

Introducing "Improving Diagnosis and Treatment of Obstetric Sepsis, V2.0 Toolkit" Webinar – September 2025
Q&A Answers by Panelists

- Did the community advisory group have recommendations about effective methods for communicating warning signs at the time of discharge? I would guess a lot of sites would say that do educate every patient on discharge about urgent warning signs, but that it's not done successfully and we don't know how to confirm it was successfully communicated-it would be great to hear any recommendations community members had. Thank you!

They do recommend providing it on a QR code so they have access to it on their phone as well as other information you normal give out. It is also helpful to give out during prenatal visits, antenatal testing, in pediatric offices, etc. Get creative! There are so many opportunities to share it before patients are concerned with caring for the neonate and may be prioritizing leaning about that.

(Dr. Melissa Bauer)

- Are these tools available in different languages?

Currently we have the Follow-up Guide and the Advocacy Tool available in English and Spanish. You can translate into any language as long as you remove the logos.

(Christa Walczak, RN)

The follow up guide is meant for providers to assess patient concerns and we recommend the use of a medical interpreter when assessing patient concerns.

(Dr. Melissa Bauer)

- Can you speak to why fetal tachycardia is not included as criteria for screening positive for serious infection?

Great question! Fetal tachycardia is often a response to the maternal system- and is secondary information. Unfortunately, it is a non-specific finding and can be from many causes. It certainly should be evaluated and treated; however, it is not included in the initial screening criteria. Also, in some settings where this screen may be used, there may not be fetal tracings. All in all, it is an important adjunctive warning sign that warrants attention.

(Dr. Courtney Martin)

- How long are these vital signs valid postpartum? Greater than 12 weeks?

Greater than or equal to 20 weeks and less than or equal to 72 hours postpartum.

(Christa Walczak, RN)

You would use a non-pregnancy adjusted tool less than 20 weeks and after they are discharged from the hospital. That way you don't miss patients. The adjusted criteria have elevated HR thresholds and in early pregnancy and 24-72 hours after delivery the HR goes back to baseline. This is consistent with CMS SEP-1 criteria. See our work here: <https://pubmed.ncbi.nlm.nih.gov/38086052/>

(Dr. Melissa Bauer)

- Do the elevated vitals need to be sustained or do they still meet criteria if they are intermittent?

We suggest 15-20 minutes sustained and not just one abnormal value.

(Dr. Melissa Bauer)

- What about patients that develop s/s post epidural?

Great question! That is where the bedside evaluation is helpful. If the screen positive occurs after an epidural placement, an evaluation should occur to then decide as a team if this is likely infection or not.

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There is a great section about Epidurals and increasing basal temperature over time that I would direct you to for more information about how it may increase temperature over time, confounding laboring patient temperature triggers.

(Dr. Courtney Martin)

Also, an epidural fever is a diagnosis of exclusion and we recommend exploring all diagnoses. We have seen many cases of infection that have been dismissed as epidural fever. In the flowchart we suggest "in the absence of any alternative diagnosis, proceed to Action."

(Dr. Melissa Bauer)

- Was there any consideration to the language change to be more inclusive for all patients e.g removing "maternal" and obstetric patient or birthing person?

Yes, the title of the Toolkit includes "Obstetric Sepsis" and the majority of references throughout the Toolkit do so. We recognize that other agencies and definitions currently utilize "Maternal Sepsis" so certain explanations require use of that term.

(Christa Walczak, RN)

- How does this relate to chorioamnionitis in labor? If someone has chorioamnionitis and you treat, and temperature check and vital signs are not improving, would you send lactate?

Really important question. It has significant crossover. I answered some of this- but the new toolkit does not recommend sending a lactate in the 2nd stage of labor or 1 hour postpartum. It would depend on how they were not improving, but consider escalating care and making sure fluids were appropriately given.

(Dr. Courtney Martin)

- Do you recommend waiting an hour to draw lactic acid if a patient has two positive indicators right after delivery?

This is a judgement call; the bedside evaluation is meant to identify patients with serious infections rather than just "routine chorioamnionitis". If the patient seems really ill then draw the lactate, ideally an hour after. The most important step, however, is antibiotics and fluid and support.

(Dr. Elliott Main)

- Is it okay to still draw blood cultures after starting antibiotics once chorioamnionitis is diagnosed?

In general, blood cultures are not useful in chorioamnionitis but they are recommended if end organ injury is present. So, this is a setting where we recommend starting antibiotics early and then if labs show organ injury, then draw blood culture.

(Dr. Elliott Main)

- The data cited in the opening statement of the executive summary is very old and no longer accurate based on the most recent 2023 CDC maternal mortality data that came out this year stating PPH (18%), sepsis/infection (15%) and HTN (6%). Are there plans to update this statement so it's accurate?

Infection is a leading cause of maternal mortality and its position varies from year to year and from state to state. The key point is that it is one of the most frequent causes of MMR and a leading cause of SMM (Dr. Elliott Main)

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- It was mentioned that oral temperatures are the gold standard but there has been discussion that rectal temps are most accurate and should be used in sepsis screening. Thoughts for the maternal population?
Yes, absolutely. If there is concern that an oral temperature is questionable or unobtainable a rectal temperature should be considered. Consideration is made for the patient and the perception of a rectal temperature. There is much smaller variation between oral and rectal temperature than other methods. Of course, collection a rectal temperature would never be “wrong” clinically.
(Christa Walczak, RN)
- The MD and RN relationship is truly the key! How can a nurse communicate with the MD if they feel wellness bias and vice versa?
Agree! There are some specific examples of responses on the CUS language slide.
Use CUS (concerned, uncomfortable, safety issue) words if there is resistance to sepsis screening and you receive a response like the following examples:
 - “We will continue to monitor her; sepsis screening is not necessary.”
 - “It is normal in pregnancy to have those vital sign changes; it is not sepsis.”Examples of CUS verbiage
 - “I am uncomfortable with waiting to initiate the sepsis screening, and I would like to activate the order set so that we can promote early recognition and treatment if indicated.”
 - “Although vital signs are elevated in pregnancy, her current vital signs meet sepsis screening criteria. This is now a safety issue we must address.”(Christa Walczak, RN)
- Have you seen incidence of over or under coding sepsis? Our facility has a great sepsis code and great hospital response, but often these are patients with IAI who meet criteria but are not septic - but because it's coded as a code sepsis, the term gets pulled. Any idea or how are others coding a "not sepsis" event?
YES! We sure have. We will be addressing this, but the short answer is education to not document “sepsis” unless EOI is present. Training of coders should include not coding all infection care as sepsis.
(Christa Walczak, RN)
- TY on covering RN scope related to assessment. The RN driven protocols are outstanding. Some hospitals push back on these. Any recommendations to get higher acceptance?
In my experience, showing data that has proven nurse driven care can reduce time to treatment with these approaches, and emphasizing that the RN stays in scope is key. I would also recommend showing the toolkit section on this, and having a physician champion or two that can help support moving forward on this approach.
(Dr. Courtney Martin)
- Should we load Zosyn?
Typically for zosyn, it needs to be run over 4-6 hours to be effective. By infusing Zosyn over 4–6 hours (instead of a standard 30-minute infusion), you keep plasma and tissue concentrations above the MIC for longer. That is why a load typically is not recommended.
(Dr. Courtney Martin)

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A loading dose can be considered in chorioamnionitis to quicken the time to reach AUC₂₄ and to reduce the time that the IV line is tied up with Zosyn that is not commonly compatible with other fluids (ie LR). In sepsis, Zosyn should always be loaded. Maintenance doses are always preferred to be over extended infusions but may need to be on a patient-by-patient basis based on IV line access.

(Katie Andonian, PharmD)

- Your choice of Metronidazole over Clinda does not take into significance of blockade of production of potent GAS toxins that are often associated with worse outcomes. Your observation?

We include within the toolkit additional call-outs for use of clindamycin for GAS toxin production as well. Certainly agree it can play a very important role, but also important to recognize that there will need to be institution and/or patient specific assessment for risk benefits of clindamycin (may not provide as broad anaerobic coverage) vs. metronidazole (as you said, anaerobic coverage, but would require 2nd agent if concerned for GAS).

(Lauren Puckett, PharmD)

Thank you for bringing this up. If GAS or GBS toxin production is in the picture, patients are likely presenting with sepsis with or without EOI. At that point, clindamycin or linezolid can be considered for toxin suppression. In chorioamnionitis without severe features, toxin suppression is not indicated at that time, although it may evolve. And if patient decompensates and GAS or GBS TSS is in the work-up, clindamycin during hemodynamic instability (or linezolid) could be indicated - but not for anaerobic coverage necessarily. As for anaerobic coverage for pelvic anaerobes, metronidazole has been shown to be superior to clindamycin. Examples include rising resistance to Bacteroides spp. Most institutions do not do in-house sensitivity testing for the majority of pelvic anaerobes additionally. Thank you for bringing this up.

(Katie Andonian, PharmD)

- What are your thoughts on cefoxitin for uncomplicated chorioamnionitis?

I think that cefoxitin, per your antibiogram and formulary, is another wonderful cephalosporin option for chorioamnionitis/endometritis.

(Katie Andonian, PharmD)

- Where can we find the patient educational information including QR codes on the website?

<https://www.cmqcc.org/resource/improving-diagnosis-and-treatment-obstetric-sepsis-v20-toolkit-2025>
All included in the Toolkit!

(Christa Walczak, RN)

- I keep hearing that lactate will be changing to >4mmol/L. Is this true?

There was data suggesting that if it is drawn during labor, that 4mmol/L would be the cutoff. We are not recommending that in the active phase or during pushing that you draw it.

(Dr. Elliott Main)

- What would be the best way for RNs to document their bedside evaluation after screening for OB sepsis? Is there a template?

There are really good ways to do a systemwide smartphrase or whatever your EHR system has a standard template for. We definitely have some of those at the institutions I've been at, where we have a standard one that then the nurses are educated to document it. And that actually should be

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considered as we talk about one of the time zeros, once that bedside evaluation happens which is why it's really important to have a documentation that's consistent for the physicians who may doing the bedside evaluation and for the nursing team. So definitely a good idea to have just a template that works for your institution.

(Dr. Courtney Martin)

- Now that acetaminophen and ibuprofen are typically scheduled post-delivery, has that made the identification of postpartum sepsis more difficult?

I think the data is pretty clear that acetaminophen doesn't really hide sepsis. If you're really sick, you're going to break through and the other vital signs cover that as well.

(Dr. Elliott Main)

I would just weigh in one last thing on that is that remember that many postpartum and many patients with sepsis don't have a fever, so a wellness bias or a bias that some of us might have is "oh they don't have a fever" but not consider that Tylenol. I think it's really important to take all the things at face value and always be thinking could this be sepsis.

(Dr. Courtney Martin)

- Care to comment on Procalcitonin?

People may wonder why we haven't discussed procalcitonin as a marker of sepsis, and when we've talked to our infectious disease specialists, most of the data on procalcitonin is sepsis due to pneumonia. There is clearly a relationship between the release of procalcitonin and infection in the lung. When you look at data from chorioamnionitis or other pregnancy infections, there's much less, if any, association with procalcitonin, so we haven't really included that. Now there might be an argument in the setting of urosepsis, but we would have to really investigate that further.

(Dr. Elliott Main)

- For the fluids with the 30mL/kg, what if the patient has received a bolus during labor for epidural or fetal heart rate. Is there a timeframe to consider for other boluses when considering the 30mL/kg?

Many will include the volume in the last 6 hours and reduce that from the total volume

(Dr. Courtney Martin)

- In the setting of nonviable PPRM, when should you perform D&E if managing it conservatively?

Nonviable PPRM, if you have signs of infection, I think that's the end of the pregnancy. Pretty simply, you shouldn't wait till the mother is septic. You shouldn't wait till she has severe infection. If you have elevated white, fever, and it's nonviable, that's really important for the health of the mother to move on because that pregnancy's not going to last and all you're going to end up with is a very sick mother.

(Dr. Elliott Main)

- Is the lactate not being drawn and/or using the 2 cut off in only active labor or during latent labor also?

The criteria for CMS SEP-1 indicates that lactate is difficult to interpret during labor and does not recommend it. We have felt that latent labor does not create much anerobic metabolism and therefore lactate production should not be a barrier for drawing a lactate if you feel that you have a very ill patient.

(Dr. Elliott Main)