ urge to push</li> <li>● Prepared to deliver</li> <li>● Progressed quickly to SVD of a live infant Apgar's 5/1 9/5.</li> </ul>	<input type="checkbox"/> Inform TL <input type="checkbox"/> CTG to be reviewed by Registrar <input type="checkbox"/> Plan to be made regarding labour management <input type="checkbox"/> VE due to deteriorating CTG – fetal blood sampling <input type="checkbox"/> CAT 1 LSCS called – prep for C/S <input type="checkbox"/> Paed./neonatal unit called to attend.
SPO <sub>2</sub>	96%			
BP	90/45			
HR	122			
Temp	38.6°C			
Consciousness sedation score	Alert now shivering.			
Contractions	4 – 10 lasting 60 sec stronger			
CTG	175 reduced variability with decelerations Abnormal likely			
VE	5 -6 cm dilated Fully effaced, PP -1cm MEC liquor			
FBS	Lactate 9.2			

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

State 2: Ongoing management				
5-min OBS.				
	Prior to birth QMEWT= 13	5 mins QMEWT=11	10 mins QMEWT=6	15 mins QMEWT=4
RR	28	Birth	18	14
SPO <sup>2</sup>	94		97%	98%
O <sub>2</sub> Flow	2L		RA	RA
BP/ART	88/40		100/60	110/70
HR	122		115	105
TEMP	39.9°C		39°C	38.4°C
GCS Consciousness	Hot uncomfortable		Sleepy rousable	Awake
BSL	5.6			
ECG	Sinus Tachycardia		Sinus Tachycardia	

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

State 3: Resolution					
Vital signs		Script	Details	Expected actions	
RR	16	Jane (Mum) Feeling really tired would like something to eat and drink. Remains hot but not shivering.	Baby short session of skin to skin before admission the nursery.	<input type="checkbox"/> Recap of treatment and care <input type="checkbox"/> Explanation to Jane of what happened and why <input type="checkbox"/> Debrief to family <input type="checkbox"/> Documentation of events <input type="checkbox"/> Plan of care where should that take place <input type="checkbox"/> ICU <input type="checkbox"/> Birth suite	
SPO <sub>2</sub>	97%				
BP	100/45				
HR	103				
Temp	38.0°C				
Consciousness sedation score	Alert				



# Supporting Resources

This section contains the following resources that will be essential in the delivery of this learning package:

## Scenario 1 – Standard

1. Manikin set-up guide
2. Laboratory reports
3. CTG on admission
4. Current CTG. 2<sup>nd</sup> stage pushing
5. Simulation debriefing poster
6. Debriefing guide

## Scenario 2 – Advanced

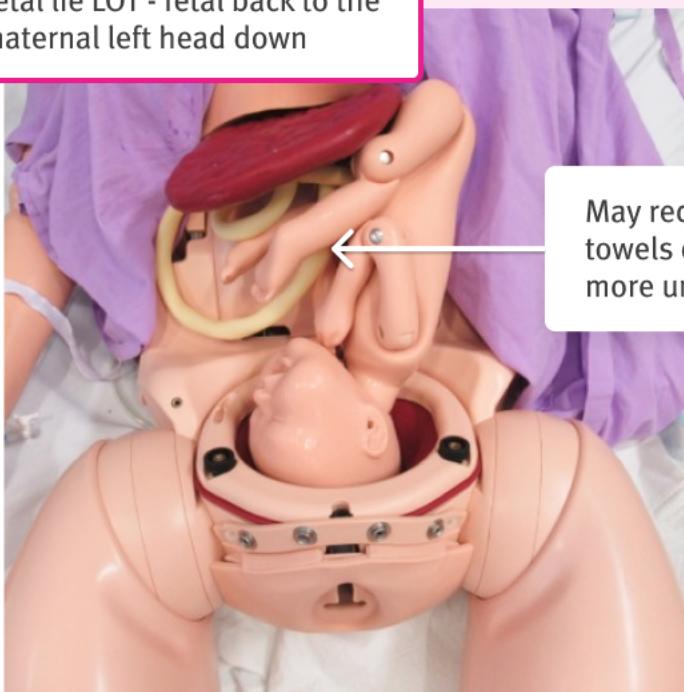
1. Manikin set-up guide
2. Laboratory reports
3. CTG on admission
4. Current CTG. 2<sup>nd</sup> stage pushing
5. Simulation debriefing poster
6. Debriefing guide



# Manikin set-up guide

## SCENARIO 1 - STANDARD

Fetal lie LOT - fetal back to the maternal left head down



May require padding with towels or soft form for a more uniform feel



Use postnatal abdomen to give the appearance of a small baby

SCENARIO 1 - STANDARD

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Reference	Comment
Haemoglobin	10.8 g/dL	13.7-17.7g/dL	
WCC	19.0 H	3.9-10.6 x 10 <sup>9</sup> /L	
Platelets	167 L	150-440 x 10 <sup>9</sup> /L	
Haematocrit	0.35	0.39 – 0.52	
RCC	5.0	4.50 – 6.0x10 <sup>12</sup> /L	
MCV	90 fL	80 – 100 fL	
Neutrophils	9.45	2.0 – 8.0x10 <sup>9</sup> /L	
Lymphocytes	3.0	1.0 – 4.0x10 <sup>9</sup> /L	
Monocytes	2.0	0.1 – 1.0x10 <sup>9</sup> /L	
Eosinophils	0.2	<0.60x10 <sup>9</sup> /L	
Basophils	0.1	<0.20x10 <sup>9</sup> /L	
CRP	160	<5	

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 2

REF:

Test	Result	Reference	Comment
Sodium	135	135 – 145 mmol/L	
Potassium	3.5	3.5 – 5.1 mmol/L	
Chloride	108	100 – 110 mmol/L	
Bicarbonate	28	22 – 32 mmol/L	
Anion gap	12	4 – 13 mmol/L	
Urea	4.8	2.1 – 7.1 mmol/L	
Creatinine	68	73 – 108 umol/L	
Urea/Creat	46	40 – 100	

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 3

REF:

Test	Result	Reference	Comment
Protein (total)	70 g/L	60 – 83 g/L	
Albumin	40 g/L	35 – 50 g/L	
Bilirubin (total)	5 umol/L	<20 umol/L	
Bilirubin (conj)	2 umol/L	<4 umol/L	
Gamma GT	60 umol/L	<55 U/L	
AST	40 U/L	<35	
ALT	40 U/L	<45	
ALP	110 U/L	(56-119)	

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Reference	Comment
Coagulation profile	Pending		
Blood cultures	Pending		

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission Bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Comment
Group and Antibody Screen		
Group	AB Rh (D) Positive	
Antibody	Negative	
		Nil
Expires in 7 days		

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

LVS 7 DAYS AGO

DATE:

PATIENT:

DOB:

LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Comment
LVS	GBS Neg	
Culture GBS Negative		

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

<b>RADIOMETRY ABL800 FLEX</b>					
ABL800 RH~RB PATIENT REPORT		SYRINGE-S250uL		1 SAMPLE # 16538	
<b>IDENTIFICATION</b>					
Patient ID Patient Last Name Patient First Name Sample type T FO <sub>2</sub> (I) Operator	Arterial 36.4 50% CSDS Simulation				
<b>Blood Gases</b>					
<b>Test</b>	<b>Result</b>	<b>Reference</b>	<b>Test</b>	<b>Result</b>	<b>Reference</b>
pH	7.45	7.350-7.450	<b>Electrolyte values</b>		
PCO <sub>2</sub>	25 mmHg	35.0-45.0	cNa <sup>+</sup>	135 mmo/L	135-145
pO <sub>2</sub>	65 mmHg	75.0-100	cK <sup>+</sup>	31 mmo/L	3.2-4.5
cHCO <sub>3</sub> <sup>-</sup> (P)c	17 mmol/L	21.0-27.0	cCl <sup>-</sup>	109 mmo/L	100-110
cBase (B) c	-5.2 mmol/L	-3.0-3.0	cCa <sup>2+</sup>	1.20 mmo/L	1.15-1.36
P50c	40 mmHg		AnionGap K+c	13 mmo/L	
Baro		mmHg	<b>Metabolite values</b>		
<b>Oximetry values</b>			cGlu	11.1 mmo/L	3.0-7.8
aO <sub>2</sub>	94%		cLac	5.5 mmo/L	0.7-2.5
cHb	87 g/L	105-135	cCrea	ummo/L	36-82
Hct	%		<b>Temperature corrected values</b>		
FO <sub>2</sub> Hb	%	94.0-98.0	pH(T)	mmHg	
FCOHb	%	0.0-1.5	PCO <sub>2</sub> (T)	mmHg	
FMelHb	%		pO <sub>2</sub> (T)	mmHg	
FHHb	%				
<b>Notes:</b>					

## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Admission Urine

DATE:

PATIENT:

DOB:

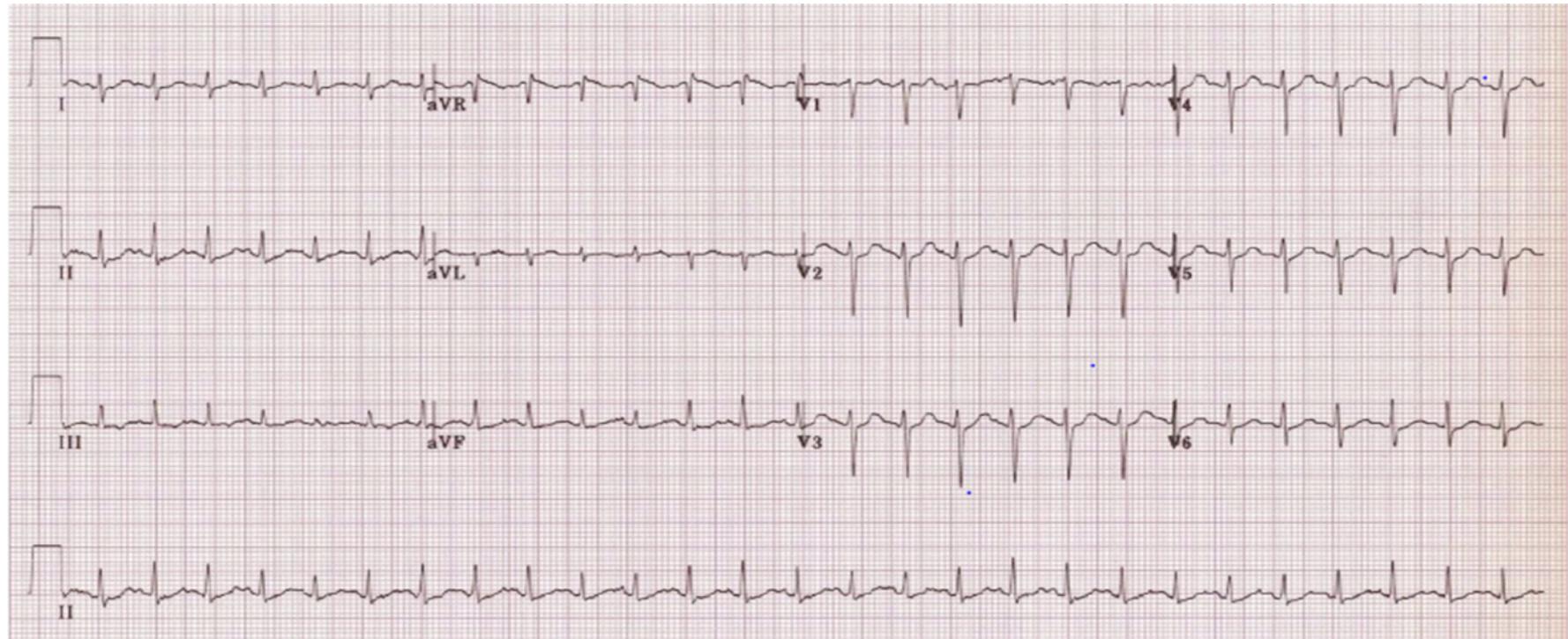
### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Comment
Urine Dipstick	Leucocytes +++	
	Nitrates +	
	Glucose Nil	
	Protein ++	
	Ketones +++	
	Blood +++	
	Leucocytes +++	
Culture pending		

### ECG – Sinus Tachycardia

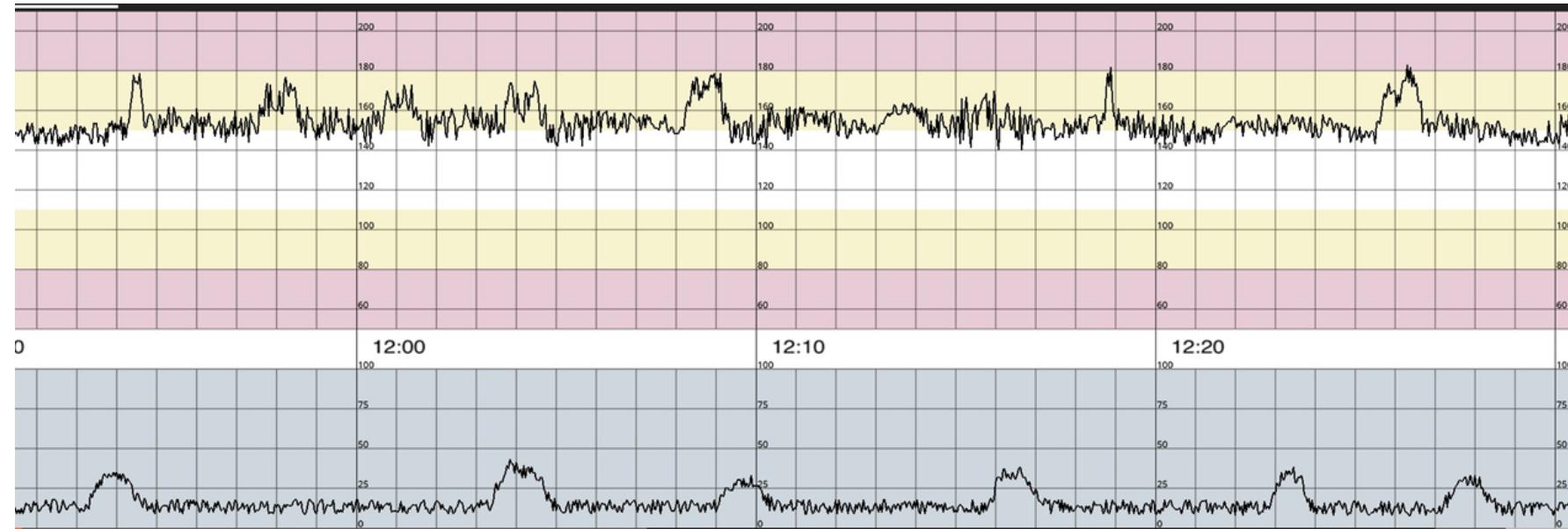


## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### CTG on admission

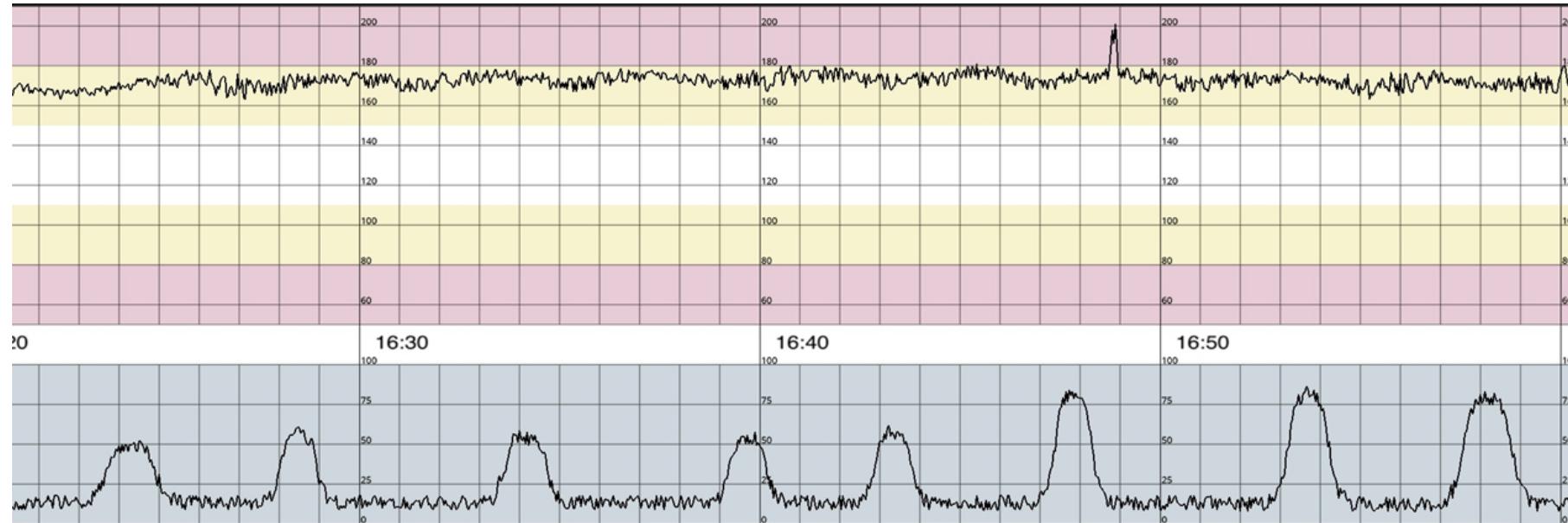


## SCENARIO 1 - STANDARD

Sepsis Antenatal

Maternity Education Program

### Labour CTG



# Simulation Debriefing

Establishing a safe container for learning in simulation.



## Reaction phase - “vent”

1

- How was that?
- How are you feeling?
- Any other initial reactions?
- Learners may reveal key areas that are important to them.



2

## Description phase

- Clinical summary of the case.
- Can be shortened if it appears there is shared understanding of the case.

## Analysis phase

3

Select which strategy is suited.

- Learner Self-Assessment - learner generates objectives  
What went well/what would you change?  
What well/did not go well and why?
- Focused Facilitation - analyse performance related to objective

4

## Summary phase

- Discuss take-home learning points
- Learner guided approach or
- Facilitator guided approach

Adapted from Eppich, W. and Cheng, A., 2015. Promoting Excellence and Reflective Learning in Simulation (PEARLS). *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 10(2), pp.106-115.

## Debriefing guide

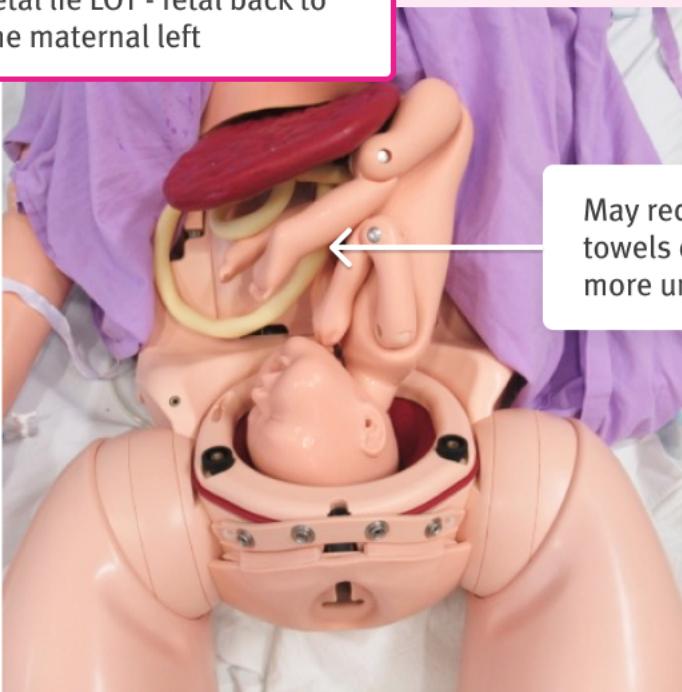
<b>Scenario objectives</b>	<p>Participants are required to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognise and respond to the clinical deteriorating patient</li> <li><input type="checkbox"/> Demonstrate the clinical management of a labouring woman with sepsis</li> <li><input type="checkbox"/> Assess the possible cause of the maternal sepsis and its management</li> <li><input type="checkbox"/> Prepare to receive a pre-term baby from a mother with possible sepsis</li> </ul>
<b>Vent phase</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Initial thoughts of how the simulation went?</li> <li>• Acknowledge emotions (note body language and tone of participants)</li> </ul>
<b>What happened (phases)?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Tell us about your patient and what were your initial priorities?</li> <li>• What led to your decision to escalate management?</li> <li>• What clinical signs and symptoms led you to become concerned?</li> </ul>
<b>What was done well and why?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• What could have been better at each phase?</li> </ul>
<b>Relevance to experience</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• How would you transfer knowledge from today into your workplace?</li> </ul>
<b>What has been learned?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• What actions will you take to enhance your skills and knowledge post simulation?</li> </ul>
<b>Transfer to clinical settings</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Can you give an example of how you may apply new skills or knowledge gained during this session?</li> <li>• What will you take away from this session?</li> </ul>
<b>Key moments</b>	<ul style="list-style-type: none"> <li>• Recognition of antenatal sepsis (potential / actual)</li> <li>• Calling for HELP early</li> <li>• Having key team members present</li> <li>• Preparing and plan for ongoing adverse event</li> </ul>



# Manikin set-up guide

## SCENARIO 2 - ADVANCED

Fetal lie LOT - fetal back to the maternal left



May require padding with towels or soft form for a more uniform feel



Fetus inside a condom with cloudy fluid

SCENARIO 2 - ADVANCED



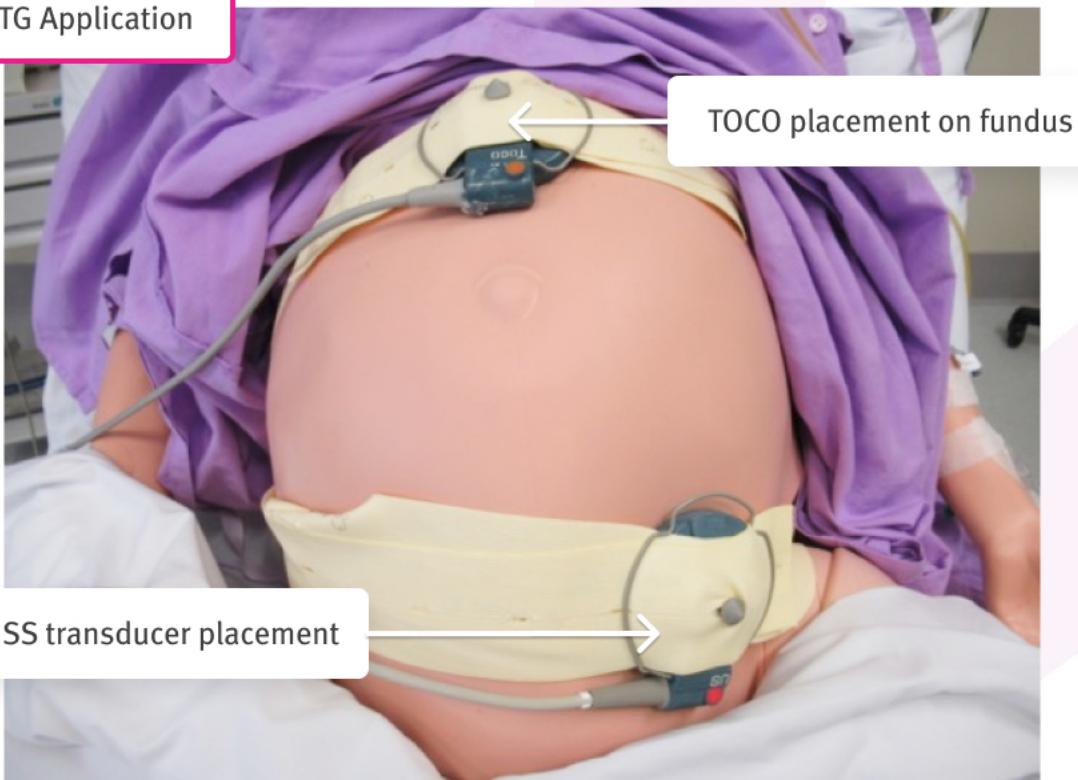
# Manikin set-up guide

## SCENARIO 2 - ADVANCED



Fluid green for meconium  
(see CSDS moulage recipes)

CTG Application



SCENARIO 2 - ADVANCED

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Reference	Comment
Haemoglobin	11.8 g/dL	13.7-17.7g/dL	
WCC	18.0 H	3.9-10.6 x 10 <sup>9</sup> /L	
Platelets	186 L	150-440 x 10 <sup>9</sup> /L	
Haematocrit	0.35	0.39 – 0.52	
RCC	5.0	4.50 – 6.0x10 <sup>12</sup> /L	
MCV	90 fL	80 – 100 fL	
Neutrophils	9.15	2.0 – 8.0x10 <sup>9</sup> /L	
Lymphocytes	3.0	1.0 – 4.0x10 <sup>9</sup> /L	
Monocytes	2.0	0.1 – 1.0x10 <sup>9</sup> /L	
Eosinophils	0.2	<0.60x10 <sup>9</sup> /L	
Basophils	0.1	<0.20x10 <sup>9</sup> /L	
CRP	160	<5	

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 2

REF:

Test	Result	Reference	Comment
Sodium	135	135 – 145 mmol/L	
Potassium	3.0	3.5 – 5.1 mmol/L	
Chloride	102	100 – 110 mmol/L	
Bicarbonate	28	22 – 32 mmol/L	
Anion gap	12	4 – 13 mmol/L	
Urea	4.8	2.1 – 7.1 mmol/L	
Creatinine	60	73 – 108 umol/L	
Urea/Creat	42	40 – 100	

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 3

REF:

Test	Result	Reference	Comment
Protein (total)	70 g/L	60 – 83 g/L	
Albumin	40 g/L	35 – 50 g/L	
Bilirubin (total)	5 umol/L	<20 umol/L	
Bilirubin (conj)	2 umol/L	<4 umol/L	
Gamma GT	60 umol/L	<55 U/L	
AST	40 U/L	<35	
ALT	40 U/L	<45	
ALP	110 U/L	(56-119)	

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Reference	Comment
Coagulation profile	Pending		
Blood cultures	Pending		

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission Bloods

DATE:

PATIENT:

DOB:

### LABORATORY REPORT

PAGE: 1

REF:

Test	Result	Comment
Group and Antibody Screen		
Group	AB Rh (D) Positive	
Antibody	Negative	
		Nil
Expires in 7 days		

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

<b>RADIOMETRY ABL800 FLEX</b>					
ABL800 RH~RB PATIENT REPORT		SYRINGE-S250uL		1 SAMPLE # 16538	
<b>IDENTIFICATION</b>					
Patient ID Patient Last Name Patient First Name Sample type T FO <sub>2</sub> (I) Operator	Arterial 36.4 50% CSDS Simulation				
<b>Blood Gases</b>					
<b>Test</b>	<b>Result</b>	<b>Reference</b>	<b>Test</b>	<b>Result</b>	<b>Reference</b>
pH	7.45	7.350-7.450	<b>Electrolyte values</b>		
PCO <sub>2</sub>	25 mmHg	35.0-45.0	cNa <sup>+</sup>	135 mmo/L	135-145
pO <sub>2</sub>	65 mmHg	75.0-100	cK <sup>+</sup>	31 mmo/L	3.2-4.5
cHCO <sub>3</sub> <sup>-</sup> (P)c	17 mmol/L	21.0-27.0	cCl <sup>-</sup>	109 mmo/L	100-110
cBase (B) c	-5.2 mmol/L	-3.0-3.0	cCa <sup>2+</sup>	1.20 mmo/L	1.15-1.36
P50c	40 mmHg		AnionGap K+c	13 mmo/L	
Baro		mmHg	<b>Metabolite values</b>		
<b>Oximetry values</b>			cGlu	11.1 mmo/L	3.0-7.8
aO <sub>2</sub>	94%		cLac	5.5 mmo/L	0.7-2.5
cHb	87 g/L	105-135	cCrea	ummo/L	36-82
Hct	%		<b>Temperature corrected values</b>		
FO <sub>2</sub> Hb	%	94.0-98.0	pH(T)	mmHg	
FCOHb	%	0.0-1.5	PCO <sub>2</sub> (T)	mmHg	
FMelHb	%		pO <sub>2</sub> (T)	mmHg	
FHHb	%				
<b>Notes:</b>					

## SCENARIO 2 - ADVANCED

Sepsis Antenatal

Maternity Education Program

### Admission Urine

DATE:

PATIENT:

DOB:

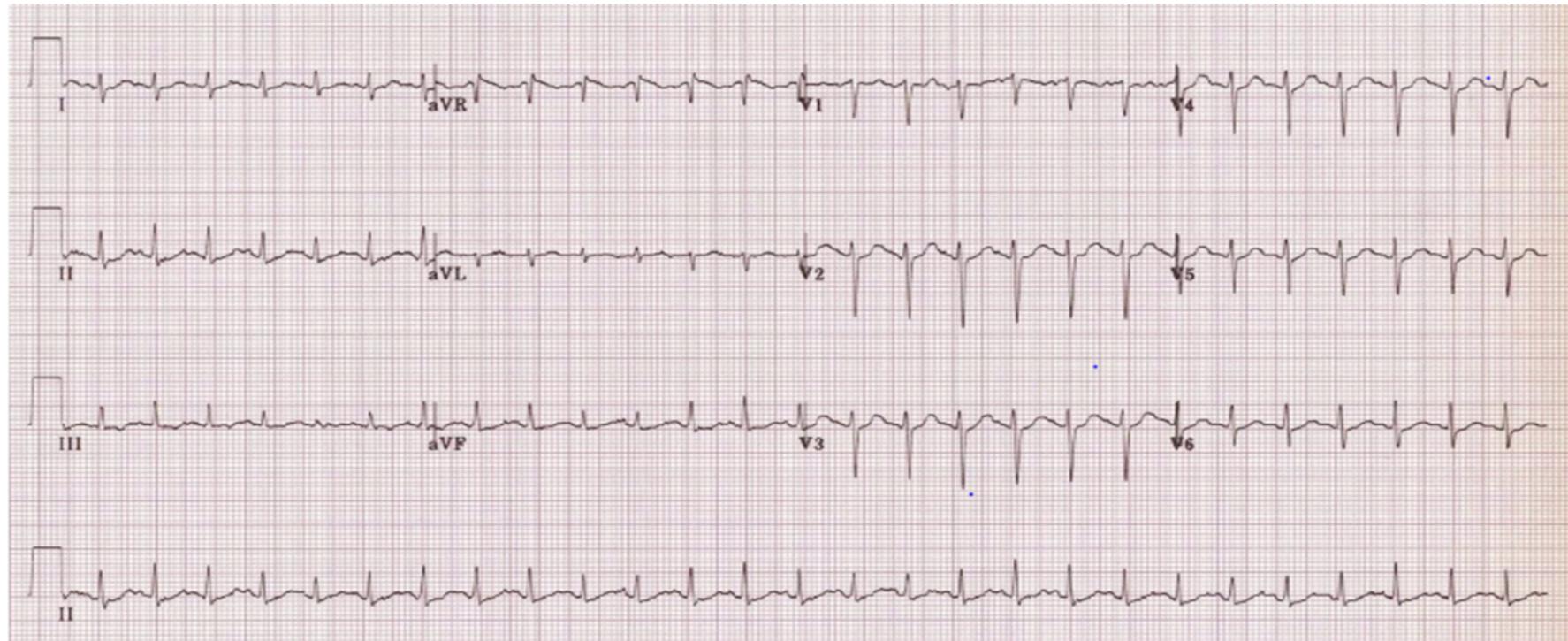
### LABORATORY REPORT

PAGE: 1

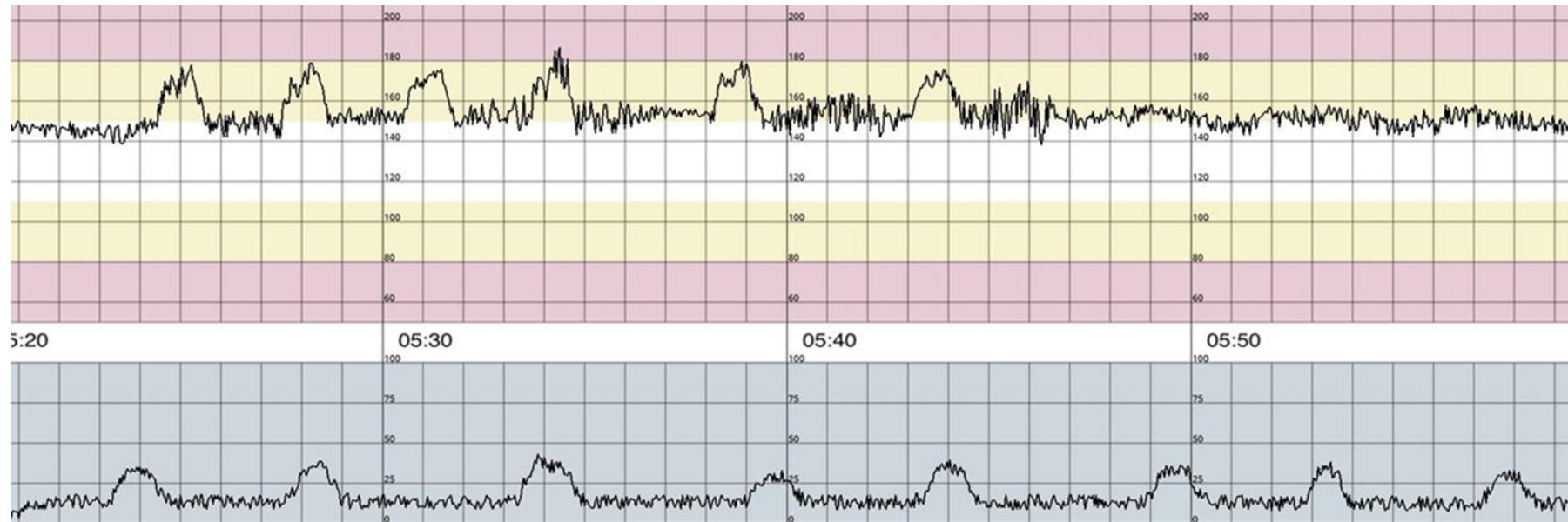
REF:

Test	Result	Comment
Urine Dipstick	Leucocytes +++	
	Nitrates +	
	Glucose Nil	
	Protein ++	
	Ketones +++	
	Blood +++	
	Leucocytes +++	
Culture pending		

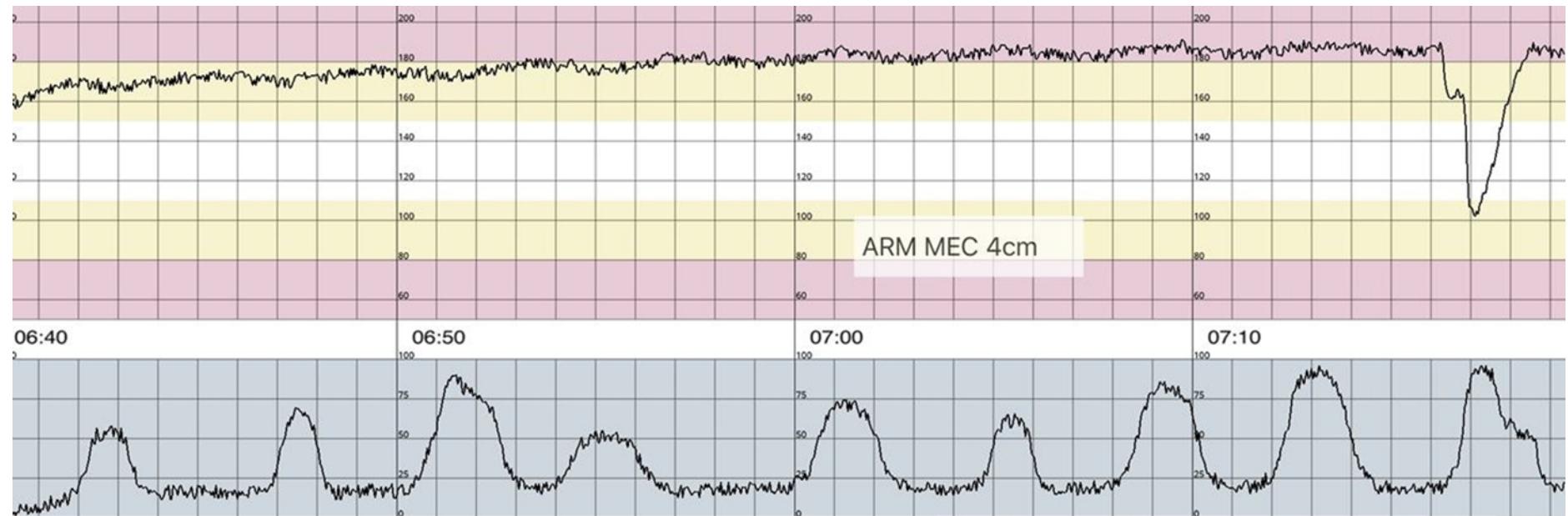
### ECG – Sinus Tachycardia



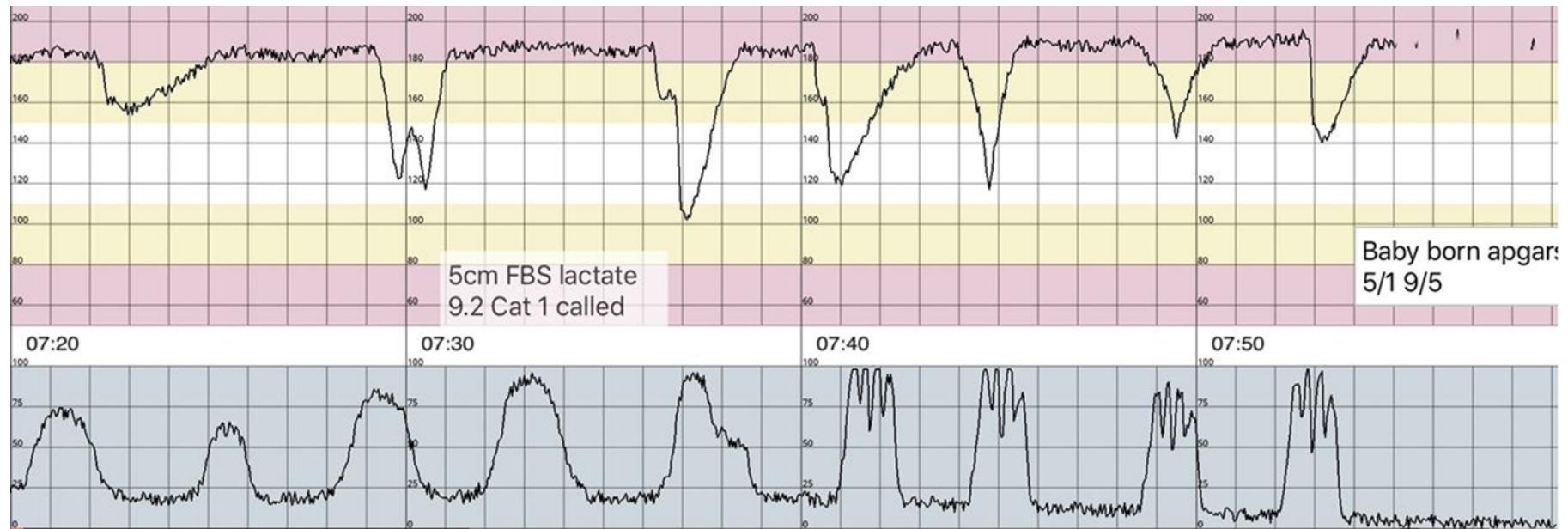
### CTG on admission



### Early labour CTG



### Labour CTG



# Simulation Debriefing

Establishing a safe container for learning in simulation.



## Reaction phase - “vent”

1

- How was that?
- How are you feeling?
- Any other initial reactions?
- Learners may reveal key areas that are important to them.



2

## Description phase

- Clinical summary of the case.
- Can be shortened if it appears there is shared understanding of the case.

## Analysis phase

3

Select which strategy is suited.

- Learner Self-Assessment - learner generates objectives  
What went well/what would you change?  
What well/did not go well and why?
- Focused Facilitation - analyse performance related to objective

4

## Summary phase

- Discuss take-home learning points
- Learner guided approach or
- Facilitator guided approach

Adapted from Eppich, W. and Cheng, A., 2015. Promoting Excellence and Reflective Learning in Simulation (PEARLS). *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 10(2), pp.106-115.

## Debriefing guide

<b>Scenario objectives</b>	<p>Participants are required to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recognise and respond to the clinical deteriorating patient</li> <li><input type="checkbox"/> Demonstrate the clinical management of a labouring woman with sepsis</li> <li><input type="checkbox"/> Assess the possible cause of the maternal sepsis and its management</li> <li><input type="checkbox"/> Prepare to receive a baby from a mother with possible sepsis</li> </ul>
<b>Vent phase</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Initial thoughts of how the simulation went?</li> <li>• Acknowledge emotions (note body language and tone of participants)</li> </ul>
<b>What happened (phases)?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Tell us about your patient and what were your initial priorities?</li> <li>• What led to your decision to escalate management?</li> <li>• What clinical signs and symptoms led you to become concerned?</li> </ul>
<b>What was done well and why?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• What could have been better at each phase?</li> </ul>
<b>Relevance to experience</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• How would you transfer knowledge from today into your workplace?</li> </ul>
<b>What has been learned?</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• What actions will you take to enhance your skills and knowledge post simulation?</li> </ul>
<b>Transfer to clinical settings</b>	<p>Example questions:</p> <ul style="list-style-type: none"> <li>• Can you give an example of how you may apply new skills or knowledge gained during this session?</li> <li>• What will you take away from this session?</li> </ul>
<b>Key moments</b>	<ul style="list-style-type: none"> <li>• Recognition of antenatal sepsis (potential / actual)</li> <li>• Calling for HELP early</li> <li>• Having key team members present</li> <li>• Preparing and plan for ongoing adverse event</li> </ul>

## Acronyms and abbreviations

Term	Definition
AN	Antenatal
bpm	Beats per minute
C/S	Caesarean section
CAT 1	Category 1
CSDS	Clinical Skills Development Service
CTG	Cardiotocograph
ECG	Electrocardiograph
FBC	Full blood count
FBS	Fetal blood sample
GAS	Group A beta haemolytic streptococcal
GCS	Glasgow coma scale
GP	General Practitioner
Hb	Haemoglobin
ICU	Intensive care unit
ieMR	Integrated electronic medical records
IVC	Intra venous cannula
Mec	Meconium
MO	Medical Officer
NAD	Nothing abnormal detected
Obs	Observations
omqSOFA	Obstetrically modified quick sepsis related organ failure assessment
OT	Operating theatre
PHR	Pregnancy Health Record

<b>PP</b>	Presenting part
<b>PV</b>	Per vagina
<b>QMEWT</b>	Queensland Maternity Early Warning Tool
<b>RCOG</b>	Royal College of Obstetricians & Gynaecologists
<b>ROL</b>	Right occipital lateral
<b>SMFM</b>	Society for Maternal – Fetal Medicine
<b>SOMANZ</b>	Society of Obstetric Medicine of Australia & New Zealand
<b>SVD</b>	Spontaneous vaginal delivery
<b>TL</b>	Team leader
<b>VE</b>	Vaginal examination

## References

This resource kit has been inspired by the Optimus BONUS project of the Children's Health Queensland's Simulation Training Optimising Resuscitation for Kids (STORK) service. To know more information about STORK and their Optimus project, visit their website.

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[www.rcog.org.uk/globalassets/documents/guidelines/gtg\\_64a.pdf](http://www.rcog.org.uk/globalassets/documents/guidelines/gtg_64a.pdf)

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## Sepsis Antenatal– Facilitator Resource Kit

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