Inpatient Quality Reporting Program

Support Contractor

IQR: SEP-1 Early Management Bundle
Severe Sepsis/Septic Shock Part III

Questions and Answers

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Question 1: Can we contact the speaker once this is over for advice on starting our own program?

Answer 1: Yes, we'd be excited to talk to you about other hospitals, our experience, and what we've learned over the years. We'll probably have you contact CMS, and they can forward your information to us.

Question 2: Could we have a copy of this tip sheet?

Answer 2: We would be more than happy to share those tools. I can send those to you and have them posted with the presentation on the *Quality Reporting Center* website.

Question 3: Were contracts for the ED Providers considered since the 3 Hour Bundle starts in the ED?

Answer 3: I work in the ICU, so unfortunately, I can't comment about the ED physician's contracts. I'm just not that familiar with all the details of their contracts, so I can't give you any insight there.

Question 4: What representatives are on your System Sepsis Team?

Answer 4: The System Sepsis Team is comprised of nurses, physicians, pharmacy members, abstraction coders, and educators. It's really a well-rounded team from all the hospitals, both ED and inpatient.

Question 5: If the Sepsis BPA is suppressed because the patient is being treated for sepsis, is there an alert if the patient declines/progresses to severe sepsis or septic shock?

Answer 5: The alert is suppressed if the patient is being treated for sepsis, severe sepsis, or septic shock using our Order Set. We do not have an alert if sepsis progresses, but rather we focus on clinician education to identify the progression. The Order Set is built so the physician can use it multiple times if the patient progresses, to place orders that are compliant with the SEP-1 core measure.

Question 6 Dr. Walter, what is the false positive rate with the ED sepsis screen?

Answer 6: We haven't calculated formal sensitivity and specificity values for our sepsis screens. Our idea with the screen is that it would be very sensitive, overly sensitive, and not very specific. The idea behind the screen is that it would heighten awareness and prompt the nurse or the physician to then examine the patient to provide specificity as to whether the patient has severe sepsis or septic shock. So, the screening is very sensitive. That's why we've worked on suppressing the BPA, because it does fire until it's suppressed. But, it's not very specific, and that's by design; so that we can then have further clinicians or providers determine that specificity.

Question 7: Have you integrated a trigger into your EHR so that the provider knows when to complete the 6-hour Focused exam? How do they know when to complete this in the correct timeframe?

Answer 7: We have not currently done that. There isn't really a great way to remind physicians, other than potentially adding an instruction to the IV bolus order for the nurse to notify the physician to go ahead and complete that note. It's still a very manual process, and that's simply because we can't identify the presentation time with the way that the measure is written currently. When we did our compliance metrics, it was a little bit easier in that ED presentation

time was *Time Zero*. *Time Zero*, as you now know, is dependent on a few different parameters. And so that *Time Zero* has been a real challenge for us, and we're currently brainstorming as to how to figure out how to note, on the fly, *Time Zero*, so that we could do that exact thing. If anybody has any clever ideas or a way to abstract that from the electronic health record and can share that with us, that would really be helpful, because we sat down and had one session as to how to figure out that problem, and haven't quite got there with a good solution yet. But, we're working on it, as I'm sure everybody else is.

Question 8: Sepsis Patient Order does not seem to specify between Sepsis vs. Severe Sepsis. How do you verify severe sepsis as opposed to mild sepsis patient?

Answer 8: So, we do not differentiate between the different levels of sepsis, severe sepsis, and septic shock. The movement from mild sepsis to severe sepsis or vice versa is a fluid progression when a patient is in the hospital. Sepsis can progress and become more severe or get better. The term Sepsis Patient simply identifies those patients being treated for sepsis, not merely to suppress the alert but also to drive the banner and the track board so that the in-charge nurse and clinicians can see from the track, or without entering the patient's chart, if that patient is a septic patient. We've aimed, with most of these alerts and banners, to be overly sensitive. We don't want to miss people that may progress. We want to have a very high level of awareness. The philosophy behind most of the development of the BPAs, as well the orders, is that they are overly sensitive with specificity provided by clinician or nurse interview. We don't try to distinguish. We have noticed that a lot of patients present with sepsis but over the next few hours may progress to severe sepsis, so we want to know about those patients, even if they're just simple sepsis as was referred to in the question.

Question 9: We have issues with EPIC "kicking out" our serial lactic acids as duplicates. Is this something we have altered or have you had similar issues? Also, does lab collect your labs or are labs clinician-collected?

Answer 9: We have a specific frequency for our lactic acids that times them three hours apart. Once the first test is done, the second is done in three hours, and the third is completed three hours later, or six hours after the initial one. It's identified in our EHR as a duplicate order. It doesn't kick them out or reject them.

Who collects then? There are differences between hospitals as far as who collects the labs. At DePaul, I think, the nurses collect their own entire lab

versus some of other hospitals where the nurses do not collect labs except in the ER, so, it varies.

Question 10: Is the ED Tracking Board part of EPIC

Answer 10: Yes.

Question 11: How do you educate the physicians?

Answer 11: We have used multiple educational platforms to educate the physicians. We've distributed tip sheets, developed tri-folds and pocket cards, and have presented data at different business meetings to different specialty groups to help them understand the metrics. Additionally, we've had grand rounds where we sat down and discussed how we wanted to educate the physicians with the understanding that we are addressing multiple generations of physicians. Some of the physicians are attuned to written materials, some carry stuff in their pockets, some use iPods, while others use their mobile phones. As a result, we've tried to develop numerous platforms because every physician learns differently. By utilizing many broad platforms, we are trying to reach each physician.

Question 12: Is Core Measure abstraction done in real time or retrospectively?

Answer 12: Currently the core measure abstraction is done retrospectively. We've talked about trying to incorporate some concurrent elements in the future, but at this time we're just looking at charts after they're closed.

Question 13: Do you have Clinical Documentation Improvement Specialists in your hospital? They, too, work with providers to document correctly to capture the most accurate coding and would be a great additional resource.

Answer 13: Yes we do have those Clinical Documentation Specialists at our hospitals, as well.

Question 14: Does your BPA allow you to diagnose sepsis before the patient develops severe sepsis or septic shock? Do you track these ratios, and do you have data as to whether you are diagnosing more sepsis in your system?

Answer 14: The BPA does not diagnose severe sepsis or septic shock. The triggers for the BPA are: does the patient have evidence of infection and are there series criteria that are met on the vital signs?

We use the electronic health record to screen the vital signs but we do not look for organ dysfunction to diagnose severe sepsis. With that caveat, we

have tried to develop some inpatient protocols that do electronically try to capture organ dysfunction. We are in the middle of those trials, so that research is on its way and we may be able to give you an update next time we talk.

Question 15: Does your organization abstract the full or sampled population? If sampled, is there an alternative way to monitor the non-core measure patients and compliance with care?

Answer 15: We actually abstract for the sampled population currently. We do have some reports that we have developed that capture all patients that we're updating so that we can ensure that they are meeting all of the requirements, but currently our focus has been on those patients that we're abstracting.

Question 16: Does SSM include any monitoring that identifies the *Time Zero* for Severe Sepsis/Septic Shock Presentation time?

Answer 16: That's a difficult parameter to measure right now because it relies on a number of documentation events to occur. The short answer is no, we don't have an automated way to define *Time Zero* for the core measure requirements.

Question 17: How do you apply these metrics to inpatient identification and treatment?

Answer 17: The majority of our patients come to the ED. That's not to say we're not focusing on inpatient at all, but our focus thus far has been pretty heavily concentrated in our ED departments since that's about where 90 percent of our patients come from who present with severe sepsis or septic shock.

The inpatient workflow is currently under development now at SSM. The nurses utilize the same screening on admission as they utilize in the ED triage area. There's no alert currently. we did pilot an inpatient alert a few years ago with limited success; however, with the core measure implementation and increased interest from inpatient clinicians, we may try this workflow again.

Question 18: Is SSM Health DePaul Hospital an academic medical center?

Answer 18: We are not an academic medical center. We are a community hospital, part of the Saint Louis region. One of our hospitals, however, is an academic medical center, SSM Saint Louis University Hospital, which was recently purchased. SSM Health DePaul itself is not an academic medical center.

Question 19: How long has your system been on EPIC?

Answer 19: Our first hospital went live in 2008 and each year we have added additional hospitals. Our last hospital will go live on Epic next year at which time all of our hospitals will be live on EPIC.

Question 20: How do you ensure timely MD/NPA documentation following fluid resuscitation and vasopressor therapy when a patient leaves the ED and is admitted to Critical Care?

Answer 20: If the patient has code sepsis activation, the ICU team, including the ICU physicians, will know about that patient before they arrive in the ICU. There is a verbal sign-out from the ED physician to the intensivist, and within that sign-out we talk about bundle compliance and completion of specific time-sensitive measures so that care can be continued in the ICU.

Question 21: If the ProCESS, ARISE, and ProMISe trials showed no difference in outcomes when compared to non-guideline driven care, why are you continuing push guideline-driven care?

Answer 21: The trials did not show a difference in mortality but there was evidence within each individual trial of benefit for various components of the SEP-1 measures. As Dr. Walter mentioned, the SEP-1 measure is consistent with the Surviving Sepsis Campaign international guidelines for severe sepsis and septic shock.

From a CMS policy aim, our intention is to improve sepsis care nationally, and we believe we can do that by encouraging all providers to try to provide the most up-to-date evidence. We believe that the measure supports the most up-to-date evidence in caring for septic patients.

Question 22: 6-hour Focused Exam template on slide # 28: does this need to be this extensive to pass CMS guidelines?

Answer 22: The Focused Exam is a physical assessment of the patient's volume status and perfusion performed by a physician, APN, or PA in the time period between the crystalloid fluid administration time and six hours following presentation of septic shock. It includes a vital signs review, cardiopulmonary exam, capillary refill evaluation, peripheral pulse evaluation and skin examination. Each element of the Focused Exam must be completed consistent with the specifications for each respective data element in the manual. Documentation supporting performance of the elements of the Focused Exam can be contained all within a single note, in separate notes, or in notes from different providers. How performance of the data elements for the Focused Exam are captured in the medical record may vary depending on the medical record being used and its capabilities. Regardless, the requirements of each of the

data elements as outlined in the manual must be met to pass the Focused Exam part of the measure.

Question 23: A number of our patients are quadriplegic and have "normal" BPs that sit in the 90s systolic range. As such, if they present in septic shock with persistent hypotension, we don't necessarily always give them a vasopressor. Will there possibly be exclusions to giving a vasopressor in the future so that these patients don't fail the measure?

Answer 23: If there is documentation in the medical record that the patient's "normal" systolic blood pressure (SBP) is less than 90 mmHg and the recorded SBP readings are less than 90, this can be considered a chronic condition. Because the patient has a chronic condition, their SBP normally being less than 90 mmHg, this should not be included as evidence of organ dysfunction as indicated in the *Severe Sepsis Present* data element. With regards to vasopressor administration, for the purpose of the measure, a vasopressor would only be given if the patient had persistent hypotension. This means there would need to be two consecutive SBP readings less than 90 OR two consecutive mean arterial pressure records of less than 65 in the hour following administration of 30 ml/kg of crystalloid fluids. Vasopressors would not be given for someone whose SBP is in the 90s.

Question 24: A patient meets criteria for severe sepsis, but not septic shock. About 12 hours after severe sepsis presentation, the patient's physician dictates on the H&P that the patient has sepsis with shock. As this is over six hours past the severe sepsis presentation, will the answer for "Was septic shock present?" be "No" since the shock documentation is over 6 hours passed the severe sepsis presentation?

Answer 24: Yes.

Question 25: This is an abstraction question. Does the 1 hour after crystalloid fluid administration (for determining hypoperfusion) mean the time when the required volume is met or when the first dose is completed when given in a series of infusions? Is there a timeframe in which the required dose must be given?

Answer 25: The one hour starts after 30 ml/kg have been infused. There is not a specific time frame in which the 30 ml/kg must be infused, because this will vary depending on the total volume and infusion rate. For crystalloid fluids to count toward the total volume of 30 ml/kg, they must be infused at a rate greater than 125 ml/hour (equivalent to 1000 ml over 8 hours), as specified in the *Crystalloid Fluid Administration* data element.

Question 26: An exclusion term for severe sepsis is "Sepsis." If a provider documents sepsis with organ failure or dysfunction, would this be acceptable as provider documentation of severe sepsis present?

Answer 26: If this is all that is documented, it is not acceptable as "severe sepsis." As noted in the question, "sepsis" cannot be used in place of severe sepsis. Sepsis can be used as a suspected infection because it is caused by an infection. Sepsis can be used as one of the three clinical criteria (suspected infection, two or more SIRS criteria, and sign of organ dysfunction) to determine severe sepsis. Physician documentation of organ failure or dysfunction is not acceptable. What is acceptable for organ dysfunction is specifically defined in the *Severe Sepsis Present* data element by measurable parameters. If there is documentation of "sepsis," this can fulfill the suspected infection criteria. There then must be two or more SIRS criteria and one of the signs of organ dysfunction as identified in the *Severe Sepsis Present* Notes for Abstraction.

Question 27: Are all of your septic shock patients admitted to the ICU?

Answer 27: Septic shock patients on vasopressors are admitted to the ICU. Normotensive septic shock patients with a lactic acid >4 may or may not be admitted to the ICU.

Question 28: Are differential diagnoses of pneumonia or UTI accepted for suspected infection?

Answer 28: Yes.

Question 29: Are there BPAs and orders for inpatients who screen positive for sepsis after admit (not in ED)?

Answer 29: There is no BPA, but we do have Order Sets for patients who are admitted with sepsis and/or develop sepsis on the inpatient side. The nurse would follow our Rapid Response workflow and contact the physician for orders.

Question 30: Aside from letters, are you providing feedback to physicians in any other way?

Answer 30: Each of our facilities have multidisciplinary sepsis teams. These teams meet once a month and share feedback to the providers. Sepsis data/compliance rates are also shared with the clinicians.

Question 31: Please confirm that the crystalloid fluids provided the day before *Septic Shock Present* does not fit the criteria for *Prior To*. Where in the manual are instructions regarding this scenario?

Answer 31: The manual does not specify a time frame prior to septic shock presentation for crystalloid fluid administration. This is because the time frame prior to presentation can vary depending on the total volume being administered, the rate of infusion, and the patient response. A very large volume given at a slow rate could take more than 24 hours to totally infuse. For any fluids, there must be an order and there are four bullet points in the *Crystalloid Fluid Administration* Notes for Abstraction that are key in determining what fluids prior to presentation are acceptable. The last bullet point indicates the order must include a time which the fluids are to be given. If there is not an infusion time period or infusion rate, the fluids cannot be included. The next to last bullet point indicates the fluids must be administered at a rate greater than "usual" or "to keep vein open." This is defined as greater than 1000 ml over 8 hours, which is equivalent to 125 ml/hour. Fluids must be given at a rate greater than 125 ml/hour to be included. The third bullet point indicates not to include fluids given to flush lines of give medications. The second bullet point indicates to only include fluids given for the presence of severe sepsis with hypotension or lactate ≥4. So if fluids were ordered and given but the patient did not have hypotension or a lactate ≥4 at the time the order was written, then do not include them.

Question 32: Can an X-ray be used as a source for infection?

Answer 32: The X-ray itself cannot. The X-ray interpretation can be used as a source of infection, depending on what is documented and assuming the interpretation is from a physician (radiologists are physicians). The documentation must include the word "infection" or a condition or disease that is an infection. For example, if the X-ray interpretation stated, "infiltrates in right lower lobe possibly representing pneumonia," this is acceptable because pneumonia is included. If the X-ray interpretation stated, "infiltrates in right lower lobe," this is not acceptable because there is no mention of a condition or disease that is an infection.

Question 33: Can symptoms of infection (i.e., cloudy urine) be used as “potential source of infection?”

Answer 33: No.

Question 34: Can the specific changes in the 5.0b version of the Manual concerning SEP-1 be summarized and printed?

Answer 34: These were summarized and presented in a webinar on October 26, 2015. Slides from that webinar are posted on the following location: http://www.qualityreportingcenter.com/inpatient/iqr/events/.

Release notes for version 5.0b are posted on *QualityNet* and summarize all changes to the manual. https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228774725171

Question 35: Can you give us an idea how SSM's performance with the bundle has changed over time?

Answer 35: Over time, the compliance with the 3 and 6 hour surviving sepsis campaign treatment bundles has improved with some measures (initial lactic acid, blood cultures, and antibiotics) reaching 100% on certain months. Important process improvements that have lead to these improvements, including the development of our hospital's sepsis workgroup and implementation of the Code Sepsis Team.

Question 36: CMS hasn't made it very clear about nurses documenting the presence of an actual or suspected infection. I read the instructions as a nurse can 'reference' an infection, actual or suspected, such as pneumonia, that a patient had diagnosed the previous day in their primary MD's office. I do not read this instruction as a nurse can say "I suspect an infection" and then check a "Yes" in the box on our severe sepsis screening. Also, a "Yes" in the box asking if an infection or suspected infection is present doesn't clarify a source, nor does it clarify if fungal, viral, or bacterial. This discrepancy can cause a huge difference in *Time Zero*. How should this be interpreted?

Answer 36: The *Severe Sepsis Present* Notes for Abstraction regarding nursing documentation of infection state, "Nursing documentation referencing an infection, suspected infection, or current treatment of an infection is acceptable." They do not specify nor imply this should be interpreted as in the question. If the nurse has indicated in a screening tool for severe sepsis that an infection is suspected, this will count. Keep in mind, the data element is not looking for diagnosis of an infection, which can only be made by a physician, APN, or PA. The data element is looking for documentation that an infection is suspected.

Question 37: Do diagnoses of pancreatitis, colitis, gastroenteritis, appendicitis, cystitis, etc. qualify as infections?

Answer 37: Please note that just because a word ends in "itis" does not mean it is an infection. The *Severe Sepsis Present* Inclusion Guidelines for Abstraction contain a list of infections commonly associated with severe sepsis. There is a statement noting this is not an all-inclusive list. There is an additional statement indicting if a documented condition is not on the list and is not

identified as an infection, you may consult other resources to identify whether or not the condition is an infection. Based on medical resources we have consulted: pancreatitis (No), colitis (Yes), appendicitis (Yes), cystitis (Yes).

Question 38: Do you do venous or arterial lactate levels at your facilities or does it vary depending on what is available at the site? Do you consistently do venous or arterial on each patient?

Answer 38: Most of our hospitals are using venous lactate levels, but a few have point of care lactate testing available in their Emergency Departments.

Question 39: Do you have a current way of tracking care on these patients as they come through ED or during hospitalization to insure bundle compliance.

Answer 39: We have a sepsis bundle documentation flowsheet in Epic that contains a checklist for the 3 hour and 6 hour bundles. We are currently working to update these flowsheets with the new CMS SEP-1 requirements. Once we do that, we will likely create reports that will monitor bundle compliance that is documented on these flowsheets.

Question 40: Do you use telemedicine in your hospital system? Do you collaborate with their services to support your sepsis plan/recommendations, such as specific narration that indicates the review is for a severe sepsis or septic shock patient?

Answer 40: We do utilize some telemedicine within our hospital system. We do not collaborate with telemedicine to support our sepsis plan and recommendations at this time but might possibly consider this in the future.

Question 41: Does a provider have to state a rate to give Crystalloid fluids or can they say bolus or run wide open?

Answer 41: At this point, bolus and wide open are not acceptable, because they do not specify a time frame over which to infuse the fluids. We recognize this is a common way to order crystalloid fluids in this situation and are looking into this for a future version of the manual.

Question 42: Do components of your ED Trackboard print as part of the legal record or can you clarify the question that the Trackboard is part of Epic?

Answer 42: The ED Trackboard is essentially a “home screen” for ED clinicians. The banner for sepsis patients displays in a report that is visible from both the Trackboard and within the chart. The elements of the ED Trackboard are

available within the legal medical record, but they are not displayed the same when printed.

Question 43: Does the RN or physician have to log into EPIC to get the alert or will the alert notify the clinician without waiting for them to log into the EMR?

Answer 43: The RN and physician have to be logged into Epic to receive the alert. The RN receives a pop-up alert when he/she files documentation in the chart that completes the criteria for the alert (vs. infection screening) and is instructed to notify the physician and place orders at that time.

Question 44: Does your code sepsis team get alerted for shock patients only or for all patients identified with sepsis.

Answer 44: The Code Sepsis Team gets activated for hypotension post IV fluid bolus.

Question 45: For abstraction purposes, can any of the following be considered a documented infection: positive flu or positive strep culture or use of Pneumonia/UTI/Colitis/etc. order sets?

Answer 45: Culture results are not acceptable as they do not indicate an infection is suspected. Use of condition-specific order sets can be used if they are specifically designed to treat an infection, contain documentation indicating they are actually being used for the specified condition, and are signed by a physician, APN, or PA.

Question 46: If infection has been documented every day leading up to time of presentation for Severe Sepsis and continues to be documented in the following days but there is not a note in the 6 hour window of the organ dysfunction and two SIRS criteria, can we use the fact the patient has a documented infection in the chart as our "infection documented?"

Answer 46: As the specifications for the severe sepsis clinical criteria are currently written, all three must be met within six hours of each other. We recognize that documentation, as illustrated in this question, occurs and are exploring ways to address this for a future version of the manual.

Question 47: For determining *Time Zero*, do you use the time that the labs were drawn or when you receive the results? What if the time the test is completed is not on the chart that will be printed for auditors but is in the EHR, e.g., lactic acid results, WBC, Creatinine?

Answer 47: For all labs results that will contribute to the clinical criteria for identifying the presence of severe sepsis, you need to use the results time. All

information upon which you base responding to a data element for any measure must be provided to auditors for validation. We recognize the export functions of some EHRs do not allow exporting of information the same way an abstractor will necessarily see it in the EHR. If this is the case, it is important you perform a screen capture to send for any information that is missing from the EHR export.

Question 48: For the 30ml/kg crystalloid fluid element, if a physician orders 2000 ml Normal Saline IV bolus with no duration or rate, and from the nursing documentation there is a time the fluids started and a time the fluids were completed, are we able to use this volume since the patient received the fluid and we can determine the time over which the fluids were administered even though the physician's order does not give the rate or duration?

Answer 48: No, the last bullet point in the *Crystalloid Fluid Administration* Notes for Abstraction indicate if a fluid volume is ordered but there is no order for the time over which the IV fluids are to be given, choose Value "2." As such, the order must include an infusion duration or infusion rate to be acceptable.

Question 49: For the documentation of Sepsis assessments, are Residents considered Physicians?

Answer 49: Yes, please refer to the Introduction to the Data Dictionary, Physician/Advanced Practice Nurse/ Physician Assistant Documentation section.

Question 50: Have other hospitals used a single power plan with multiple phases for sepsis, severe sepsis, and septic shock, so basically one power plan in the EHR?

Answer 50: I'm not sure what other hospitals have used, but our approach for addressing sepsis has been outlined within our presentation.

Question 51: Regarding slides 27/28 about Focused exam, it is very extensive. Does it need to be this extensive for CMS purposes or can it be simplified? Please advise.

Answer 51: The Focused Exam is a physical assessment of the patient's volume status and perfusion performed by a physician, APN, or PA in the time period between the crystalloid fluid administration time and six hours following presentation of septic shock. It includes a vital signs review, cardiopulmonary exam, capillary refill evaluation, peripheral pulse evaluation, and skin examination. Each element of the Focused Exam must be completed consistent with the specifications for each respective data element in the manual. Documentation supporting performance of the elements of the Focused Exam can be

contained all within a single note, in separate notes, or in notes from different providers. How performance of the data elements for the Focused Exam are captured in the medical record may vary depending on the medical record being used and its capabilities. Regardless, the requirements of each of the data elements as outlined in the manual must be met to pass the Focused Exam part of the measure.

Question 52: Is there currently coordination between any EMS agency and ED/ICU at SSM to produce a better outcome for our patients?

Answer 52: There is not. We've seen successful programs that other cities/hospitals have implemented that coordinate with EMS, but SSM has not implemented anything similar at this time. Perhaps we will explore this potential more in the future.

Question 53: How are you overcoming resistance to giving 30 ml/kg?

Answer 53: Educating physicians regarding the current Surviving Sepsis campaign recommendations which are 30 ml/kg bolus. Once they understand that this is the recommendation for best practice, there is a better physician buy-in to administer the IV fluid bolus.

Question 54: How did you get that infection screen into EPIC? I don't see it in our EPIC as a choice.

Answer 54: It was custom built as a documentation flowsheet row; it's not Epic-released.

Question 55: How did you get your coders onboard with the Sep-1 criteria to code sepsis vs. septic shock and vice versa?

Answer 55: Early on, the core measure and quality teams met with the lead coders. We assisted in the development of educational documents for the coders. The leaders pulled the coders together across the SSM System to provide this education. It continues to be an ongoing process with open communication and re-education when necessary.

Question 56: How do we abstract the Persistent Hypotension data element when we have only one BP documented in the hour post crystalloid infusion?

Answer 56: If the single SBP documented in the hour after crystalloid fluid infusion is greater than or equal to 90 mmHg, select "2 (No)," because hypotension is clearly not present. If the single SBP documented in the hour after crystalloid fluid infusion is less than 90 mmHg, select "3 (No) or UTD." While there is

one reading indicating hypotension is present, two are required to determine hypotension, so you are unable to determine.

Question 57: How do you deal with an MD who would not document "Severe Sepsis" even if patient meets all criteria because in her eyes the patient does not look like he has severe sepsis, only Sepsis?

Answer 57: After group education, we rely on individual physician education in the form of an education letter and coaching by the department chairman.

Question 58: How do you identify persistent hypotension electronically?

Answer 58: We manually review the documented vital signs in Epic on the Vital Signs Report during the one hour period after crystalloids are completed.

Question 59: How do you order for IV fluid to avoid bolus or wide open to suffice CMS rules?

Answer 59: Our orders allow the physician to determine the appropriate volume to be infused and then calculate the rate by which infusion should take place.

Question 60: How do you pull out those clinical criteria associated with a chronic condition using the EMR?

Answer 60: Currently we review the patient history section in Epic and then search the record for organ dysfunction criteria. For example, if the patient has a history of ESRD, we would not use the creatinine result for organ dysfunction.

Question 61: How many parameters does your BPA need to meet before it fires?

Answer 61: The BPA fires when a patient screens positive for signs or symptoms of infection and has two or more abnormal vital signs (HR >90, RR >20, SBP <90, MAP <65, Temp >38 or <36).

Question 62: I am still not clear about identification of severe sepsis/septic shock. If the MD says sepsis, but does not mention severe sepsis or septic shock but the patient qualifies for one or both, will they be considered “Yes” or “No?”

Answer 62: If the physician documents "sepsis," this documentation alone is not sufficient to select "Yes" for either *Severe Sepsis Present* or *Septic Shock Present*. If the clinical criteria are met for severe sepsis and/or septic shock, you will select "Yes" to the respective data element for which the criteria are met, regardless of physician documentation.

Question 63: If timing for crystalloid fluid administrations stops 3 hours after the onset of septic shock, when does it begin?

Answer 63: For the purposes of the measure, crystalloid fluids must be started within 3 hours following the presentation of septic shock to pass the measure. Crystalloid fluids can be started before, at the time of, or after presentation of septic shock.

Question 64: I may have misunderstood, but it sounded as if "SOB, dysuria, altered mental status" meet the infection part of the three criteria to document severe sepsis. Is that correct?

Answer 64: I will refer you to the *Severe Sepsis Present* data element, which includes a list of infections most commonly associated with severe sepsis, although this is not an all-inclusive list. Additionally, there is a statement indicting if a documented condition is not on the list and is not identified as an infection, you may consult other resources to identify whether or not the condition is an infection. Referring to medical resources does not indicate these are considered infections.

Question 65: I notice that you repeat the Lactic acid if it is >2. However, the CMS abstraction guidelines ask if a repeat lactate level was redrawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter. There is no reference to a lactate >2. Have you adjusted your ED nursing order set to repeat the lactate regardless of result if they meet criteria for severe sepsis?

Answer 65: Our lactate orders are paneled together to always draw three regardless of what the result is. This is similar to what we have previously set up for Troponins in AMI patients.

Question 66: I see the alert for sepsis fires with a suspected infection. What about the clinical indicators, two sirs and one organ failure? How do you capture these indicators to initiate the SEP pathway?

Answer 66: The alert does not fire when only a suspected infection is documented. I refer you to the *Severe Sepsis Present* data element, which includes a list of infections most commonly associated with severe sepsis, although this is not an all-inclusive list. Additionally, there is a statement indicting if a documented condition is not on the list and is not identified as an infection, you may consult other resources to identify whether or not the condition is an infection. Referring to medical resources does not indicate these are considered infections.

Question 67: I wanted to ask if there have been any questions about Automated ICU physicians completing the Focused Exam required within 6 hours of presentation of septic shock if hypotension persists within the first hour post-initial fluid resuscitation OR initial lactate >4. They assess the patient via television with the assistance of the ICU nurse with the AICU doctor, documenting his assessment and findings. Would this be acceptable for the Focused exam?

Answer 67: Yes, if there is documentation reflecting the assessments for the Focused Exam was performed by the physician, this is acceptable. There is nothing in the data element that prohibits nurses assisting physicians with performing the assessments of the Focused Exam.

Question 68: If a patient develops Acute Respiratory Failure on admission and is intubated in the ED, and then later in stay on day 3 develops SIRS criteria, can the acute respiratory failure that was developed on admission be used as a sign of Organ failure on Day 3?

Answer 68: The clinical criteria for *Severe Sepsis Present* must all be met within six hours of each other.

Question 69: If a patient is admitted with an infection (PN, UTI) and later has severe sepsis and the MD documents the presence of infection on admission and daily progress notes, does the requirement for documentation of an infection still need to be within 6 hours of other severe sepsis criteria?

Answer 69: As the specifications for the severe sepsis clinical criteria are currently written, all three must be met within six hours of each other. We recognize that documentation as illustrated in this question occurs and are exploring ways to address this for a future version of the manual.

Question 70: If a patient is in the OR during the 6 hour window, how do you abstract, i.e., no lactic acid going to be repeated?

Answer 70: If a repeat lactate is indicated based on the results of the initial lactate, then a repeat must be drawn/collected within 6 hours of severe sepsis presentation.

Question 71: If a physician orders two antibiotics, one a monotherapy and the other a dual therapy, and the dual therapy is hung first and meets the 3 hour time frame but the broad-spectrum monotherapy is hung second and falls out of the 3 hour window, does the patient fall out of the measure for the ABX not being given in time?

Answer 71: If these are the only antibiotics ordered, and the one combination therapy antibiotic is the only one given or started within the time period of 24 hours prior to presentation through 3 hours following presentation, the case will meet the antibiotic timing requirement of receiving an antibiotic within 3 hours of severe sepsis presentation. This is because an antibiotic was given or started in the specified time period. It will however, not meet the requirement for *Broad Spectrum or Other Antibiotic Administration Selection,* assuming this was the only antibiotic given or started in the 24 hours prior to presentation through 3 hours following presentation. To meet this requirement, if the ONLY antibiotics given or started were within the 3 hours following severe sepsis presentation, the antibiotic(s) given or started must be from Table 5.0 (Antibiotic Monotherapy, Sepsis) or the appropriate combination from Table 5.1 (Antibiotic Generic/Trade Name Crosswalk, Sepsis).

Question 72: If blood cultures are taken after antibiotic, how is this abstracted? One place says it qualifies as a "1" (Yes) and another spot says it is a "2" (No).

Answer 72: It is unclear what this question is referencing. The Blood Culture Collection data elements do not make reference to timing of the blood culture being after antibiotic administration.

Question 73: If the doctor documents "treated with additional fluids X2 liters" without writing an order for the fluids, can we include those fluids? If a nurse documents in a note "2 liters given at 1400 and completed at 1600" or "at 1400 2 liters given over 2 hours" but there aren't any orders for the fluids, can we abstract those times?

Answer 73: There must be an order or series of orders for the crystalloid fluids. The volume in the order(s) must be equivalent to 30 ml/kg, and there must be an infusion duration or rate in the order. If an order for the fluids meeting these requirements is not present, you cannot select "1 (Yes)" for *Crystalloid Fluid Administration*.

Question 74: If the patient does not have hypotension after the administration of the recommended fluids, is the reassessment still required?

Answer 74: If the patient does not exhibit persistent hypotension, the algorithm evaluates the Initial Lactate Level Result. If this is ≥4 mmol/L, the reassessment must be performed, because this would indicate the patient has septic shock. The septic shock didn't manifest by persistent hypotension. If the Initial Lactate Level Result is <4 mmol/L, the reassessment is not required.

Question 75: If there is no "reported" lab time found, can I use the nurse documentation of a lab value?

Answer 75: Yes.

Question 76: If you do not have two consecutive low BPs but the provider documents septic shock, would that still qualify as septic shock?

Answer 76: Yes.

Question 77: Infection screening does not seem to have a place to document "location" of possible infection, which is a requirement. How do you document possible location of infection in triage?

Answer 77: Location is not a requirement. We don't have the RN document location of infection because that would be considered diagnosing and outside of the scope of the RN.

Question 78: Is the ED timeline part of your facility's printed chart within EPIC?

Answer 78: The information from the ED timeline is found within our facility's printed chart within Epic.

Question 79: Is the physician education letter and feedback request for the outliers completed through your peer review process or is this education currently provided separately?

Answer 79: The education letter is provided through the peer review process. The outliers are provided by the quality/clinical outcomes departments across the System. The outliers are typically provided on a weekly basis, soon after abstraction has been completed. This outlier list is sent to all leaders, clinical and administrative at each facility. This list is shared with the physicians as well as other bedside providers. These outliers are also further discussed at Patient Safety and Quality monthly meetings.

Question 80: Is there a screening process for ICU and medical floors?

Answer 80: Yes, all inpatients are screened on admission in the same way as the ED screens patients in triage.

Question 81: It doesn't seem very clear when the fluid resuscitation is supposed to take place. When are you applying that metric to the patient, after the diagnosis of Severe Sepsis is made or when the SB/P is <90?

Answer 81: When to give the crystalloid fluids is a clinical decision based upon clinical findings. The SEP-1 measure identifies time frames within which the fluids must to be given to measure appropriateness of care, as defined in clinical guidelines, in order to meet the measure. This time frame is defined as within 3 hours of septic shock presentation. When to actually start the fluids will depend on how the patient presents. If the patient meets criteria for severe sepsis and also has hypotension, 30 ml/kg of crystalloid fluids should be started when the hypotension is identified. If the patient's blood pressure does not respond to the crystalloid fluids, they have septic shock. In this case, the fluids are given before presentation of septic shock, because the lack of response the fluids is what defines septic shock. If the patient meets criteria for severe sepsis and has a lactate ≥4 mmol/L, they have septic shock. The septic shock is defined by the lactate level. In this case, the 30 ml/kg of crystalloid fluids would most likely be started after septic shock presentation. If the presence of septic shock is determined based upon provider documentation of septic shock, the fluids may be started before or after presentation of septic shock, depending on the timing of when the orders are written in relation to physician documentation.

Question 82: It is understood with the measure updates that we do not use evidence of organ dysfunction that is due to a chronic condition or medication. What about a low WBC that is related to chemotherapy, for example, in a stem cell transplant patient?

Answer 82: Chemotherapy is a medication. If there is documentation associating or attributing the low WBC to the chemotherapy, then the low WBC can be disregarded as a sign of organ dysfunction.

Question 83: It sounds like screening is done in triage and on admission. What about the patient who becomes septic during a hospital stay? Do any of the screening tools apply throughout the hospitalization?

Answer 83: Currently we do not screen periodically throughout hospitalization, but that is currently being discussed as part of our inpatient workflow development that we are beginning to work on.

Question 84: A passive leg raise (PLR) or fluid challenge is just one of the two required reassessment actions for the septic shock category, and performing a PLR or a fluid challenge are the methods of obtaining a reading from the NICOM device, so it seems intuitive that NICOM is 'compatible' with the SEP-1 measure. However, the measure states that an MD/PA/APN must perform this. I doubt that in many hospitals that the physicians are the ones directly performing a passive leg raise.

Answer 84: The NICOM device is used for hemodynamic monitoring and can be used to assess whether or not there is a physiologic response to a passive leg raise (PLR) or fluid challenge. It does not perform the PLR or fluid challenge. The legs must be raised or the fluid must be administered by a person to perform a PLR or fluid challenge. These data elements are not looking for documentation of results of the PLR or fluid challenge. As such, documentation of results taken from a NICOM device or any other device for monitoring hemodynamics is compatible to measuring the response, but not sufficient for indicating whether or not a PLR or fluid challenge was actually performed. The criteria for determining these are spelled out in the respective data elements. We recognize that in many facilities the physician may not actually be the one performing the PLR and are working on addressing this in a future version of the manual.

Question 85: Does a physician order to perform a PLR and interpreting the result count as performing the test?

Answer 85: The *Passive Leg Raise (PLR) Exam Performed* data element does not specify what constitutes performing the PLR. As such, there would need to be some form of documentation reflecting the physician was involved in performing it.

Question 86: Patient did not meet criteria for septic shock as defined. However, the patient had all care measures met for septic shock, i.e., fluid resuscitation, etc. MD documented septic shock about 2 hours after all care was administered and included reassessment in same note. Would this reassessment qualify?

Answer 86: The reassessment must be completed within six hours of septic shock presentation. The earliest the elements of the reassessment can be completed and meet the measure criteria is after the crystalloid fluids are started.

Question 87: Please elaborate on the administration of fluids. Do we use the initial time the fluids were hung and the actual or projected time they were completed as our timeframe for determining the 1 hour post infusion hypotension?

Answer 87: Determining when the hour to assess for persistent hypotension can be determined a couple of different ways. If there is documentation indicating when the infusion ended, this can be used and is preferred. If there is not documentation of when the infusion ended, you can estimate the infusion end time based on the infusion duration or rate in the order, the volume of fluids being infused to achieve a volume of 30 ml/kg, and the time that infusion was started.

Question 88: Patient arrives 08/23 @ 03:00–meets criteria for severe sepsis– on 8/24 @05:00 becomes hypotensive. For abstraction purposes, which will be the start time? Can you have more than one event? Which do you abstract?

Answer 88: There is not enough information in the question to provide a response.

Question 89: Does the repeat volume status and tissue perfusion assessment have to be performed if the patient is not hypotensive but lactate is >4?

Answer 89: Yes.

Question 90: We have patients in ESRD and Heart Failure. It would be dangerous to give these patients 30ml/kg. Why isn't there an option to exclude these patients from the population?

Answer 90: The International Guidelines for Management of Severe Sepsis and Septic Shock upon which the SEP-1 measure is based, recommend 30 ml/kg of crystalloid fluids for patients presenting with sepsis induced hypotension or lactate greater than or equal to 4 mmol/L. The guidelines do not exclude patients with co-morbidities such as ESRD or heart failure.

Question 91: If the ED physician is performing an initial physical exam and then the hospitalist performs an assessment when the patient is first admitted (such as an hour after ED sepsis diagnosis), will that meet the requirements of the second Focused Exam or does the Focused Exam have to be at a six hour mark?

Answer 91: The components of the Focused Exam must be completed in the timeframe from when the crystalloid fluids are started and within six hours of septic shock presentation time.

Question 92: For serial lactic acid levels, how many lactate levels are ordered and what is the frequency, lactate levels q4 hours x3?

Shock Presentation: the patient did have severe sepsis. Her initial lactate was 2.4 (<4). There was no MD documentation of Septic Shock. The patient only received 1000ml of Saline (would have needed 1971ml to meet the 30ml/kg requirement). The patient did not receive the appropriate fluids 30ml/kg, so we cannot determine if there was Persistent Hypotension, therefore, must we answer "No" to septic shock? Although this seems like the correct answer, if we never give the patient the 30ml/kg, then we would never have a septic shock patient, unless documented by MD or lactate >4. Does this seem correct to you?

Answer 92: I am unable to answer the first question regarding serial lactate. This would be a clinician decision. The measure and guidelines only indicate if the initial lactate is elevated, a repeat should be drawn within 6 hours of severe sepsis presentation. There is not enough information to responsd to the second question regarding presence of septic shock.

Question 93: Should organ dysfunction criteria be used if it is noted to be an acute on chronic condition? Specifically, should we use creatinine for a patient with acute on chronic kidney disease?

Answer 93: The *Severe Sepsis Present* Notes for Abstraction indicate that if there is evidence of organ dysfunction considered to be due to a chronic condition, it should be disregarded. If the documentation in the medical record indicates the elevated creatinine is not due to a chronic condition, it can be used as a sign of organ dysfunction.

Question 94: Since FLAGYL is not listed on Table 5.0 or 5.1, is it collectable if administered prior to admission for antibiotic time?

Answer 94: Table 5.0 (Antibiotic Monotherapy, Sepsis) or the appropriate combination from Table 5.1 (Antibiotic Generic/Trade Name Crosswalk, Sepsis) are ONLY used if the ONLY antibiotics the patient received were started in the 3 hours following severe sepsis presentation. These tables are ONLY used for responding to the *Broad Spectrum or Other Antibiotic Administration Selection* data element. The *Broad Spectrum or Other Antibiotic Administration* data element Notes for Abstraction state: "If the patient received any IV antibiotic within the 24 hours preceding or 3 hours following the presentation of severe sepsis, choose Value '1.'" If Flagyl or any IV antibiotic was given in the 24 hours prior to presentation, you will select value "1 (Yes)" for *Broad Spectrum or Other Antibiotic Administration*. If an antibiotic was given in the 24 hours prior to presentation, you do not need to answer the *Broad Spectrum or Other Antibiotic Administration Selection* data element. In this case, referencing Table 5.0 and 5.1 is irrelevant.

Question 95: So, the broad spectrum antibiotic administration selection will only need to be answered if the date/time of earliest antibiotic administered is within 3 hours after severe sepsis time? I am confused because with most of the abstractions I've encountered, the time broad spectrums have been started before the severe sepsis time.

Answer 95: You are correct. If the antibiotic time you enter is prior to severe sepsis presentation time, the algorithm will bypass the *Broad Spectrum or Other Antibiotic Administration Selection* data element. The reason for this is the

International Guidelines for Management of Severe Sepsis and Septic Shock recommend broad spectrum antibiotics for initial treatment of patients with severe sepsis. Prior to severe sepsis being identified, an infection is being treated, not severe sepsis. It is only after severe sepsis is identified as being present that it is actually being treated. As such, any antibiotics started prior to severe sepsis are not necessarily being used for the treatment of severe sepsis, and the measure is not looking at those to determine whether or not they provide broad coverage. The measure is only looking at antibiotics specifically ordered for treatment of severe sepsis as being broad coverage. This would be represented by antibiotics started in the 3 hours following severe sepsis. In the cases where antibiotics were started prior to presentation, re-dosing with another antibiotic many not be warranted within the 3 hours following presentation because antibiotics were already started.

Question 96: The clinical components for presentation of severe sepsis, meaning the results/signs for two SIRs and organ dysfunction, are easy to report, but how do you monitor and abstract the infection documentation when it can be documented by any clinician anytime and anywhere? That documentation may set the *Time Zero*.

Answer 96: Keep in mind all three of the clinical criteria must be met within 6 hours of each other. If you find a period within which two SIRS criteria and a sign of organ dysfunction are present, then look in the time period around that encompasses 6 hours for documentation of a suspected infection.

Question 97: The comparison of SSC and SEP-1 shows Blood Culture: does this mean Blood Culture x1 or x2 is recommended for each?

Answer 97: While the guidelines get into more details regarding how many blood cultures should be drawn and when or from where they should be drawn, SEP-1 is only interested in whether or not blood cultures were drawn and the timing of them in relation to antibiotic administration and severe sepsis presentation.

Question 98: The patient has history of oxygen dependent COPD and is on a CPAP machine at home. The patient had Bipap placed while in the hospital. Would we exclude the Bipap as organ dysfuntion criteria r/t patient with chronic respiratory condition with CPap at home?

Answer 98: Most likely, yes. To consider mechanical ventilation (invasive or non-invasive) as a sign of organ dysfunction, there must also be documentation of acute respiratory failure.

Question 99: Dr. Walter, what is the sensitivity and specificity of your screening tools?

Answer 99: We have not performed formal sensitivity and specificity analysis for the screening tool that is currently in use. We have worked on an inpatient screening tool that relied on an electronic review of vital signs and organ dysfunction to identify severe sepsis, and we found this to be very sensitive but not specific. To add specificity, we are considering having a centralized person review all positive screens.

Question 100: Is the EPIC build discussed today available for any hospital on EPIC?

Answer 100: Currently we are on the 2014 version of Epic and have built out our own tools. If a hospital is on the same version of Epic, then likely they should be able to build out the same tools that we have.

Question 101: What about the patient who is being treated on the floor for a documented infection (showing a "negative S&S of Infection" with nursing screening) but has abnormal vital signs and severe sepsis?

Answer 101: This question is unclear. I am, therefore, not able to provide a response.

Question 102: What is the process flow for patients diagnosed with sepsis whilst inpatient on the wards?

Answer 102: The RN would call a Rapid Response and/or the physician to notify of possible sepsis and obtain orders at that time.

Question 103: What is your sepsis population? How many are you seeing? How about Sepsis identification of the floor?

Answer 103: Our larger facilities see approximately 120–160 sepsis cases a month. Our smaller hospitals may only see around 10–50 a month. We have supplied education to the bedside clinicians on every unit. The ED has a "Code Sepsis" call that they use for patients presenting with septic shock. As for the identification on the floor, we have provided additional education to our rapid response teams. If the patient is identified as severe sepsis or septic shock, the response team has a protocol to follow. That protocol has been tweaked frequently in order to meet the needs of our staff and patients.

Question 104: What specific time do we use for acute respiratory failure as a sign of organ dysfunction to determine severe sepsis?

Answer 104: To be used as a sign of organ dysfunction, the *Severe Sepsis Present* Notes for abstraction indicate there must be a new need for mechanical ventilation: "Acute respiratory failure as evidenced by a new need for invasive or non-invasive mechanical ventilation." There are, therefore, two parts to this: there

must be documentation of acute respiratory failure and it is a sign of organ dysfunction when mechanical ventilation is started.

Question 105: When do you order the second lactate level?

Answer 105: In the Order Sets, the lactate levels are timed to be STAT x1, then 3 and 6 hours later for a total of 3 lactate levels.

Question 106: When you mentioned lactic acid sets, do you still do the second and third if the initial is not elevated?

Answer 106: Yes, unless the physician manually discontinues the follow-up lactate levels.

Question 107: When you started sepsis, were you validated right away?

Answer 107: None of the SSM hospitals have been validated for the sepsis core measure, but our understanding is that validation has not yet been announced by CMS either.

Question 108: Where can I get the new Manual?

Answer 108: The Specifications Manual can be accessed on *QualityNet* at www.qualitynet.org under the **Hospital-Inpatient** tab.

Question 109: Where can we find your Identification and Treatment of Severe Sepsis and Sepsis Shock Tool Checklist?

Answer 109: The tip sheet has been posted on the www.qualityreportingcenter.com website.

Question 110: Who performs the chart abstractions, nurses or high school grad abstractors?

Answer 110: At SSM Health, nurses perform the chart abstractions.

Question 111: Why can we not take the nurse's documentation for patient's refusal of antibiotics or lab draw?

Answer 111: We are looking into changes to this requirement for a future version of the manual.

Question 112: With antibiotics, do we give antibiotics such as vancomycin and gentamicin to a patient if they meet SIR criteria and we suspect infection, and then we confirm that the patient has pneumonia?

Answer 112: The antibiotics given are a physician decision. For purposes of the measure, the ONLY antibiotics that are compared to Table 5.0 (Antibiotic Monotherapy, Sepsis) and Table 5.1 (Antibiotic Generic/Trade Name Crosswalk, Sepsis) are those given within 3 hours following *Severe Sepsis Presentation Time and only* if those are the ONLY antibiotics the patient received in the period 24 hours prior to presentation through 3 hours following presentation.

Question 113: With reference to the alert on slide 23, if the MD clicks the "no sepsis," is it reflected in the progress note?

Answer 113: Not at this time.

Question 114: Would "Abnormal UA: No urinary symptoms" work for suspected infection?

Answer 114: No, Abnormal UA does not indicate what is abnormal about it; therefore there is not anything that reflects an infection is suspected.

Question 115: Would infiltrate be considered an infection?

Answer 115: No, infiltrate is a finding on a chest x-ray, which is not an infection.

Question 116: Would SSM Health be willing to share their sepsis screening tool and sepsis order sets as references for hospitals trying to create tools in their EHRs?

Answer 116: Yes, we have posted our resources on the www.qualityreportingcenter.com website.

Question 117: Would the template with mention of treatment of Septic Shock (even if no other criteria of Septic Shock is recorded) mean that we have to abstract Septic Shock? We have some doctors adding a template with this type of verbiage, but there is no other documentation to support septic shock.

Answer 117: The last bullet point of the *Septic Shock Present* Notes for Abstraction indicate if the criteria for septic shock are not met, but there is physician/APN/PA documentation of septic shock to choose Value "1 (Yes)." I cannot say how this applies to the question of a template in an EHR, because I am not familiar with the template or the EHR referred to in the question.

Question 118: You implied a lot of "optionalization" into your process by saying that each unit can make adjustments depending on the local culture. Doesn't that take away from your system "processness?"

Answer 118: Our strategy at the system level is to provide each hospital tools for success (Epic infection screen to help identify patients with sepsis, order sets, and reports). Each hospital is expected to figure out how to use these tools within their local culture to achieve improved compliance. For example, an individual hospital may need process improvement on utilization of order sets, and understanding the local culture is necessary to make this happen.