Hospital Inpatient Quality Reporting (IQR) Program

Inpatient and Outpatient Healthcare Quality Systems Development and Program Support

Severe Sepsis and Septic Shock: Management Bundle (Composite Measure)
Crystalloid Fluid Administration Data Element
Version 5.16 Questions and Answers
Presentation Transcript

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Donna Bullock: Hello, and welcome to today's event: *Severe Sepsis and Septic Shock Management Bundle Crystalloid Fluid Administration Data Element, Version 5.16, Questions and Answers*. My name is Donna Bullock. I am the [Hospital] IQR [Program] lead with the Inpatient and Outpatient Healthcare Quality Systems Development and Program Support. I will be your moderator for today's event. Before we begin, I would like to make a few announcements. This program is being recorded. The recording and a transcript of the presentation, along with a question and answer summary, will be posted to the Quality Reporting Center website in the upcoming weeks. That's www.QualityReportingCenter.com. If you registered for this event, a link to the slides was emailed to you a few hours ago. If you did not receive that email, you can download the slides from the Quality Reporting Center website or, during the webinar, you can use the link provided in the Handouts section. This webinar has been approved for Continuing Education credit. More information will be provided at the end of the event. If you have questions as we move through the webinar, please type them into the Ask a Question window along with the associated slide number, if possible, and we will answer questions as time allows after the event.

Our speakers for today's event are Noel Albritton, Lead Solutions Specialist with the Behavioral Development and Inpatient and Outpatient Measure Maintenance Support Contractor, and Jennifer Witt, Senior Quality Improvement Facilitator, also with the Behavioral Development and Inpatient and Outpatient Measure Maintenance Support Contractor.

The purpose of today's event is to review the *Crystalloid Fluid Administration* data element and to respond to frequently asked questions.

At the conclusion of today's event, participants will be able to understand and interpret the guidance in Version 5.16 of the specification manual specific to the *Crystalloid Fluid Administration* data element.

This slide displays a list of the acronyms and abbreviations that we may use throughout the presentation.

If we do not answer your question during the webinar, please submit your question to the QualityNet Question and Answer Tool. Noel will go over this process in detail later in the webinar.

I would now like to turn the presentation to Noel. Noel, the floor is yours.

Noel Albritton: Thanks, Donna. Hello, everyone, and thank you for joining us. For today's presentation, we will focus on the abstraction guidance and frequently asked questions pertaining to the *Crystalloid Fluid Administration* data element. We will be using the abstraction guidance found in specification manual Version 5.16, which you would use for abstraction of discharges from July 1, 2024, through December 31, 2024. You can find the SEP-1 algorithm and specification manual Version 5.16 on the QualityNet website at QualityNet.cms.gov. The *Crystalloid Fluid Administration* data element, including the notes for abstraction, can be found on pages 1-39 through 1-44 of the specifications manual. Also, I would like to point out that the *Crystalloid Fluid Administration* data element did not receive any updates to the abstraction guidance in manual Version 5.16.

Let's begin with the definition and suggested data collection question for the *Crystalloid Fluid Administration* data element. The data element's definition is documentation of initiation of crystalloid fluids within the specified time frame and complete infusion of the target ordered volume. To determine if the definition of the data element was met, the suggested data collection question asks, "Were crystalloid fluids initiated within the specified time frame and completely infused based on the target ordered volume?" During abstraction, you would select allowable value 1, 2, 3, or 4 as the answer to the suggested data collection question. The allowable value selected will then determine how the case proceeds in the SEP-1 algorithm. So, let's take a look at the portion of the SEP-1 algorithm that includes the *Crystalloid Fluid Administration* data element.

Let's review this portion of the SEP-1 algorithm and what it means when you select allowable value 1, value 2, value 3, or value 4 for the *Crystalloid Fluid Administration* data element.

You will use the abstraction guidance included in the *Crystalloid Fluid Administration* data element to determine which allowable value should be selected. Selecting value 1 (Yes) indicates the target ordered volume of crystalloid fluids were ordered and initiated within the specified time frame, and the target ordered volume was completely infused. When value 1 (Yes) is selected, the case will proceed in the algorithm to the *Crystalloid Fluid Administration Date* and *Time* data elements. Selecting value 2 (No), indicates that less than the target ordered volume of crystalloid fluids were ordered or initiated within the specified time frame, or the target ordered volume was not completely infused. Selecting value 3 (No) indicates the target volume of crystalloid fluids was NOT initiated within the specified time frame, or you are unable to determine if the target volume of crystalloid fluids was initiated. Selecting value 2 or value 3 will result in the case proceeding to category D in the algorithm which will result in the case only being in the measure's denominator. Selecting value 4 (No) indicates there is documentation the patient has an implanted Ventricular Assist Device, documentation of the patient or authorized patient advocate's refusal of IV fluids, or documentation that no fluids were ordered because the patient was not volume or fluid responsive by clinical evidence. If you select value 4 (No), the case will proceed to category B and will be excluded from the measure. Now, let's review some of the guidance and frequently asked questions regarding the *Crystalloid Fluid Administration* abstraction guidance.

Let's begin with the abstraction guidance in the *Crystalloid Fluid Administration* data element that includes the specified time frame for acceptable crystalloid fluids. This guidance specifies the time frame as six hours before through three hours after the earliest triggering event which are the initial hypotension date and time OR the septic shock presentation date and time. We often receive questions regarding the specified time frame for the *Crystalloid Fluid Administration* data element that reference the severe sepsis presentation time. It's important to note the guidance on this slide because the specified time frame for acceptable crystalloid fluids is not based on the severe sepsis presentation time.

Let's take a look at further guidance from the data element that helps us determine the appropriate target ordered volume.

We frequently receive questions via the online Q&A tool that reference a volume within 10 percent less than the 30 mL/kg volume, so let's review the abstraction guidance related to using a volume within 10 percent less than 30 mL/kg. The abstraction guidance on this slide provides instruction for when to use a volume within 10 percent less than the 30 mL/kg volume during abstraction. There must be a physician/APN/PA order for a volume of crystalloid fluids that is within 10 percent less than the 30 mL/kg for that volume to be used as the target ordered volume. It's important to note that this abstraction guidance only applies when a volume within 10 percent less than 30 mL/kg was ordered. If 30 mL/kg or more fluids were ordered, this abstraction guidance would not apply to the case. The example included on this slide and in the data element reflects how this abstraction guidance may apply to your abstractions. Specifically, we can see that 2000 mL was ordered in the example, but the patient's weight was later obtained at 74 kg, which would result in a 30 mL/kg volume of 2,220 mL. However, the physician's order for 2000 mL is within 10 percent less than the 30 mL/kg volume which meets the abstraction guidance on this slide and allows for the 2000 mL to be used as the target ordered volume. Let's take a look at a scenario we frequently see.

This question asks: "What is the target volume for this patient based only on the physician documentation below?" The patient's weight recorded in the ED was 61.67 kg. So, the 30 mL/kg volume based on the patient's documented weight would be 1850 mL. Then, there is an MD order for sepsis fluids that includes normal saline IV 1800 mL over 120 minutes. Use 1800 mL as the target volume because this is the ordered volume of fluids, and 1800 mL is within 10 percent less than the 30 mL/kg volume. Let's take a look at another scenario that's similar to this one.

This question is similar to the last, but the outcome is different based on the fluid orders. The question asks: "What is the target volume for this patient based only on the physician documentation below?" The patient's weight recorded in ED was 82 kg.

So, the 30 mL/kg volume would be 2460 mL. Then, there is an MD order for normal saline IV 1000 mL over 60 minutes and a second MD order for normal saline 1500 mL over 90 minutes. Use 2460 mL as the target volume because the physician ordered 2500 mL which would allow the 30 mL/kg volume to be met. In this scenario, you would not use a volume within 10 percent less than the 30 mL/kg volume because the ordered volume of fluids was at least 2460 mL. As I mentioned earlier, you would only use a volume within 10 percent less than the 30 mL/kg volume if that was the ordered volume of fluids. Next, let's take a look at further abstraction guidance in the *Crystalloid Fluid Administration* data element related to using a lesser fluid volume.

The abstraction guidance on this slide is also found in the notes for abstraction section of the *Crystalloid Fluid Administration* data element. This is a lengthy portion of the abstraction guidance, so please reference the data element to review more in depth. This abstraction guidance allows for a lesser volume of crystalloid fluids to be used as the target volume when there is physician/APN/PA documentation including the lesser volume and a reason for the lesser volume. This abstraction guidance requires the ordering physician/APN/PA to document the lesser volume being used and the reason for ordering a volume less than 30 mL/kg. Let's take a look at two more sub-bullet points that accompany this abstraction guidance in the data element.

This first sub-bullet point on this slide addresses scenarios where there are multiple physician orders for a lesser volume with documented reasons. When there are multiple orders for lesser volumes and documented reasons for those volumes, you would use the total of the lesser volumes ordered within the six hours before through three hours after the triggering event for crystalloid fluid administration. This second bullet point is also located under the abstraction guidance for using a lesser volume as the target volume, and it applies to cases where there is an order for a lesser volume but there is also physician/APN/PA documentation indicating the 30 mL/kg volume should be used as the target ordered volume.

In that scenario, if the documentation indicating the target volume was 30 mL/kg is within six hours after the lesser volume was ordered, you would 30 mL/kg as the target volume. Before we move onto reviewing some examples of these scenarios, I do want to point out that these bullets are used to determine the target volume you would use during abstraction. This portion of the guidance is not related to determining if the target volume was ordered and started within the specified time frame for the *Crystalloid Fluid Administration* data element. We frequently receive questions regarding cases that have documentation of a lesser volume and reason, so let's take a look at some example scenarios.

This question is similar to scenarios we frequently receive related to the abstraction guidance we discussed on the previous slides. This question asks: "Which volume would you use as the target ordered volume?" The patient weighs 90 kg. So, the 30 mL/kg volume would be 2700 mL, and the patient had initial hypotension at 08:00. At 06:00, normal saline 250 mL over 30 minutes was ordered and includes the comment: "Fluid overload." Then, at 08:15, normal saline 250 mL over 30 minutes was ordered with the comment: "Hypotensive but improving." On the MAR, 250 mL was started at 06:10 and stopped at 06:40, and the second 250 mL infusion was started at 08:15 and stopped at 08:45. You would use 500 mL as the target volume because there are multiple fluid orders for lesser volumes that include documented reasons. So, you would use the total of the lesser volumes ordered because both orders were within six hours before to three hours after the triggering event which was initial hypotension in this case. Let's take a look at another scenario.

This is another question we frequently receive where there are multiple orders for a lesser volume and only documentation of a reason for a lesser volume in one order. This question asks: "Which volume would you use as the target ordered volume?" The patient weighed 75 kg. So, the 30 mL/kg volume would be 2250 mL, and the *Septic Shock Presentation Time* was 13:00. At 11:20 normal saline 1000 mL over one hour was ordered with the comment: "Only give 1000 mL due to CHF."

Then, at 14:30 normal saline 500 mL over one hour was ordered. On the MAR, 1000 mL was started at 11:45 and stopped at 12:45, and 500 mL was started at 14:45 and stopped at 15:45. You would use 1000 mL as the target volume in this scenario because the second fluid order for 500 mL does not include a reason for the lesser volume. The abstraction guidance we previously discussed regarding multiple orders for lesser volumes only applies when there are documented reasons for each of the lesser volumes ordered. In the scenario on this slide, you would only use the lesser volume of 1000 mL as the target volume because the physician's documentation includes a reason for this lesser volume. Let's take a look at another example.

This is another question we have received and reviewed previously, but, for clarification, let's review it again today. This question asks: "Which volume would you use as the target ordered volume based only on the information below?" The patient weighed 105 kg. So, the 30 mL/kg volume would be 3150 mL, and initial hypotension was present at 21:30. Then, there is an ED physician note stating: "CHF, concern with overload, 0 mL ordered." You would use the 30 mL/kg volume of 3150 mL as the target volume based on this documentation. The abstraction guidance for using a lesser volume as the target volume requires the ordering physician to document the lesser volume they are ordering along with a reason for ordering the lesser volume. In the scenario on this slide, 0 mL is not an ordered volume, and it would not be administered at a rate greater than 125 mL/hr. Therefore, this documentation does not meet the abstraction guidance for using a lesser volume as the target volume. Next, you can participate in answering the following knowledge check question.

Would you use 250 mL as the target ordered volume for the *Crystalloid Fluid Administration* data element based only on the physician statement, "Ordering 250 mL due to pneumonia." A. Yes or B. No. We'll give you a few more seconds to select your answer.

Select A, Yes, because the physician's documentation includes the lesser volume of 250 mL and the reason of pneumonia.

We frequently see questions such as this in the online Q&A tool because the reason the physician is ordering the lesser volume is due to an infection, such as pneumonia. However, the abstraction guidance in the *Crystalloid Fluid Administration* data element does not restrict the reasons for ordering a lesser volume. Therefore, the physician documentation including a lesser volume with the reason is acceptable for using the lesser volume as the target volume. Let's take a look a few more example scenarios.

This is a frequently asked question we see which is addressed by the sub-bullet point we discussed earlier regarding an order for a lesser volume and physician/APN/PA documentation indicating 30 mL/kg is the target volume. This question asks: "Which volume would you use as the target ordered volume?" The patient weighed 62 kg, so the 30 mL/kg volume would be 1860 mL. The initial hypotension time was 18:00. Then, at 18:30, normal saline 250 mL over 30 minutes was ordered with the comment: "250 mL due to mild hypotension." Then, a physician note at 22:00 said: "Ordering 30 mL/kg due to septic shock." You would use 1860 mL as the target volume in this scenario because there is physician documentation indicating 30 mL/kg was the target volume within six hours after the order for the lesser volume, and 1860 mL is the 30 mL/kg volume. Frequently questions related to this scenario are concerned with the timing of the physician documentation indicating 30 mL/kg is the target volume for the patient. It's important to note at this point in the abstraction guidance, we are only attempting to determine the target volume based on the documentation available in the medical record. Once we determine the target volume, then we will determine if the target volume was ordered and started within the specified time frame for the *Crystalloid Fluid Administration* data element. Let's review another scenario.

This question asks: "Which volume would you use as the target ordered volume?" The patient weighed 100 kg, so the 30 mL/kg volume would be 3000 mL. Then, the *Septic Shock Presentation Time* was 09:35. The ED physician noted: "Giving 500 mL due to CKD." Then, at 09:35 LR 500 mL over 60 minutes was ordered.

An APN note at 18:00 stated, “Concerned for septic shock, pt received 500 mL earlier, adding 2500 mL for a total of 3000 mL.” You would use 500 mL as the target ordered volume because the APN documentation indicating 30 mL/kg was being given was greater than six hours after the order for the lesser volume at 09:35. In this scenario, you would disregard the APN documentation of 1800 because it was more than six hours after the lesser volume was ordered. Before we move onto the next topic, I do want to point out that it’s difficult to include and review the various scenarios and nuances you all find during abstraction. However, there are a couple examples already included in the notes for abstraction in the *Crystalloid Fluid Administration* data element. You are welcome to submit your questions via the online Q&A tool, if we did not cover a scenario today that gives you difficulty.

Now, we are going to move onto reviewing other abstraction guidance from the *Crystalloid Fluid Administration* data element.

We often receive questions related to the bullet points on this slide related to the target volume being ordered, initiated, and completely infused. First, I want to point out that the first bullet point is stating the target volume must be ordered and started within the specified time frame based on either initial hypotension or septic shock. The second bullet point is stating that there must be documentation that the target volume was completely infused to select value 1 (Yes) for the *Crystalloid Fluid Administration* data element. The third bullet point clarifies that the target volume does not need to be completely infused within the specified time frame. To be clear, to select value 1 (Yes), the target volume of fluids must be ordered and started within the specified time frame, but the target volume is NOT required to be completely infused within the specified time frame. Questions often arise because the abstraction guidance on this slide requires the target volume to be documented as completely infused to select value 1 (Yes). So, since the target volume must be documented as completely infused, let’s take a look at the abstraction guidance that helps you determine if the target volume was completely infused.

The abstraction guidance on this slide specifies the documentation necessary to determine that the target volume was completely infused. Whether the target volume is met by a single infusion or multiple infusions, each infusion must have a start time and rate, duration, or end time, such as the examples on this slide to determine that the infusion was completely infused. Again, the target volume is only required to be ordered and started within the specified time frame; it is not required to be completely infused within a specified time frame. There are several examples included under the bullet points on this slide within the notes for abstraction of the *Crystalloid Fluid Administration* data element. However, let's review an example scenario that we frequently receive.

This question asks: "Was the target ordered volume of crystalloid fluids completely infused based only on the documentation below?" The patient weighed 87 kg, so the 30 mL/kg volume would be 2610 mL. The *Septic Shock Presentation Time* was 18:30. At 17:15, the EMS documentation states: "Started 1000 mL normal saline." The ED arrival time was 17:50. Then, at 18:20, normal saline 2000 mL at 1000 mL/hr was ordered. On the MAR, normal saline 1000 mL was started at 18:23 at 1000 mL/hr. A second infusion of normal saline 1000 mL was started at 19:25 at 1000 mL/hr.

No, in this scenario, the target volume was not documented as completely infused due to the EMS infusion documentation only containing the start time of the prior to arrival infusion and not including a rate, duration, or end time. You would not use the arrival time to the ED as the completion time for the fluids that were started prior to arrival because the documentation does not refer to the fluids being stopped or completed at that time. You would disregard the prior to arrival infusion in this case and select value 2 (No) for the *Crystalloid Fluid Administration* data element based on the information included in this example. Let's take a look at another example that we frequently receive.

This scenario is similar to the previous one; however, the EMS documentation of the prior to arrival fluids is slightly different. This question asks: "Was the target ordered volume of crystalloid fluids completely infused based only on the documentation below?"

The patient weighed 95 kg, so the 30 mL/kg volume would be 2850 mL. The initial hypotension time was 06:00. The EMS documentation at 05:00 states: "Started 1000 mL normal saline bolus." The ED arrival time was 05:45. At 06:40, the physician ordered normal saline 2000 mL over two hours. On the MAR, you can see 06:45 was the start time for 1000 mL of normal saline, and the second 1000 mL infusion was started at 07:50. No, you would not determine the target volume to be completely infused based on this documentation because a rate, duration, or end time is not available for the prior to arrival fluids. The inclusion of "bolus" in the EMS documentation often causes questions during abstraction because terms such as "bolus" are acceptable in physician/APN/PA fluid orders. However, the documentation of the fluid administration must contain the start time and a rate, duration, or end time to determine that the target volume was completely infused. Similar to the previous example, you would disregard the prior to arrival fluids in this case and select value 2 (No) for the *Crystalloid Fluid Administration* data element based only on the information on this slide.

Next, I will turn it over to Jennifer to continue our review of the abstraction guidance for fluid orders.

Jennifer Witt: Thanks, Noel. This is a portion of the abstraction guidance that specifies the requirements for physician/APN/PA fluid orders. The first sub-bullet point states that orders are required for fluids with the exception of prior to arrival infusions and infusions started in the operating room which are discussed in other portions of the abstraction guidance. Secondly, fluid orders must include the fluid type, volume, and a rate or time over which the fluids are to be given. The third sub-bullet allows for terms such as "bolus," "wide-open," or "open" to be used as the infusion rate or duration within the fluid orders. Again, note that this abstraction guidance is specific to fluid orders. If you recall from our earlier discussion, there must be documentation of a start time and rate, duration, or end time specific to the infusion administration to determine the infusion was completely infused. Therefore, if you have an infusion ordered as a bolus, there must be documentation of the start time and specific rate, duration,

or end time for the actual fluid administration. If there was prior to arrival fluid administration documentation that only refers to the infusion given as a bolus, such as the previous example, you would not use that infusion toward the target volume unless there was documentation of the actual rate, duration, or end time specific to the infusion. So, terms such as "bolus," "wide-open," and "open" are only acceptable to meet the rate or duration requirement within fluid orders. All infusions used toward the target fluid volume must have a complete order per the abstraction guidance under crystalloid fluid orders, and all infusions must have a start time and rate, duration, or end time reflecting the actual fluid administration. Before we move onto discussing other *Crystalloid Fluid Administration* guidance, you can participate in answering the next knowledge check question.

Would you use the prior to arrival fluids toward the target ordered volume based only on this EMS documentation? It says, "Normal saline 1000 mL bolus 16:25 to 17:10." A. Yes. B. No. We'll give you a few more seconds to select your answer.

Select A, Yes, because the EMS documentation of the prior to arrival fluids includes the start and stop time for the bolus infusion. I would like to address one more point regarding the use of bolus administrations during abstraction. Occasionally abstractors report that their hospital infuses all boluses at a certain rate and ask if the rate their hospital uses for all boluses can be used to determine the fluids were completely infused. Unless the rate for the bolus is included in the medical record documentation specific to the fluid administration, you would not assume the bolus infusion was given at a particular rate. The abstraction guidance regarding documentation of a start time and rate, duration, or end time continues to apply so that you can determine the target volume was completely infused per the abstraction guidance. Now, let's take a look at some other *Crystalloid Fluid Administration* abstraction guidance.

The abstraction guidance on this slide includes the requirements for all fluids used toward the target volume to be administered at greater than 125 mL/hr. You would not use any fluids with an infusion rate of 125 mL/hr or

less toward the target fluid volume. There are a couple questions we frequently receive from abstractors related to this abstraction guidance that I would like to review. First, we have received questions asking if the bullet point on this slide allows for colloid fluids to be used to meet the *Crystalloid Fluid Administration* data element. This question is based on the inclusion of "colloid" in the bullet point. However, this bullet point is specific to the rate requirement for all fluids used toward the target volume. It is not providing the specific guidance on which fluid types are acceptable for meeting the data element. There is other abstraction guidance within the notes for abstraction that provide the specific requirements for acceptable crystalloid and colloid fluids. Again, the bullet point on this slide is only specific to the rate requirement; it is not providing the specific abstraction guidance regarding the type of fluid. Another question we often receive related to this abstraction guidance is based on combining infusion rates for multiple infusions to equal more than 125 mL/hr. In those scenarios, abstractors often have two or more infusions running at the same time, but the infusions have rates that are 125 mL/hr or less. For example, you may have two infusions running at the same time, both have rates of 75 mL/hr, and you question if the rates for both infusions can be combined to equal 150 mL/hr. However, the abstraction guidance only allows for infusions with a rate of greater than 125 mL/hr to be used toward the target volume. So, you would not combine multiple infusion rates to equal more than 125 mL/hr. You would disregard any infusions with a rate of 125 mL/hr or less. Next, let's take a look at the abstraction guidance related to acceptable crystalloid fluids.

We often receive questions asking if a particular fluid type would be acceptable to use for meeting the *Crystalloid Fluid Administration* data element. So, let's review the abstraction guidance that is specific to acceptable crystalloid fluids. The bullet point on this slide refers to crystalloid or balanced crystalloid solutions as being acceptable. Then, the inclusion guidelines for abstraction includes a list of acceptable crystalloid solutions that are more commonly used, but it's important to note that this is not all-inclusive.

Often your questions will include fluid types that are not included in the inclusion guidelines for abstraction. As long as the fluid is a crystalloid or balanced crystalloid, it would be acceptable to use toward the target fluid volume. However, if you are unsure if a particular fluid is a crystalloid or balanced crystalloid, you should consult a medical resource such as a physician, pharmacist, or literature. Our team responding to your questions via the online Q&A tool does not have a list of crystalloid or balanced crystalloid solutions other than the fluids listed in the inclusion guidelines for abstraction on this slide. So, our suggestion when the medical record includes an infusion that is not listed in the inclusion guidelines for abstraction is to consult a medical resource to determine if that particular fluid is a crystalloid or balanced crystalloid solution. Next, I would like to review the abstraction guidance related to selecting value 4 (No) for the *Crystalloid Fluid Administration* data element.

The abstraction guidance on this slide is specific to scenarios where you would select value 4 (No) for the *Crystalloid Fluid Administration* data element, which would exclude the case from the SEP-1 measure. This slide includes two of the three sub-bullet points under this guidance for selecting value 4 (No). The first sub-bullet point allows for you to select value 4 when there is documentation in the medical record that the patient has an implanted ventricular assist device, or VAD. To select value 4, the documentation of the implanted ventricular assist device must be prior to or at the time of identifying the need for crystalloid fluids. Typically, documentation of the patient having a ventricular assist device is clear within the medical record, but we do receive questions occasionally asking if other devices such as a pacemaker would meet this abstraction guidance for selecting value 4. However, since this abstraction guidance is specific to ventricular assist devices, you would not select value 4 for the *Crystalloid Fluid Administration* data element based on documentation of another device such as a pacemaker. The second sub-bullet point on this slide allows for value 4 to be selected when there is documentation that the patient or authorized patient advocate refused IV fluid administration prior to or within six hours following septic shock presentation.

As many of you are aware, refusal of IV fluids is also addressed in the *Administrative Contraindication to Care Severe Sepsis* and *Septic Shock* data elements. However, this abstraction guidance is also included in the *Crystalloid Fluid Administration* data element because the documented refusal can be outside of the specified time frame for the *Administrative Contraindication to Care Severe Sepsis* data element, and the *Crystalloid Fluid Administration* data element can be reached in the algorithm prior to reaching the *Administrative Contraindication to Care Septic Shock* data element. In that particular scenario, selecting value 4 for the *Crystalloid Fluid Administration* data element prevents the case from failing the measure when IV fluids were refused and allows the case to be excluded upon selecting value 4. There is one more sub-bullet point that also allows value 4 to be selected, so let's take a look at that one on the next slide.

As I mentioned, this is the third sub-bullet point under the abstraction guidance for selecting value 4 for the *Crystalloid Fluid Administration* data element. This bullet point allows for you to select value 4 (No) and exclude the case when there is physician/APN/PA or nursing documentation that indicates no fluids were ordered because the patient was not fluid responsive based on the cardiac output, cardiac index, stroke volume, or stroke volume index. This abstraction guidance is looking for documentation reflecting that no fluids were ordered because the patient's cardiac output, cardiac index, stroke volume, or stroke volume index [were used to determine] the patient would not respond to IV fluid resuscitation. There are a few frequently asked questions that we have received via the online Q&A tool related to this abstraction guidance, and we will take a look at those next.

With the abstraction guidance for selecting value 4 from the previous slide in mind, this question asks: "Does the physician/APN/PA or nursing documentation required to state, 'No crystalloid fluids were ordered because the patient was not volume or fluid volume responsive?'" The answer is No. The abstraction guidance on the previous slide only requires documentation indicating no crystalloid fluids were ordered because the patient was not volume and not fluid responsive.

Therefore, you are reviewing for documentation indicating why no crystalloid fluids were ordered in this case rather than reviewing for this explicit statement: "No crystalloid fluids were ordered because the patient was not volume or not fluid responsive." Let's take a look at another question related to this abstraction guidance.

This is another question we have received via the online Q&A tool. It asks: "Is the physician/APN/PA or nursing documentation required to include the measurement value and the invasive or non-invasive method used to measure the cardiac output, cardiac index, stroke volume, or stroke volume index?" The answer is No. The measurement value for the cardiac output, cardiac index, stroke volume, or stroke volume index is not required to be included in the documentation, and the method used to obtain the cardiac output, cardiac index, stroke volume, or stroke volume index is not required to be included in the documentation. The abstraction guidance is only looking for the physician/APN/PA documentation indicating the fluids were not ordered because, based on the cardiac output, cardiac index, stroke volume, or stroke volume index, the patient would not respond to fluid resuscitation. The abstraction guidance includes the reference to invasive or noninvasive measurements of the cardiac output, cardiac index, stroke volume, or stroke volume index simply to reflect that any method used to obtained the cardiac output, cardiac index, stroke volume, or stroke volume index is acceptable. As far as the documentation requirements for meeting this abstraction guidance and selecting value 4, the documentation is not required to include the actual measurement value nor include the method used to obtain the measurement. Next, let's review a couple example scenarios related to this abstraction guidance.

This question asks: "Would you select value 4 (No) for the *Crystalloid Fluid Administration* data element based only on the physician documentation below?" Hospitalist note states: "Severe sepsis patient with hypotension, unlikely to respond to fluid resuscitation based on cardiac output." The answer to this question is Yes.

You would select value 4 (No) for the *Crystalloid Fluid Administration* data element based on this physician's documentation because it indicates that no fluids were ordered because, based on the cardiac output, the patient would not be fluid responsive. For the next example scenario, you can participate in answering the knowledge check question.

Would you select value 4 (No) for the *Crystalloid Fluid Administration* data element based only on the physician documentation of "ordering 500 mL due to stroke volume"? A. Yes. B. No. We'll give you a few more seconds to select your answer.

Select B, No, because the physician's documentation states they are ordering a volume of fluids based on the stroke volume. Since the documentation does not indicate that no fluids were ordered, you would not select value 4 (No) for the *Crystalloid Fluid Administration* data element based on this documentation. I would like to review one more portion of the *Crystalloid Fluid Administration* abstraction guidance before we move on, and that abstraction guidance is related to using the ideal body weight for determining the target fluid volume.

As I mentioned, the abstraction guidance on this slide provides the requirements for using the ideal body weight, predicted weight, dosing weight, and adjusted body weight to determine the 30 mL/kg target volume. To use one of these weights, there must be physician/APN/PA documentation in the medical record indicating the patient is obese or has a BMI greater than 30 and documentation that the ideal body weight is being used to determine the target volume. The ideal body weight value must be documented within the medical record as well, but it is not required to be documented by the physician/APN/PA. Generally, questions submitted related to this guidance are asking if documentation in a particular medical record meets the requirements to use the ideal body weight to determine the target volume. As long as the medical record documentation meets the requirements included on this slide, it would be acceptable to use the ideal body weight to determine the target volume. However, we also receive questions asking if the documentation is required to be documented by the same physician and if the required

documentation must be within a specified time frame. You will note in the abstraction guidance on this slide, it does not require all of the requirements to be documented by the same physician or by the physician that ordered crystalloid fluids. Therefore, one physician can document the patient has a BMI greater than 30, another physician can document the ideal body weight was being used, and the documentation would meet the physician/APN/PA documentation requirements. Also, you will note that this abstraction guidance does not require the documentation to be within a specified time frame. Generally, you would expect this documentation to be near the time 30 mL/kg were ordered, but the documentation is not required to be. Let's review one more example scenario related to this abstraction guidance.

This question asks: "Which weight would you use to determine the target ordered volume?" The patient weighs 125 kg, and 30 mL/kg equals 3750 mL. The PA note states: "Sepsis fluids based on IBW of 75 kg. BMI is 29." You would use the 30 mL/kg volume based on the patient's documented actual weight of 125 kg which would result in the target volume of 3750 mL. You would not use the ideal body weight to determine the 30 mL/kg volume in this scenario because the documented BMI is 29. If the PA's documentation included a BMI that was greater than 30 or documentation of obesity, then you would use the ideal body weight of 75 kg to determine the 30 mL/kg volume.

We are going to use the next few minutes to review the knowledge check questions and responses. So, hopefully you are clear on why we selected those responses.

The first question asked was, "Would you use 250 mL as the target ordered volume for the *Crystalloid Fluid Administration* data element based only on the physician statement of ordering 250 mL due to pneumonia?" A. Yes. B. No. You would select A, Yes, because the physician's documentation includes the lesser volume of 250 mL and the reason of pneumonia. This question was intended to clarify that the documented reason for ordering a lesser volume is not restricted.

So, even if the physician/APN/PA documentation states they are ordering a lesser fluid volume due to an infection such as pneumonia, it is still acceptable for meeting the documentation requirements to use a lesser volume. Let's take a look at the next knowledge check question.

The second knowledge check question was, "Would you use the prior to arrival fluids toward the target ordered volume based only on the EMS documentation of normal saline 1000 mL bolus 16:25 to 17:10?" A. Yes. B. No. Select A, Yes, because the EMS documentation of the prior to arrival fluids includes the start and stop time for the bolus infusion. This question was intended to point out the difference when abstracting crystalloid fluids that are only documented as a bolus versus fluids documented as a bolus that include the infusion start time and a rate, duration, or end time. If you recall from the abstraction guidance, an infusion start time and a rate, duration, or end time are required to determine the infusion was completely infused. Additionally, if you think of the other data elements within the measure, you will need to be able to determine when the target fluid volume was completely infused to determine if other elements such as *Persistent Hypotension* and *Septic Shock* were met. Therefore, it's important for abstraction purposes that you only use fluids toward the target volume that have a start time and a rate, duration, or end time documented. I also want to point out that, while the example on this slide refers to EMS documentation of fluids, the abstraction guidance for determining the target volume to be completely infused also applies to fluids ordered in the hospital. For example, if the physician order a 1000 mL normal saline bolus, there must be documentation of a start time and rate, duration, or end time for that infusion to determine it completely infused. Again, you would not assume the rate of the actual administration based on the inclusion of "bolus" in the order. Now, let's take a look at the last knowledge check question.

The last knowledge check question was, "Would you select value 4 (No) for the *Crystalloid Fluid Administration* data element based only on the physician documentation of ordering 500 mL due to stroke volume?" A. Yes. B. No.

Select B, No, because the physician's documentation states they are ordering a volume of fluids based on the stroke volume rather than documentation does not indicate that no fluids were ordered. We see questions like this one submitted at times because the physician's documentation includes the reference to the stroke volume. However, in this scenario, the physician is ordering a lesser volume of fluids based on the reason. So, this would be acceptable physician documentation of a lesser volume and reason. However, since this documentation is not referring to no fluids being ordered for the patient, you would not select value 4 (No) for the *Crystalloid Fluid Administration* data element. We also receive questions occasionally that include scenarios where there is acceptable physician/APN/PA or nursing documentation indicating no fluids were being ordered because the patient was not fluid responsive based on the cardiac output, cardiac index, stroke volume, or stroke volume index, but there are orders for fluids in the medical record. In those scenarios, you would continue to select value 4 (No) for the *Crystalloid Fluid Administration* data element based on the documentation meeting the abstraction guidance for selecting value 4.

That concludes our review of the updates and frequently asked questions for the *Crystalloid Fluid Administration* data element. Thank you for participating in our review of the updates. Next, I will turn it over to Noel to review how to submit questions via the QualityNet Inpatient Question and Answer Tool.

Noel Albritton: Thanks, Jennifer. First, if we did not get to your question during the webinar, please submit your question to the QualityNet Inpatient Question and Answer Tool via the link on this slide. If your question is about a specific slide, please include the slide number. From the QualityNet.cms.gov website, you can search for existing questions and answers or submit a new question. To search for an existing question and answer, type the topic or data element into the search box and select search. All Q&As pertaining to that topic will appear, and you can review the existing Q&As to find your answer.

The existing Q&As are for educational purposes, and it's important to ensure the Q&A you are referencing is in agreement with the current manual guidance based on the discharge period you are abstracting. We are continually reviewing and updating the existing Q&As, so it's important to review the existing Q&As often to ensure the responses continue to apply to your questions. Also, from the Quality Question and Answer Tool page, you can submit your own question by selecting the Ask a Question button.

When submitting a question to the support team, you must complete the form that includes your name and contact information. The response to your question will be sent via email to the email address you include on this form.

Next, you will select the Program. For abstraction questions for the SEP-1 measure, select Inpatient Measure and Data Element Abstraction. Questions are often submitted to other programs by mistake, and it may take longer to get a response if the question has to be re-routed to the correct support team. So, for SEP-1 abstraction questions, the program to select is Inpatient Measures and Data Element Abstraction.

After selecting the Inpatient Measures and Data Element Abstraction program, you will then select the Topic. For SEP-1 abstraction questions, you can select one of the topics under Hospital Inpatient Sepsis. The topics listed are by the data elements that are included in the SEP-1 measure. I do want to point out that occasionally abstractors will select one of the topics under Hospital Inpatient-ED. Selecting a topic under Hospital Inpatient-ED will send your question to another location, and it will need to be re-routed back to our team. So, ensure you are selecting only a topic listed under Hospital Inpatient Sepsis.

The next required field is the Discharge Period. It is important to select the appropriate discharge period because answers to your questions may vary slightly depending on the manual version. Next, you will add the subject for your question in the Subject field. Then, enter your question into the Please Describe Your Question field.

It's important that no PII or PHI is included in your submitted questions. Also, we are unable to receive screenshots or attachments. Submitted abstraction questions should be concise and only include the information specific to the topic being questioned. After you have entered your question, you would next click the Submit Question button. The support team will respond to your question as quickly as possible. So, that is how you can review existing Q&As and submit a question to the support team. Donna, I will turn it back over to you.

Donna Bullock: Thank you, Noel. Now, we have time to answer some of the questions submitted during the webinar. This is our first question. Noel, it is my understanding that there are few acceptable reasons for giving no fluids when the patient is hypotensive. Would MD documentation of no fluids due to volume overload be accepted?

Noel Albritton: Thanks, Donna. This is Noel. Okay, would the MD documentation of no fluids due to volume overload be accepted? No. So, this documentation doesn't meet the abstraction guidance for using a lesser volume as the target volume. It also does not meet the abstraction guidance for selecting value 4 (No) which can occur when there are no fluids that are ordered. I assume that this question is related to the lesser volume abstraction guidance since it's including a reason in the documentation here. So, that abstraction guidance for using a lesser volume requires a physician documentation to include a lesser volume with the reason and then an order for that lesser volume. So, you have to meet those requirements, or the documentation has to meet those requirements, to use the lesser volume as a target ordered volume.

Donna Bullock: Thank you. Then, here's our next question. It pertains to slide 16. The "still hypotensive" does not state a concern for fluid overload. Why is it added to the previous 250 milliliters?

Noel Albritton: This is Noel again. So, this slide is an example of the abstraction guidance that addresses multiple physician/APN/PA orders for lesser volumes with documented reasons. In that scenario, when there's multiple orders that have lesser volumes and they have documented reasons for those lesser

volumes, you would use the total of those lesser volumes that are ordered within the six hours prior through three hours after the triggering event. So, in the scenario on slide 16, where you have one order for 250 milliliters, that has the reason of concern for fluid overload. Then, you have a second order for 250 milliliters that refers to "still hypotensive." Both of those orders for lesser volumes include reasons, and, since they're within that timeframe that's in the extraction guidance, you would combine those two lesser volumes to use 500 milliliters as the target volume in that scenario.

Donna Bullock: Thank you. This is our next question. Would CMS consider only requiring fluid exception from one provider, even if multiple providers order fluid? We are a teaching hospital and have multiple residents, attendings, and handoffs. Fluid is often ordered by multiple providers, and we frequently fail the fluid exception, even if one of the providers has documented it.

Noel Albritton: So, this is a good question, and I know a lot of you have had the same question. So, currently, for manual Version 5.16, we went over that guidance today, and the ordering provider or physician must also be the one that documents the lesser volume and reason for the lesser volume. However, if you go out to the QualityNet website where the specifications manuals are published, you'll see manual Version 5.17, and that will be for discharges January 1, 2025, and beyond. So, the abstraction guidance though in that manual version has already been updated to allow for multiple physicians to order and document those lesser volumes and reasons. So, the requirement that's currently in there, that you're using today for manual Version 5.16, won't be in there or will be updated anyway when you abstract 2025 discharges.

Donna Bullock: Thank you, Noel. Our next question: Does the full target volume of crystalloid fluids need to be infused completely within three hours of initial hypotension/septic shock presentation date and time or whichever comes first?

Noel Albritton: Thanks, Donna. This is another good question that we see fairly often, and I know we addressed some of that during the presentation today.

We can clarify it again here too. The abstraction guidance does not require the target volume of fluids to be completely infused within three hours of either triggering event. The abstraction guidance only requires the target volume be ordered and started within the six hours before to three hours after the triggering events. There must be documentation that the fluids were completely infused, but it is not required that they be completed within that specified timeframe.

Donna Bullock: Okay, thank you. We have another question. Regarding our heart failure/ fluid overload patients where MDs are hesitant to order fluids, is it acceptable for the MD to indicate the goal volume of fluid as 100 milliliters for the patient, and we then give 100 milliliters of an antibiotic that has a start/end time/end rate greater than 125 milliliters an hour?

Noel Albritton: So, this is Noel again. So, the short answer is yes, if you have the physician documentation that meets the abstraction guidance for using a lesser volume as the target volume. So, in this scenario, you have physician documentation that they're giving 100 milliliters due to heart failure or fluid overload. Then, the physician ordered an antibiotic that was diluted in crystalloid fluids, and that order is complete, meaning it includes the fluid type and volume, rate, everything. Then, there's documentation that it was ordered and started within a specified time frame for crystalloid fluids. In that scenario, yes, the dilution fluids given with the antibiotic would be acceptable to meet that in a lesser volume of 100 milliliters. Toward the bottom of the *Crystalloid Fluid Administration* data element, you can find the abstraction guidance related to using dilution fluids mixed with medications. So, if the target volume is not met by crystalloid fluids that aren't used for dilution, then, yes, you can use the dilution fluids to meet that lesser volume and target volume.

Donna Bullock: Thanks, Noel. Here's our next question. Can the guidelines for fluids ordered within 10 percent of the 30 milliliters per kilogram also be applied to fluids ordered per ideal body weight for BMIs greater than 30?

Noel Albritton: So, yes. This is another good question that we see fairly often. In this scenario, we kind of mentioned this during the presentation also.

We are first going to determine the target volume based on the physician documentation and the patient's weight. In this case, assuming the physician documentation requirements are met to use the ideal body weight to determine the target volume or 30 milliliters per kilogram volume, then we would be able to determine what 30 milliliters per kilogram is. That's based on the patient's ideal body weight. Then, looking at the fluid orders, if the volume ordered was within 10 percent of the patient's 30 milliliters per kilogram volume based on the ideal body weight, then that ordered volume that's within 10 percent would be acceptable.

Donna Bullock: Thanks, Noel. This question pertains to slide 14. The lesser volume option for crystalloid fluids is discussed. Is there a limit of the documentation of the lesser volume? Must it be within three hours after the triggering event? The guidance is clear that the documentation must be by the ordering clinician, but we often see that there is a statement that includes all the appropriate criteria that is documented later in the stay.

Noel Albritton: This is Noel again. So, I'll address a couple of these questions that are in this one. So, is there a limit of the documentation of the lesser volume? I assume that's referring to the volume. Is there like a minimal limit that's acceptable? The answer for that is no. There's no minimum volume provided in the extraction guidance, in this case. The key there is the lesser volume that's documented and ordered by the physician must be an ordered volume, and it must be able to be administered at greater than 125 milliliters per hour. So, while there's no minimum, as long as the medical record reflects the lesser volume was infused at greater than 125 milliliters per hour, it would be acceptable. Then, must it be within three hours after the triggering event? I'll address a couple of things there.

First, the target volume, whether it's 30 milliliters per kilogram or a lesser volume based on the physician documentation, all acceptable crystalloid fluids must be ordered and started within that specified timeframe based on a triggering event. As far as the required physician documentation to use a lesser volume with a reason, the abstraction guidance does not include a specified time frame for that physician documentation.

The order, you know, would still have to be within the specified time frame, but, as far as the requirement for the physician to document a lesser volume with a reason, there's no specified time frame for that. Hopefully, that got all of the questions in that one question.

Donna Bullock: Thank you, Noel. The next question pertains to slide 11: Order for two liters only based on weight, 2,040 milliliters required. It looks like the two liters would be my target volume. However, if I hang an antibiotic with 100 milliliters, would that impact time when target ended? Would I use it?

Noel Albritton: So, no. In this scenario, the 30 milliliters per kilogram volume is 2,040 milliliters, and the physician ordered two liters. The two liters are within 10 percent less than 2,040 milliliters. So, that ordered volume of two liters, that's within 10 percent less, would be acceptable as the target volume. You would not need to use the dilution fluids that are mixed with the antibiotic in this case, because that target volume of two liters is acceptable without using the dilution fluids. If, let's say, the 30 milliliters per kilogram volume was 2,040 milliliters, and the physician ordered, I don't know, 1,800 milliliters, then you may want to use the dilution fluids to get to whatever the target volume would be, to where it'd be acceptable. You wouldn't need to use dilution fluids unless you had to have them basically to reach the target volume.

Donna Bullock: Okay. Thank you. Here's our next question. In cases of patients with renal failure, CHF, and so on, the ordering physician document must [note] the reason for less than protocol fluid. Is there a minimum volume or minimum rate that must be administered to be acceptable? Did I ask that already?

Noel Albritton: We had a similar one, but I can clarify again if you'd like.

Donna Bullock: I would say please do.

Noel Albritton: So, again, for lesser volume, there's no minimum volume, as I mentioned earlier. As far as the minimum rate that's mentioned in this question, all acceptable fluids, regardless of the target volume, all acceptable fluids used to meet the *Crystalloid Fluid Administration* data element have to be administered at 126 milliliters per hour or greater.

Fluids infused below that rate are considered maintenance fluids, instead of for a fluid resuscitation. So, let's see, I believe that's everything that was in that question, but feel free to correct me.

Donna Bullock: All right, I think you did it. Here's our next question. Can you provide any insight on how pre-arrival fluid administration, EMS, can be included within the 30 milliliter per kilogram if within the fluid resuscitation volume? Thank you.

Noel Albritton: Sure. So, also in the *Crystalloid Fluid Administration* data element, there is a section. I'm not what page it's on, 1-42 of the specifications manual. There's an exception for prior to arrival fluids, and that provides the guidance for the documentation requirements for using prior to arrival fluids, whether it's EMS, long-term care, any of those fluids. The documentation requirements are in that section of the abstraction guidance. As far as including the prior to arrival fluids in the 30 milliliters per kilogram volume, as long as the documentation requirements that are mentioned in the abstraction guidance are met, then you would include those prior to arrival fluids in 30 milliliters per kilogram volume. If the documentation requirements were not met, if they were missing an end time, rate and duration, that kind of stuff, if any of that information was missing, then you would just disregard the prior to arrival fluids and continue looking for the fluids administered in the hospital.

Donna Bullock: Thank you. We are running out of time, but we have a few more minutes for a few more questions. Here's our next one. Is there any scenario you can pass the fluid data element when nursing only documents a start time, but no stop time?

Noel Albritton: Sure. So, in this case, if, let's say, on the MAR, you have a start time, but there's no end or stop time for an infusion, then you would defer to the ordered infusion rate or duration. So, if the order was for 1,000 milliliters per hour or administer over one hour, that rate or duration would be acceptable for determining when that infusion completed. It is not required anyway that there be a stop time or end time documented on the MAR.

When you do have the start time and stop time on the MAR, then we generally use those time stamps to determine when the fluids were actually administered. Hope that helps.

Donna Bullock: Great. Thank you, Noel. This question pertains to slide 39. I'm sorry; it's going to be our last question. If the provider documents the patient is obese, but the patient's BMI recorded in the ED triage note by the RN is less than 30, can ideal body weight still be used to determine the target ordered volume?

Noel Albritton: So, yes, in this case, you still have the physician documentation requirements that are included in the abstraction guidance. The requirement for the physician to document the patient has obesity or BMI greater than 30 would still be met in this documentation. So, if you recall, we abstract at face value. So, we would take that provider documentation that the patient has obesity, along with the documentation that they're ordering fluids based on the ideal body weight, to meet the abstraction guidance to use the ideal body weight to determine the 30 milliliters per kilogram volume.

Donna Bullock: Okay. I am sorry, but that is all we have time for questions today. This webinar has been approved for 1.5 continuing education credits. If you registered for today's event, an email with the link to the survey and continuing education information will be sent to you within two business days. If you did not register for the event, please obtain this email from someone who did register. More information about our continuing education processes can be found by clicking the link on this slide.

That concludes today's presentation. Thank you for joining us. Enjoy the rest of your day.