Hospital Inpatient Quality Reporting (IQR) Program

Support Contractor

SEP-1 Early Management Bundle, Severe Sepsis/Septic Shock:
  v5.5a Measure FAQs

Presentation Transcript

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Christine Leber: Thank you, everyone, for joining today’s presentation titled, *SEP-1 Early Management Bundle, Severe Sepsis/Septic Shock: v5.5a Measure FAQs*. I’m Christine Leber, Program Manager I for the Hospital Inpatient Quality Reporting Program with the Hospital Inpatient Value, Incentives, and Quality Reporting Outreach and Education Support Contractor. I will be the event moderator for today. Before we begin, I would like to make our first few regular announcements. This program is being recorded. A transcript of the presentation, along with the questions and answers, will be posted to the inpatient website, [www.QualityReportingCenter.com](http://www.QualityReportingCenter.com), and to *QualityNet* at a later date. If you are registered for this event, a reminder email, as well as the slides, was sent out to your email a few hours ago. If you did not receive that email, you can download the slides at our inpatient website. Again, that is [www.QualityReportingCenter.com](http://www.QualityReportingCenter.com). I would now like to welcome and introduce our guest speakers for today: Noel Albritton, Lead Solutions Specialist, and Jennifer Witt, Senior Health Informatics Solutions Coordinator from the Hospital Inpatient and Outpatient Process and Structural Measure Development and Maintenance Support Contractor.

The objectives for the presentation today are to explain the changes to the measure and guidance in manual v5.5a and to identify and understand the rationale behind the v5.5a update.

This slide provides a list of the acronyms that will be used throughout today’s presentation.

Today’s presentation of frequently asked questions for manual v5.5a has a slightly different format than our previous sepsis webinars. Today, we will review frequently asked questions, then review the relevant guidance from the manual, followed by questions we would like you to respond to. I would now like to turn the presentation over to Noel and Jennifer. Noel and Jennifer, the floor is yours.

Noel Albritton: Thank you, and hello everyone. Thank you for joining us today. Before we begin, we wanted to share an update on the SEP-1 bundle-level reports. In previous national provider calls, we have announced that three-hour and
six-hour bundle-level reports are being developed for Hospital Compare. That work continues and these reports are planned for release in July 2019 on Hospital Compare. SEP-1 overall results will continue to be available on the Timely and Effective Care web page. The SEP-1 severe sepsis and septic shock three-hour and severe sepsis and septic shock six-hour bundle results will be available in addition to the overall results in the Timely And Effective Care hospital, state, national [CSV] files and the facility-level PDF reports downloadable from Hospital Compare. While overall results are reported as rolling four quarters of data, for this first release, the bundle-level reports only include results for the third quarter of 2018. Subsequent quarterly data will be rolled into this with the future Hospital Compare releases. More information will be available as we get closer to the release date. Now, let’s begin our review of frequently asked questions for manual v5.5a.

Jennifer Witt: Thank you, Noel. The first frequently asked question we will review today is related to the Administrative Contraindication to Care, Severe Sepsis data element. With the updated guidance in manual v5.5a, which makes selecting Value “1” (Yes) accessible when there’s documentation within the specified time frame indicating that the patient left AMA, we have received questions such as, “Is physician/APN/PA documentation required when a patient leaves AMA?” Let’s begin by reviewing the updated guidance in the Administrative Contraindication to Care, Severe Sepsis data element.

The updated guidance for manual v5.5a states, “If there is a signed AMA form or documentation by a physician/APN/PA or nurse indicating the patient left AMA prior to or within six hours following presentation of severe sepsis, select Value “1.” Based on this guidance, physician/APN/PA or nursing documentation within the specified time frame indicating the patient left AMA would suffice selecting Allowable Value “1” (Yes).

Also, for the Administrative Contraindication to Care, Severe Sepsis data element, we’ve received questions such as, “If the physician documented within the specified time frame, ‘patient not willing to stay,’ is this
acceptable documentation indicating the patient left AMA?" This question is frequently asked, primarily because the physician/APN/PA or nursing documentation does not include AMA. However, the updated guidance in manual v5.5a addresses this type of documentation.

The *Administrative Contraindication to Care, Severe Sepsis* data element provides this updated guidance for manual v5.5a, which states explicit documentation that the patient left AMA is not required. With the example of physician/APN/PA or nursing documentation stating, “Patient is refusing to stay for continued care,” [this] would suffice Allowable Value “1” (Yes) as this documentation indicates the patient left AMA. As you can see, including the term “against medical advice” or “AMA” in the documentation is not required.

This slide provides another example of physician/APN/PA documentation that would suffice selecting Value “1” (Yes) based on the guidance discussed on the previous slide. The APN notes within specified time frame, “patient refusing to stay, explained diagnosis, but doesn’t want care.” Based on the APN documentation within the specified time frame indicating the patient is refusing to stay and doesn’t want further care, Value “1” (Yes) would be selected for the *Administrative Contraindication to Care, Severe Sepsis* data element. Although this documentation does not explicitly state the patient left AMA, based on the updated guidance discussed earlier, this documentation would continue to suffice for selecting Value “1” (Yes).

Next, we will move on to a question for the *Broad Spectrum or Other Antibiotic Administration Selection* data element. One question we frequently encounter regards acceptable documentation for identifying the presence of C. diff. Questions frequently appear, such as the one on this slide which states the ED APN documented “suspected C. diff, culture sent to lab.” The ED MAR has oral Vancomycin given one hour after the *Severe Sepsis Presentation Time*. Can Value “1” (Yes) be selected for the *Broad Spectrum or Other Antibiotic Administration Selection*? The primary goal of this question is to determine if the documentation by the APN of the suspected C. diff will suffice for documentation identifying
the presence of C. diff and allow Value “1” (Yes) to be selected since oral Vanco was administered within three hours of severe sepsis presentation. In this case, yes, the physician/APN/PA documentation of suspected C. diff would suffice for documentation identifying the presence of C. diff and, with oral Vanco administered within three hours after the Severe Sepsis Presentation Time, Value “1” (Yes) would be selected for the Broad Spectrum or Other Antibiotic Administration Selection data element. So, let’s discuss the guidance related to this.

The Broad Spectrum or Other Antibiotic Administration Selection data element provides the guidance on this slide for cases when a monotherapy or combination therapy antibiotics are not administered within the specified time frame. Antibiotic therapy for C. diff may be acceptable if there’s physician/APN/PA documentation within 24 hours before the antibiotic start time identifying the presence of C. diff and oral or rectal Vancomycin or IV Flagyl was initiated within the three hours after severe sepsis presentation. When we look for physician/APN/PA documentation identifying the presence of C. diff, explicit documentation confirming C. diff is present is not required. Given the nature of C. diff and the length of time for positive cultures to return in this case, physician/APN/PA documentation, such as suspect or possible C. diff, [is] acceptable for identifying the presence of C. diff.

For the Poll the Audience question, “MD notes at 1945 diagnosis of possible C. diff Colitis. MAR notes - Flagyl IV 2100 given within time frame,” which Allowable Value would be selected? A, Value “1” (Yes). B, Value “2” (No).

Noel Albritton: This is Noel. I’ll review that question one more time for everyone: MD notes at 1945 diagnosis of possible C. diff colitis. MAR notes - Flagyl IV 2100 given within the time frame. Which Allowable Value would be selected? A, Value “1” (Yes) or B, Value “2” (No). I see our responses are starting to slow down. Rachel, if you could go ahead and close the polls for us. The correct answer for this question is Allowable Value “1.” “Yes” would be selected for the Broad Spectrum or Other Antibiotic Administration Selection data element based on the physician
documentation identifying the presence of C. diff within 24 hours before the antibiotic and the MAR documentation of IV Flagyl administration within three hours after the Severe Sepsis Presentation Time. As you can see by the documentation provided in the question, the physician/APN/PA documentation of possible or suspected C. diff is acceptable for documentation identifying the presence of C. diff.

Jennifer Witt: Thank you, Noel. Next we will review several frequently asked questions for the Crystalloid Fluid Administration data element, including these first two questions. First, how do you determine if the target ordered volume of crystalloid fluids was completely infused? And second, what is the time frame for the target ordered volume to be completely infused? The Crystalloid Fluid Administration data element provides specific guidance addressing both of these questions. So, let’s review the guidance.

The first question on the previous slide asked, “How do we determine if the target ordered volume of crystalloid fluid was completely infused?” This guidance found in the Crystalloid Fluid Administration data element provides further clarification for determining if the target ordered volume was completely infused. It states, along with an infusion start time, an infusion rate, duration, or end time is needed to determine the target ordered volume was completely infused. As you can see, to consider the target volume to be completely infused, a start time and a rate, duration, or end time is needed.

The second question to the previous slide stated, “What is the time frame for the target ordered volume to be completely infused? As demonstrated by the guidance on this slide, the target ordered volume must be documented as completely infused, which we just discussed how to determine if the target ordered volume was completely infused. As you are aware, the Crystalloid Fluid Administration data element provides a specified time frame for acceptable fluids to be used towards the target ordered volume. The first sentence of the updated guidance provided on this slide states, “The target ordered volume must be ordered and initiated within the specified time frame if initial hypotension or septic shock is present.” The guidance on this slide goes on to state, “The target ordered
volume is not required to be completely infused within the specified time frame.” Therefore, although there must be documentation that the fluids were completely infused, the fluids are not required to be completely infused within a specified time frame. As this guidance points out, the specified time frame for the *Crystalloid Fluid Administration* data element is only referring to the order and initiation of fluids, not the completion of the target ordered volume.

This slide is provided to simply state the target ordered volume is not required to be completed within a specified time frame. As we discussed on the last slide, the target volume must be ordered and started within the specified time frame provided in the *Crystalloid Fluid Administration* data element. There must also be a documented start time and rate duration or end time. However, the target ordered volume is not required to be completely infused within a specified time frame.

We often receive questions regarding the guidance in the *Crystalloid Fluid Administration* data element that refers to fluid volumes within 10 percent of the 30 mL/kg volume. This is often referred to as the “10% rule” by abstractors. Questions frequently state, “If the patient weighs 90 kg and the physician orders ‘NS IV 30 mL/kg over 2 hours,’ will administering 2500 mL be acceptable based on the ‘10% rule,’ or do we have to administer 2700 mL?” This question has asked if a volume within 10 percent of the 30 mL/kg total volume will suffice in this scenario. As you can see, the physician order includes the volume of 30 mL/kg. So, a volume less than 30 mL/kg would not be acceptable in this case. Let’s review the guidance related to this in the data element.

The guidance states, “Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg or within 10% less than the 30 mL/kg are considered the target ordered volume.” To clarify, this bullet point is referring to the ordered volume of crystalloid fluid, meaning if a volume equivalent to 30 mL/kg is ordered, the complete 30 mL/kg volume would be required, and a lesser volume would not be acceptable. However, if only a volume that was within 10 percent of the 30 mL/kg volume was ordered, then that volume that was ordered within 10 percent of the 30 mL/kg would be
acceptable. For example, if the patient weighed 70 kilograms, then 2100 mL would be needed for the 30 mL/kg volume. However, the physician only ordered 2000 mL. Therefore, administering the complete 2000 mL would be acceptable because 2000 mL is within 10 percent of the 30 mL/kg total volume.

For the Poll the Audience Question: “Physician Order: NS IV 30 mL/kg over 1 hour for a 52 kg patient (30 mL/kg times 52 kg equals 1560 mL). What fluid volume must be infused? A, 1404 mL. B, 1500 mL. C, 1560 mL. D, 1600 mL.

Noel Albritton: This is Noel again. I’ll review that question with you. The physician ordered NS IV 30 mL/kg over one hour for a 52 kg patient (30 mL/kg times 52 kg equals 1560 mL). What fluid volume must be infused? A, 1404 mL. B, 1500 mL. C, 1560 mL, or D, 1600 mL. I see our responses are starting to slow down. Rachel, if you would please close the polls for us. The correct answer to this question is C. Fifteen-hundred sixty mL would be required in the scenario. The physician ordered the complete 30 mL/kg volume, which is 1,560 mL based on the patient’s weight of 52 kg. Therefore, 1,560 mL would be the target ordered volume in this scenario, and a volume less than 1,560 mL would not be acceptable.

Jennifer Witt: Thank you, Noel. We will now look at a few questions frequently asked about Initial Hypotension, starting with, “What Allowable Value would be selected if you have multiple hypotensive readings in the six hours prior through six hours after Severe Sepsis Presentation Time, but there are no hypotensive readings within three hours of each other? As you are aware, the updates for the Initial Hypotension data element in manual v5.5a include that hypotensive readings must be in the specified time frame for Initial Hypotension, but also must be within three hours of each other to suffice the data element. In the case described by the question on this slide, if there are hypotensive readings within the time frame, but no hypotensive readings within three hours of each other, Value “2” (No) would be selected for Initial Hypotension. Let’s look at the guidance from the Initial Hypotension data element.
The guidance specifies the time frame of six hours prior through six hours after the *Severe Sepsis Presentation Date* and *Time for Initial Hypotension*, which remains the same for manual v5.5a. However, the two hypotensive blood pressure readings must be within three hours of each other to be used for *Initial Hypotension*. So, hypotension readings documented within the six hours before through six hours after the *Severe Sepsis Presentation Date* and *Time* are acceptable but, to suffice for *Initial Hypotension*, the hypotensive blood pressure readings must also be within three hours of each other to select a Value “1” (Yes).

For the Poll the Audience Question, the *Severe Sepsis Presentation Time* is 1600. Which time should be abstracted for the *Initial Hypotension Time*? A, 85/54 at 1230. B, 83/59 at 1555. C, 88/57 at 1720. D, 82/5 at 1800.

**Noel Albritton:** This is Noel again. I’ll review this question with you one more time. The *Severe Sepsis Presentation Time* is 1600. Which time should be abstracted for the *Initial Hypotension Time*? A, blood pressure of 85/54 at 1230. B, 83/59 at 1555. C, 88/57 at 1720. D, 82/5 at 1800. I see the responses are starting to slow down. So, let’s go ahead and close the polls please. So, the correct answer for this question is C, 88/57. The blood pressure of 88/57 at 1720 would be the correct answer. Hypotensive reading at 1230 is within the specified time frame for *Initial Hypotension*. However, this hypotensive reading is not within three hours of another hypotensive blood pressure reading. So, we would continue to review for further hypotensive readings within the time frame that are within three hours of each other. At 1555, another hypotensive reading is present. Then, our second hypotensive reading at 1720, which we would abstract for the initial hypotension date and time, is because the blood pressure at 1555 and at 1720 are within the specified time frame for initial hypotension, as well as within three hours of each other.

**Jennifer Witt:** Thank you, Noel. Our next frequently asked question pertains to *Initial Hypotension* and *Persistent Hypotension*. The frequently asked question on this slide says, “The APN documented ‘BP 82/58 baseline for patient.’ Should a blood pressure of 88/56 be used?” In this example, the APN documents the blood pressure of 82/58 is normal for the patient by
considering the blood pressure of 82/58 to be baseline for the patient. The patient then has another blood pressure of 88/56 but, in this case, the blood pressure of 88/56 is less severe than the baseline blood pressure. Therefore, the blood pressure of 88/56 would not be used. If the APN documented the blood pressure of 82/58 as baseline, but another blood pressure of 75/50 is documented, the systolic blood pressure of 75 would be used for Initial Hypotension or Persistent Hypotension because the systolic blood pressure of 75 is a more severe value than a systolic blood pressure of 82. Let’s take a look at that guidance.

This new guidance is included in both the Initial Hypotension and Persistent Hypotension data elements and states, “If a hypotensive value should not be used based on the above guidance, all instances of less severe values should not be used.” The above guidance referred to in this bullet point is referencing the bullet point directly above this bullet point in the Notes for Abstraction that determine if criteria should be disregarded based on being documented as normal for the patient, or due to a chronic condition or medication. The example demonstrates a blood pressure of 80/50 that is secondary to Lasix. Given this new guidance, systolic blood pressure readings greater than or equal to 80 would not be used. Therefore, if the patient also had a blood pressure reading of 82/53 and 87/60, neither of these blood pressures would be used. However, if the patient also had a blood pressure of 75/51 documented within the specified time frame, the blood pressure of 75/51 would be used because this value is more severe than 80/50.

Another question frequently asked pertains to why the hypotensive readings are still used when documented as due to an acute condition or acute on chronic condition. Hypotensive readings are hypotension documented due to an acute condition or acute on chronic condition are used because severe sepsis often exacerbates an acute condition or acute on chronic condition. Since the hypotensive readings may be due to an acute condition or acute on chronic condition that is actually caused by an infection or severe sepsis, the hypotensive readings would still be used. The updated guidance for this particular topic in v5.5a states, hypotensive
values due to an acute condition, acute on chronic condition, or infection should be used. If we consider the first example on this slide, hypotension related to dehydration, we would continue to use the hypotensive readings, as the dehydration, which is an acute condition in this case, may be caused by an infectious source. Therefore, if an infectious source is causing the acute condition that is causing the hypotension, we want to continue to use the hypotension readings to meet the measure criteria.

Continuing with the guidance related to hypotension documented as due to an acute condition, this slide provides further guidance stating if the hypotension is documented due to an acute condition, and there’s documentation that the acute condition is due to a non-infectious source or process, the hypotensive readings would not be used. As I mentioned previously, hypotension documented due to an acute condition should be used because the acute condition is potentially caused by an infectious source or severe sepsis. However, as this guidance demonstrates, if the source or cause of the acute condition is also documented and determined to be a non-infectious source, then we would not use the hypotensive readings because the cause of the hypotension is not infectious.

This question is frequently asked due to confusing two elements within the Initial Lactate Level Collection data element. The question states, “The Initial Lactate Level Collection data element [says] if there are multiple lactates in the specified time frame to use the highest level, but the data element also says to use the priority order to determine the lactate time to use. How should the Initial Lactate Level Collection be determined?”

Let’s look at the guidance that is being referenced in this question.

First, this guidance is defining which lactate collection should be abstracted for the data element. It states, if multiple lactate levels are drawn within the specified time frame, use the lactate drawn prior to the Severe Sepsis Presentation Time with the highest level. Secondly, if multiple lactate levels are drawn only in three hours after Severe Sepsis Presentation Time, use the lactate drawn with the highest level within the time frame. With this guidance, we can determine which lactate should be used for the initial lactate. The guidance on this side then leads us to
determine which time should be evaluated for the lactate we previously chose as our initial lactate. For example, on the last slide we determined that if multiple lactates are present, we need to select the lactate with the highest level. Now, if the lactate with the highest level has multiple times documented for this particular lactate collection, we will follow the priority order on this slide to determine if the collection time of the lactate with the highest level was within the specified time frame for this data element. So, if there are multiple lactates, follow the guidance on the previous slide to determine which lactate should be used as the initial lactate. Then, if that initial lactate has multiple collection times available, use the priority order on this slide to determine the time of the collection.

Another question we are frequently asked I'll touch on before I move on is, why is the lactate collection abstracted for this data element called the “Initial Lactate Level Collection,” when the lactate collected with the highest lactate result may not be the first lactate collected? The term “initial lactate” is not necessarily referring to the first lactate collected. This lactate collection is called the Initial Lactate Level Collection because it is the first of two possible lactate collections required for the measure. The Initial Lactate Level Collection would be the first lactate collection abstracted and the repeat lactate level collection is the second. So, the Initial Lactate Level Collection data element provides guidance to determine which lactate selection should be abstracted as the initial lactate. It is not necessarily referring to the first lactate level collection if there were multiple lactates collected.

For the Poll the Audience Question: “The Severe Sepsis Presentation Time is 1640. Which lactate value would be abstracted as the initial lactate level? A, 1230 — lactate result of 2.5. B, 1415 — lactate result 4.1. C, 1545 — lactate result 3.2. D, 1700 — lactate result 2.7.

Noel Albritton: This is Noel. I’ll review that scenario one more time. The Severe Sepsis Presentation Time is 1640. Which lactate value would be abstracted as the initial lactate level? A, 1230 — lactate results of 2.5. B, 1415 — lactate results of 4.1. C, 1545 — lactate result 3.2. D, 1700 — lactate result 2.7. I see our responses are starting to slow down. Rachel, if you could close the
polls for us please. The correct answer for this question is B. The lactate at 1415 with the result of 4.1 would be abstracted. As we previously discussed, with multiple lactates collected within the specified time frame, the lactate with the highest results in the six hours prior to severe sepsis presentation would be abstracted for the Initial Lactate Level Collection. In this case, there are multiple lactates drawn, and the highest lactate level drawn prior to the Severe Sepsis Presentation Time was the lactate result of 4.1 at 1415.

Jennifer Witt: Thanks for answering those questions. For the next part of the presentation, I’ll turn it over to Noel.

Noel Albritton: Thanks, Jennifer. We frequently receive questions from abstractors pertaining to calculating the completion time of the target ordered volume so they can determine the hour to assess for Persistent Hypotension. The questions we typically receive state, “How do we determine the hour to assess for Persistent Hypotension when multiple infusions are running at the same time?” This question is then followed with a list of infusions that were documented in the medical records.

The guidance within the Persistent Hypotension data element provides the initial direction for calculating the completion time of the target ordered volume. However, due to the questions we have received regarding multiple infusions running simultaneously, we would like to review an example to clarify this calculation.

Here’s an example that includes four infusions started at different times but infusing simultaneously at different points. I will say, there are multiple ways these calculations can be performed. The primary concern is determining the appropriate completion time of the target ordered volume. I will also point out that when fluids are ordered with a single 30 mL/kg order, determining the completion time and the hour to assess Persistent Hypotension is much easier. However, since fluids are not always ordered with the single 30 mL/kg order, we’ll take a look at this example. I realize these calculations can be overwhelming. So, I want to remind you that the presentation and the slides will be posted online, and
you’ll be able to refer back to this example at a later time, rather than attempt to remember each step as we go through it right now. So, the target ordered volume in this case is 2000 mL. There are four fluid orders. The first is for 1000 mL over two hours. The second is 250 mL mixed with IV Vanco. The third is 1000 mL over one hour, and the last is 500 mL over 30 minutes. The next thing I would do in this scenario is determine the mL infusing per minute for each infusion. Since these infusions run simultaneously at times, we will need to use the mL per minute to determine how much volume is infused over a specific period of time. So, we take the first infusion, which is 1000 mL over two hours and divide 1000 mL by 120 minutes and get 8.33 mL per minute. You’ll notice I rounded the mL per minute to the nearest hundredth. This generally provides the same final answer when compared to using the unrounded number, and the result will be more accurate than rounding the number to the nearest whole number. Next, we’ll do the same thing for all of the infusions. We divided 250 mL by 60 minutes, which equals 4.17 mL per minute. The third order is 1000 mL over one hour, which is 16.67 mL per minute, and the last infusion is 500 mL divided by 30 minutes, which is also 16.67 mL per minute.

The next step is to break down when the infusions were running alone and simultaneously. Here you can see Infusion 1 was running alone from 0800 to 0815. We multiply the 15 minutes by the mL per minute, which we determined on the previous slide. So, 15 minutes times 8.33 mL per minute, equals 124.95 mL infused between 0800 to 0815. Next, from 0815 to 0830, both Infusions 1 and 2 were running. So, we’ll multiply those 15 minutes by the mL per minute of both Infusion 1 and 2. In this case, it would be 15 minutes times 8.33 plus 4.17 mL per minute. This equals 187.5 mL were infused between 0815 and 0830. Next, from 0830 to 0900, Infusions 1, 2, and 3 are now infusing simultaneously. We will take the mL per minute from Infusions 1, 2, and 3 and multiply by 30 minutes. In this case, it’s 30 minutes times 8.33 plus 4.17 plus 16.67 mL per minute, and this equals 875.1 mL. When there are multiple infusions ordered in this way, you just continue to work through each time frame where infusions are running together. You can see that, next, all four infusions
are running at the same time from 0900 to 0915. So, we’ll multiply 15 minutes by the mL per minute of each infusion. In this case, it will be 15 minutes times 8.33 plus 4.17 plus 16.67 plus 16.67 mL per minute, and we can see that’s 687.6 mL were infused during that 15 minutes.

At this point, we can add up all the calculations we performed thus far. We can see that by 0915, 875.15 mL were infused. Then, we simply subtract 1875.15 mL from the target ordered volume, which is 2000 mL and get 124.85 mL are still needed. At this point, Infusions 1, 3, and 4 are still infusing simultaneously. So, we can divide 124.85 mL by the mL per minute of Infusions 1, 3, and 4, and we’ll get approximately three minutes. This means it took approximately three minutes to infuse 124.85 mL, with Infusions 1, 3, and 4 infusing at the same time. Now, we need to add three minutes to 0915 because 0915 was where we left off in our calculations. So, the target ordered volume was completed at 0918. Therefore, we would assess for Persistent Hypotension between 0918 to 1018. We do realize that this is a longer and more in-depth calculation but, from the questions we’ve received, this scenario is happening at times. So, hopefully this example is helpful and you can use it as a reference during your future abstractions.

Next, we’ll look at the Repeat Volume Status and Tissue Perfusion Assessment Performed data element. We are frequently asked about documentation that would provide for a physician/APN/PA documentation indicating or attesting to performing a physical exam, reassessment, or review of systems. One common question states, “The H&P is completed by the MD within the specified time frame and includes a ‘Physical Exam’ tab which lists the [physician’s] findings of the exam they performed. Will this suffice for physician documentation of performing an exam?” Before we look at the guidance from the data element, I’ll address this question. No, the documentation of the findings of an exam will not suffice for physician/APN/PA documentation attesting to performing or completing an exam. While the findings documented from an exam will not suffice for physician/APN/PA documentation attesting the documentation, the findings of an exam may suffice to five of the eight parameters that are
also listed in the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element as an acceptable option to meet the data element.

To clarify this guidance, physician/APN/PA documentation sufficing the guidance on this slide, which would be acceptable to select Value “1” (Yes) for the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element, is specifically referring to physician/APN/PA documentation attesting to performing or completing an exam, and not simply the title or heading of a section within the medical records. Also, as I previously mentioned, the documentation sufficing this particular guidance is not the findings of a physical exam or review of systems. Documentation sufficing this particular bullet point must be similar to the examples provided on this slide and in the data elements.

For the Poll the Audience Question: “APN Note within the specified time frame states, ‘Review of systems negative except as noted in the H&P.’ Which Allowable Value would be selected? A, Value “1” (Yes) or B, Value “2” (No).

**Jennifer Witt:** This is Jennifer and I’ll review the question again: “APN Note within specified time frame states, ‘Review of systems negative except as noted in H&P.’ Which Allowable Value would be selected? A, Value “1” (Yes). B, Value “2” (No). I can see the responses are slowing down. So, let’s go ahead and close the poll. The answer to this question is A. Value “1” (Yes) would be selected. The APN documentation within the specified time frame indicates the APN performed a review of systems. Therefore, Value “1” (Yes) will be selected in this scenario.

**Noel Albritton:** Thanks, Jennifer. Next, we’ll move on to the review of several frequently asked questions regarding the *Severe Sepsis Present* data element. First, we’re frequently asked, “Does the physician/APN/PA documentation of both ESRD and hemodialysis or peritoneal dialysis have to be within the specified time frame?” We’ve also received questions asking if the patient is required to receive dialysis within the specified time frame. Both of these questions are related to determining if the elevated creatinine value should or should not be used as evidence of organ dysfunction. As many
of you will recall from previous versions of the manual, if there’s physician/APN/PA documentation that the patient has ESRD and is on hemodialysis or peritoneal dialysis, the elevated creatinine value would not be used as organ dysfunction. However, in manual v5.5a, the updated guidance provides a time frame for this particular documentation to decrease abstraction burden. Before we take a look at the updated guidance, the answer to the question on this slide is “Yes.” The physician/APN/PA documentation of end stage renal disease and hemodialysis or peritoneal dialysis must both be within the specified time frame, which is prior to or within 24 hours after the Severe Sepsis Presentation Time. However, they are not required to be in the same documentation. Also, for the second question on this slide, the answer is No. The patient is not required to have or received dialysis within the specified time frame.

The specified time frame for the documentation sufficing either of these sub-bullet points was added to the Severe Sepsis Present data element in manual v5.5a. As I said in the last slide, to suffice the first sub-bullet point, the physician/APN/PA documentation of ESRD and hemodialysis or peritoneal dialysis must both be prior to or within 24 hours after the severe sepsis presentation. Similarly, for the second sub-bullet point on this slide, the physician/APN/PA documentation of CKD and the baseline creatinine must both be documented prior to or within 24 hours after the severe sepsis presentation.

Also, for the Severe Sepsis Present data element, we are often asked if SIRS criteria or evidence of organ dysfunction documented in certain areas of the hospital would be disregarded. For example, this question states, “The patient has a blood pressure of 87/58 and a heart rate of 114 on an OR flow sheet. Should these values be used?” The answer to this question is No. The SIRS criteria for blood pressure documented in the operating room would not be used. Let’s take a look at the guidance from the Severe Sepsis Present data element.

For manual v5.5a, this bullet point states SIRS criteria or evidence of organ dysfunction obtained in the operating room should not be used. To
clarify, this bullet point only allows for SIRS criteria or evidence of organ dysfunction obtained in the operating room to not be used. This guidance does not include other areas of the hospital, such as dialysis, or the cath lab, or interventional radiology at this point. Therefore, SIRS criteria or evidence of organ dysfunction documented in other procedural areas of the hospital, such as dialysis, or the cath lab, or interventional radiology, would be used in abstraction for manual v5.5a.

Another scenario we are frequently asked about is documentation after the patient is discharged. This question states the patient is discharged 1/13/18. The ED RN addendum on 1/15/18 states “had pneumonia.” What time would be used for this infection? As we can see, even though pneumonia was documented, the nursing documentation was actually an addendum two days after the patient was discharged. Since this was documented after discharge, it would not be used for severe sepsis clinical criteria A for the updated guidance in manual v5.5a. Let’s review this guidance and the data element.

As you will recall, this updated guidance and the Severe Sepsis Present data element in manual v5.5a states an infection, severe sepsis, or septic shock documented after the time of discharge should not be used. So, regardless of whether the documentation after discharge refers back to an earlier time, we would not use an infection, severe sepsis, or septic shock documentation after the time of discharge.

For determining the time to use for lab results, we frequently receive questions about the new priority order found in v5.5a. This question is often asked: “If there is nursing documentation stating the creatinine is 2.8 at 1600 and documentation on the lab report with a result of 2.8 at 1630, which time should be used” for the creatinine result? The confusion regarding which time to use for the lab values appears to be due to previous manuals where we would always use the earliest available reported or resulted time for the labs meeting severe sepsis clinical criteria. However, with the updated priority order in the Severe Sepsis Present data element, the earliest reported time will not always be correct. As we can see by the question on this slide, the nurse documents the
creatinine result at 1600, and the lab report has the creatinine results at 1630. Based on the new priority order, we would use 1630 for the time of their creatinine result. Let’s review this guidance.

As you can see, this priority order is only used for determining which time to use for a lab result when multiple times are documented for that particular lab result. The primary source for determining the time is the laboratory result time documented by the lab. This is the reason 1630 was the correct time for the question on the previous slide. Secondly, the time within a narrative note that is directly associated with the laboratory test value would be used. Third, the time the lab value was documented in a non-narrative location would be used. This may be a flow sheet or a sepsis checklist tool, for example. The fourth source would be the laboratory test sample drawn or collected time and, if the lab value is noted in a narrative note without a specified time, then the known open time would be used. I want to point out that, regardless of which time is earliest, the priority order should be used to determine the appropriate time for the lab results.

For our next Poll the Audience Question: :If the following lactate result times are documented, which should be used for the time of the elevated lactate? A, lactate drawn at 0700. B, the PA notes lactate 2.5 at 0750. [C,] RN notes lactate 2.5 untimed, or D, a sepsis flow sheet with a lactate of 2.5 at 0815.

Jennifer Witt: This is Jennifer, and I’ll review the question again. If the following lactate result times are documented, which should be used for the time of the elevated lactate? A, lactate drawn 0700. B, PA notes lactate 2.5 at 0750. C, RN notes lactate 2.5 untimed, or D, sepsis flow sheet lactate 2.5 at 0815. I see the responses are slowing down. Let’s go ahead and close the poll. The answer to this question is B. The PA note which states the lactate result of 2.5 at 0750 would be used in this case based on the priority order. In this scenario, documentation of the lab result time from the lab was not included. Therefore, we moved through the priority order provided in the data element to determine which source we should use next to determine the time of the lab results. In this case, we would use the time within a narrative note that is directly associated with the lactate result.
Noel Albritton: Thanks, Jennifer. Continuing with the *Severe Sepsis Present* data element, this is another question we see frequently regarding whether to use or not use SIRS criteria for evidence of organ dysfunction. This question states, “In the H&P, the physician documented ‘CKD Stage III.’ The lab results were pulled into the H&P and show the patient’s creatinine level is 2.9. Can we disregard the creatinine of 2.9 since the physician documented CKD?” This question seems to be asked often due to the inclusion of a chronic condition in a final organ dysfunction within the note. However, as you can see, the chronic condition and elevated creatinine are not included in the same documentation, and the physician documentation does not consider the elevated creatinine to be due to the chronic condition. Therefore, in this scenario, the elevated creatinine would be used as evidence of organ dysfunction. If we were to disregard the elevated creatinine in this scenario, we would need to infer or assume that the elevated creatinine was due to the chronic condition because the physician documentation does not specify the elevated creatinine was due to the chronic condition. Next, let’s review the guidance related to this scenario.

As many of you will recall, guidance within the *Severe Sepsis Present* data element continues to allow for SIRS criteria or evidence of organ dysfunctions to be disregarded when documentation by the physician/APN/PA prior to or within 24 hours after the *Severe Sepsis Presentation Time* considers SIRS criteria or evidence of organ dysfunction to be normal for the patient or due to a chronic condition or medication. It’s important to note that physician/APN/PA documentation must include the abnormal SIRS criteria or evidence of organ dysfunction or include a reference to the abnormal criteria, and documentation must include the abnormal criteria was normal for the patient or due to a chronic condition or medication. We would not infer or assume SIRS criteria or evidence of organ dysfunction is normal for the patient or due to a chronic condition or medication.
For our next Poll the Audience Question “If the physician documents ‘Cirrhosis’ on the ‘Active Problem List,” would an elevated bilirubin not be used?’” A, yes, or B, no.

Jennifer Witt: This is Jennifer and I’ll review the question again. “If the physician documented ‘Cirrhosis’ on the ‘Active Problem List, would an elevated bilirubin not be used?” A, yes, or B, no. I see the response are slowing down, so we’ll go ahead and close the poll. And the answer to this question is B, No. Based on the documentation of cirrhosis on the active problem list alone, the elevated bilirubin would be used. As previously mentioned, the abnormal SIRS criteria or evidence of organ dysfunction must be documented as due to the chronic condition. In this scenario, the elevated bilirubin would need to be documented as due to cirrhosis to not use the elevated bilirubin as evidence of organ dysfunction.

Noel Albritton: Thanks, Jennifer. Questions are also frequently asked about why SIRS criteria for evidence of organ dysfunction are used when documented by the physician/APN/PA as due to an acute condition or acute on chronic condition. Similar to our earlier discussion, the reason SIRS criteria or evidence of organ dysfunction are used when documented as due to an acute condition or acute on chronic condition is because often the acute condition or acute exacerbation of a chronic condition is the result of the infection, severe sepsis, or septic shock. Therefore, SIRS criteria or evidence of organ dysfunction documented due to the acute condition alone would be used. Let’s review the guidance related to this.

As you can see by the guidance on this slide, SIRS criteria or evidence of organ dysfunction documented as due to an acute condition or acute on chronic condition, or an infection, should be used. The examples provided on this slide demonstrate acute conditions or acute on chronic conditions that are potentially caused or exacerbated by an infection or severe sepsis. For example, without further documentation, it’s possible the seizure, AKI, or dehydration in the first example, were caused by an infectious source. Therefore, to not use the SIRS criteria or evidence of organ dysfunction documented due to the acute condition or acute on chronic condition, further documentation would be needed.
To not use the SIRS criteria or evidence of organ dysfunction documented as due to an acute condition or acute on chronic condition, further documentation considering the acute condition or acute on chronic condition to be due to a non-infectious source is required. An example is provided on this slide, which demonstrates a creatinine of 3.8 is due to AKI, which is the acute condition. Further physician documentation considered the AKI to be due to poor oral intake over the past three days. As the guidance states, we will review the guidance under criteria A and the Severe Sepsis Present data element, which is the infection criteria to determine if oral intake is an infectious or non-infectious source. Upon referencing a medical resource, we determine poor oral intake can be caused by an infectious source or a non-infectious source. Therefore, if there’s no further documentation in the medical records supporting poor oral intake was caused by an infectious source, then this would be a non-infectious source of the acute condition, and the elevated creatinine would not be used.

As you may recall for manual v5.5a, there’s an updated guidance regarding not using less severe values of SIRS criteria or evidence of organ dysfunction when a value is documented as normal for the patient or due to a chronic condition or medication. This is one of the questions we frequently receive. If the PA notes white blood cells 1.9 secondary to chemo, should we use a white blood cell result of 2.2 for SIRS criteria? As you can see, the WBC result of 1.9 is documented as due to the medication. The WBC value of 2.2 is less severe than the WBC of 1.9. So, the white blood cell count of 2.2 would also not be used in this scenario because that’s our less severe value than 1.9. Let’s review the guidance from the data element.

This updated guidance in v5.5a refers to the bullet point directly above this particular sub-bullet point within the data element. It states if the SIRS criteria or sign of organ dysfunction should not be used, all instances of less severe values should not be used.

There are two examples provided on this slide, which are also in the data element, but we continue to receive questions regarding SIRS criteria or
evidence or organ dysfunction values that are more severe. One question we frequently receive says if the platelet count of 75 is related to chemo, should a platelet count less than 75 be used? To clarify, if the platelet count of 75 is documented as due to the medication, less severe platelet counts, which would be platelet counts between 75 to 100, would not be used. However, platelet counts that are more severe, which would be platelet counts between zero and 74, would be used. This would also be similar, but not exactly the same, for the creatinine documented as due to chronic kidney disease in the second example on this slide. The creatinine of 2.8 is documented as due to the chronic condition. So, less severe creatinine values, which would be creatinine values between 2.0 to 2.8, would not be used to meet criteria. However, creatinine values that are greater than 2.8 would be used because those values are more severe than 2.8. As you can see, determining which values are less severe will depend on a specific SIRS criteria or evidence of organ dysfunction you’re looking at.

For our next Poll the Audience Question: “If the APN states ‘HR 110 r/t meds,’ which heart rate would be used?” A, a heart rate of 100. B, heart rate 105. C, heart rate of 110, or D, heart rate of 115.

Jennifer Witt: This is Jennifer, and I’ll review the question again. “If the APN states ‘HR 110 r/t meds,’ which heart rate would be used?” A, a heart rate 100. B, heart rate 105. C, heart rate 110, or D, heart rate 115. I see the responses are slowing down, so we’ll go ahead and close the poll. The answer to this question is D, heart rate of 115 would be used. With the heart rate of 110 documented as due to the medication, the heart rates of 100 and 105 would not be used, as these heart rates are less severe than 110. However, the heart rate of 115 is higher than 110 and, therefore, more severe. So, the heart rate of 115 would still be used.

Noel Albritton: Thank you, Jennifer. To meet SIRS criteria or evidence of organ dysfunction, the abnormal value, such as a heart rate of 120, must be documented rather than simply using tachycardia to meet the severe sepsis clinical criteria. Let’s review this guidance further to clarify. We’ve received a number of questions related to the guidance on this slide. I do
want to let you guys know that further clarification has been added to the next version of the manual. However, for v5.5a, I want to discuss a few clarifying points to assist with abstraction. As you are aware, this guidance states documentation of a term that represents or is defined by SIRS criteria or sign of organ dysfunction is acceptable in place of an abnormal value. Then, several examples of terms that represent or define an abnormal SIRS criteria or sign of organ dysfunction are included. The guidance on this slide is intended to allow for terms that represent or define SIRS criteria or sign of organ dysfunction to be acceptable when documented as normal for the patient or due to a chronic condition or medication. Meaning, if the physician documents hypotension due to pain meds, the inclusion of hypotension in this documentation will suffice and not use hypotensive blood pressure readings. I would also like to take this opportunity to discuss the documentation of A-fib with tachycardia, or A-fib with RVR. But first, let’s answer this next question.


Jennifer Witt: This is Jennifer, and I’ll review the question again. “Which physician documentation would exclude the elevated heart rates from SIRS criteria?” A, A-fib with RVR. B, A-fib with tachycardia. C, A-fib now presenting with RVR, or D, history of A-fib, A-fib with tachycardia. The responses are slowing down, so let’s close the poll. The answer to this question is D. The physician documentation of history of A-fib and A-fib with tachycardia would allow the elevated heart rates to not be used as SIRS criteria. The documentation A-fib with tachycardia reflects the elevated heart rates are due to A-fib. However, since SIRS criteria or evidence of organ dysfunction documented as due to an acute condition are treated differently than criteria documented as due to a chronic condition, and since A-fib can be either acute or chronic, we need to look for documentation that A-fib is chronic in order to not use the elevated heart rate. Therefore, if there’s also physician documentation considering
A-fib to be a chronic condition for the patient, such as the documentation of history of A-fib, then the tachycardia would be documented as due to a chronic condition and, therefore, exclude the elevated heart rates.

Noel Albritton: Thank you, Jennifer. We also frequently receive questions pertaining to the documentation of a positive and negative qualifier. Often abstractors ask is the documentation a positive qualifier and a negative qualifier required to be in the same documentation to not use the infection or documentation of severe sepsis? As far as the guidance related to the positive and negative qualifiers, yes, a positive and negative qualifier must be in the same documentation to not use the particular documentation of an infection or severe sepsis. Let’s review this guidance next.

The updated guidance for v5.5a states documentation containing both a positive and negative qualifier should not be used to meet criteria. This guidance is referring to a single documentation that includes both a positive and negative qualifier. For example, if the physician documented “Possible Severe Sepsis but unlikely,” this documentation would not be used because the documentation contains both a positive and negative qualifier. I also would like to clarify, and we frequently receive questions regarding, documentation of an infection or severe sepsis with a question mark, such as “Pneumonia?” With the question mark included in the documentation of the infection or severe sepsis, this documentation would be viewed as questionable. Therefore, the documentation of the infection or severe sepsis would include a negative qualifier and would not be used. Abstractors also frequently ask if a negative qualifier provided from this slide would suffice to negate severe sepsis. I would like to clarify that as well. The guidance for the positive and negative qualifiers table refers to determining if the documentation of an infection, severe sepsis, or septic shock should or should not be used to meet criteria. Therefore, the positive and negative qualifiers are truly meant for determining if the documentation of an infection should be used for severe sepsis clinical criteria A or if the documentation of severe sepsis or septic shock should be used to select Value 1 (Yes) for the Severely Sepsis Present data element. The negative qualifiers listed on the table are not necessarily meant to
negate the presence of severe sepsis once severe sepsis has already been met. For example, if severe sepsis was met and within six hours of severe sepsis, there was physician documentation stating, “Severe sepsis evolving,” this would not be used to negate the earlier severe sepsis presentation and would not be used to select Value 2 for the Severe Sepsis Present data element.

Our last topic for today is regarding the Severe Sepsis Presentation Date and Time data element. This scenario was frequently presented. “The patient met all three severe sepsis clinical criteria at 1330. However, the physician noted ‘Severe Sepsis present on admission’ and the patient arrived to the floor for admission at 1500. Which time should be abstracted for the Severe Sepsis Presentation Time? As you can see, the confusion seems to occur due to the inclusion of the documentation that severe sepsis was present on admission. However, the earliest Severe Sepsis Presentation Date and Time should always be abstracted. So, in this scenario, we would abstract 1330 as the Severe Sepsis Presentation Time because all three clinical criteria were met at that time and it’s the earliest presentation time. Let’s review that guidance a little further.

As you can see, the first bullet point in this slide states, “For patients with multiple severe sepsis presentation times, only abstract the earliest presentation time.” In the question on the previous slide, we had multiple severe sepsis presentation times, which included 1330 when severe sepsis clinical criteria were met and the time the patient arrived to the floor for admission due to the documentation of severe sepsis being present on admission. Therefore, the earliest Severe Sepsis Presentation Time, which was 1330, would be abstracted. Next, the guidance on this slide refers to severe sepsis being documented as present on admission. The specified time at which the patient arrives to the floor or unit for admission should be abstracted for Severe Sepsis Presentation Date and Time. There are a couple of items I would like to point out. If all three severe sepsis clinical criteria are met prior to the patient’s arrival to the floor or unit for admission, then the clinical criteria will determine the Severe Sepsis Presentation Time, rather than the admission time to the floor or unit.
Secondly, this guidance is specifically referring to the earliest time the patient arrived to the floor or unit for admission. It’s not referring to the time of the order for admission, nor the time the patient’s status changed to “inpatient.” We also receive questions regarding which time to abstract when severe sepsis is documented and is present on admission when the patient has boarded in the ED. In this scenario, we would continue to abstract per the guidance. So, if an earlier *Severe Sepsis Presentation Time* is not available, then the time the patient arrived to the inpatient floor or unit for admission should be abstracted.

And, for our last Poll the Audience Question: “The PA notes at 0900, ‘severe sepsis present on admission.’ Which time should be abstracted as the *Severe Sepsis Presentation Time*?” A, ED arrival at 0730. B, ED MD note opened time 0745. C, the admit to ICU room four at 0945, or D, admission order at 0905.

**Jennifer Witt:** This is Jennifer, and I’ll review the question again. “The PA notes at 0900, ‘severe sepsis present on admission.’ Which time should be abstracted as the severe sepsis presentation time?” A, ED arrival 0730. B, ED MD note opened time 0745. C, admit to ICU room four 0945, or D, admission order 0905. The responses are slowing down, so we’ll go ahead and close the poll. The answer to this question is C. The admit to ICU room four at 0945 would be abstracted for the *Severe Sepsis Presentation Time*. As you can see, the *Severe Sepsis Presentation Time* is 0945, but the PA note at 0900 was used to determine the *Severe Sepsis Presentation Time*. In this scenario, the physician/APN/PA documentation of severe sepsis present on admission is basically providing a specific presentation time for severe sepsis. Therefore, we would use the specified time of presentation documented by the physician/APN/PA rather than the note time that included the documentation.

**Noel Albritton:** Thank you for answering those questions, Jennifer. That concludes our review of v5.5a frequently asked questions. We hope this has been helpful and thank you again for everybody for joining us today. Chris, I’ll turn it back over to you.
Christine Leber: Thank you, Noel and Jennifer, for providing that guidance on those frequently asked questions. We are just about out of time for this session. I’ll try and squeeze one question in here real quick. The question is: “If our target ordered fluid volume is to be run over seven hours, how can we assess for Persistent Hypotension within the six-hour window to meet our measures if the fluids are still running?”

Noel Albritton: This is Noel. So, regardless when the fluids completed, you would still assess for Persistent Hypotension at that time. And, if your fluid completion time and Persistent Hypotension was found greater than six hours after severe sepsis presentation, and you had Persistent Hypotension, then you would just select Value 2 for septic shock because you would not use the persistent hypotension found greater than six hours after severe sepsis for criteria for septic shock.

Christine Leber: Thank you, Noel. That is unfortunately all the time we have for today. All the questions that were submitted through the chat feature will be responded to and posted at a later date. I’m now going to turn the presentation over to Dr. Debra Price to speak to you about the continuing education credits and process. Deb, the floor is yours.

Dr. Debra Price: Chris, thank you very much. However, due to the time constraints that we have, I’m asking that everyone review the slides that I have posted and, at the end of your survey, you’ll be taken to my actual email. If you have any problems getting your certificate, click on my email and I’ll help you from there. I hope you learned something and thank you to our speakers and, of course, to Chris. I hope everyone enjoys the rest of your day. Good bye.