Hospital Inpatient Quality Reporting (IQR) Program

Support Contractor

SEP-1 Early Management Bundle, Severe Sepsis/Septic Shock: Providence Tarzana Medical Center's Sepsis Journey and v5.4 Frequently Asked Questions

Presentation Transcript

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Our Sepsis Journey

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SEP-1 Early Management Bundle, Severe Sepsis/Septic Shock: v5.4 (FAQs)

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July 17, 2018
2 p.m. ET

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Candace Jackson: Thank you everyone for joining today's presentation titled, *SEP-1 Early Management Bundle, Severe Sepsis/Septic Shock: Providence Tarzana Medical Center's Sepsis Journey and Version 5.4 Frequently Asked Questions*. I am Candace Jackson, the Project Lead for the Hospital Inpatient Quality Reporting Program with the Hospital Inpatient Values, Incentives, and Quality Reporting Outreach and Education Support Contractor. I will be the moderator for today's event. 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* and to the *QualityNet* site at a later date. If you are registered for this event, a reminder email, as well as the slides, were sent out to your email about a few hours ago. If you did not receive that email, you can download the slides at our inpatient website *www.QualityReportingCenter.com*. If you have a question as we move through the webinar, please type your question into the chat window. We will not be using the raised hand feature for today's webinar. For our presenters to best answer your question, we request that, at the beginning of your question, please type the slide number into the chat window with it. As time allows, we will have a question-and-answer [Q&A] session at the conclusion of the webinar. Applicable questions that are not answered

during the question-and answer-session at the end of today's webinar will be posted to the *www.QualityReportingCenter.com* website at a later date.

I would now like to welcome and introduce our guest speakers for today: Dr. Jamie Eng, Associate Director Emergency Department; Dr. Howard Davis, Chief Medical Officer; Dr. Andre Vovan, Regional Chief of Clinical Effectiveness; and Steve Perry, Performance Improvement Review Nurse, all from Providence Tarzana Medical Center; and Noel Albritton, Lead Solution Specialist; and Jennifer Witt, Senior Health Informatics Solutions Coordinator from the Hospital Inpatient and Outpatient Process and Structural Measure Development and Maintenance Support Contractor.

At the end of today's presentation, participants will have a better understanding of Providence Tarzana Medical Center's sepsis journey and also will have a better understanding of the abstraction guidance with the sepsis measure in version 5.4 of the specifications manual.

This slide provides a list of the acronyms that we will use throughout today's presentation.

I would now like to turn the presentation over to our first speakers for the day, Dr. Eng and Steve Perry.

Jamie Eng: Thank you. Hello, my name is Jamie Eng and I'm the Associate Director of the Emergency Department at Providence Tarzana Medical Center in Southern California. We are a 249-bed acute care hospital accredited by The Joint Commission. We have a 24/7 emergency department that sees approximately 45,000 visits annually. We are a STEMI receiving center, a primary stroke center, and a pediatric medical center. Our services also include the Valley Heart and Vascular Institute and Women and Children Services. Today, we'll be describing our sepsis journey over the past 13 years, first in broad strokes and then in more detail, specifically, on strategies that our team felt were the most critical in our overall success.

For most of us, sepsis began taking more of the spotlight in 2005 with Dr. Rivers' publication on Early Goal Directed Therapy. For us, this was our

first attempt at a sepsis program. Physician leaders at our institutions pressed to apply the recommendations for sepsis patients and initiated case reviews with referrals to peer review for any fallout. This became one of the corner pieces of our program over the years. As expected, the number of cases and the need for process and quality improvement prompted development of a dedicated sepsis work group, which was formerly integrated as part of our IOP. Whenever new sepsis guidelines came out, such as the 2008 IHI recommendations, this group would review, adopt, revise, and incorporate them in daily practice. With each update, we realized that a clinical champion would be an integral component in driving quality and, as a result, the Sepsis Coordinator was born. This position, along with development and implementation of ED and inpatient Sepsis Order Sets, helped lay the foundation for recognition and treatment of sepsis in a consistent hospital-wide fashion. The next step was education. We began including sepsis quality measures as part of the annual nursing education update and created educational tools for all medical staff and nursing. We made sure to participate in collaboratives, conferences, and seminars and gauge where we were with our processes relative to others and what we might learn from other systems.

In 2012, IHI released updated guidelines, and we essentially recycled many of the processes I described in order to better drive compliance and, subsequently, quality. Some of the key IPI initiatives we implemented included updating our Order Set to match the new recommendations, creating a template for our physicians to use to document the care of sepsis patients, developing and implementing an Antibiotics by Source Order Set with our pharmacy and therapeutic committee, stocking anchor antibiotics in the ED for rapid administration, and creating a policy for a dedicated Rapid Response Team.

As we started initiating sepsis care in the ED, we realized we needed to get the rest of the hospital on board in an effort to standardize how we approach sepsis patients, regardless of location at the time of the presentation. We reached out to the general medical staff and hospitalists through presentations and educational reminders about the sepsis

algorithm and current guidelines. We shared data with the CMO and hospitals to improve on target metrics and we collaborated with CDS to ensure we were accurately capturing our sepsis population through documentation. We worked to optimize the inpatient floor's operations in a similar manner as the ED. We refined the roles of our RRT nurse for sepsis patients, which we'll discuss in a few slides. We stocked anchor antibiotics on the floor to lower delays in administration and continued our educational outreach with stimulation cases, which was well received by nursing. To accurately assess the impact on quality, our PI department began collecting risk of mortality and severity of illness data on all cases. Steve Perry from our PI department will elaborate on this further in just a few slides. To better understand our variations in ODE, members of our sepsis work group participated in the seminar on the analytics of the ODE calculation. This allowed us to focus in on factors affecting our mortality.

In October 2015, the SEP-1 core measures were released. Based on our previous experiences, we were prepared to restart our process again. Our PI department began collecting data in quarter four of 2015 based on SEP-1 measures, and all fallouts were referred directly to ED physician leadership, peer contemporaneous review, with feedback to the attending physician. These cases were also being referred to peer review. We pre-emptively reached out to the general medical staff to re-educate and remind them of the bundle elements in the presentation several months before the core measures start and again after the core measures start. We also distributed several forms of educational material. We established a weekly work group to identify and troubleshoot any process issues preventing bundle compliance and appropriate care. This group included ED physicians, ED nursing leadership, lab, and radiology. The feedback from our PI department, combined with our weekly work group, allowed us to rapidly recognize gaps in our clinical process and address them in real time. Our constant reassessments allowed for multiple refinements of our documentation and Order Sets. For example, we discovered the need to clarify use of dual antibiotic therapy, the need to be explicit about Time of Severe Sepsis Recognition, and the difficulty obtaining serial lactic acids. Each of these were addressed by the work group and tracked by our

PI department. Since then, we looked for other ways to expand our overall strategy to rapidly identify and manage sepsis patients. We developed a CODE SEPSIS alert in the ED, incorporated an ED nursing checklist specific to the bundle element, and created an inpatient sepsis watch list, distributed to all charge nurses in each unit. We continue to participate in our system's regional sepsis collaborative to compare notes, share ideas, discuss updates, and create a consensus on standard of care and goals from all the improvement.

One of the biggest drivers in our sepsis journey is our sepsis study group. This was, and continues to be, the vehicle through which our process improvements are discussed and implemented.

It is a multi-disciplinary medical staff committee and involves key stakeholders, including our CMO, hospital lab, nursing leadership, quality and PI departments, respiratory staff, ED leadership, coding, CDI, and our Sepsis Coordinator. We have regular monthly meetings and review systems, regional, and internal data regarding sepsis.

Early on, as I had mentioned, the sepsis study group recognized the need for a clinical sepsis champion. A position was created to monitor PI and QI projects related to sepsis and improve overall care for these patients on the clinical side. Through the years, this position has evolved and expanded the focus on physician and nursing education, sepsis rating, chart review, and coordinating stakeholder effort.

Another critical component of our success is entirely due to our PI department. Without the continuous data mining, data interpretation, queries, and follow-up chart reviews, we would be blind and directionless. Steve Perry from our PI department will now speak to you about our data collection process and metrics.

Steve Perry: Thank you. This is the top half of our current version of our ER Sepsis Rate Base Report for the year 2017. The next slide I'll show you shows the bottom half, but we divided the report into two slides for easier viewing during this presentation. This report was developed early on in

our sepsis journey starting in January of 2009. It has evolved into its present form, as we have updated it along the way to conform to changes in the IHI Surviving Sepsis Campaign recommendations through the initiation of the SEP-1 core measure and its updates. It's presented as a regular agenda item at our sepsis study group meeting. This top portion of the report details our performance for each individual bundle elements. It plays a key role in communicating to our group what we do well and the measures we miss. It is reviewed by the group for tracking and trending our performance. Many of you have noticed the letters in the row for Vasopressors, that the letters NM show in the box. Just for clarity, that means "No Measurement," and that was because there was a month where there were no patients that required Vasopressors.

This slide shows the bottom half of our Rate Base Report. This part of the report shows the data aggregated in various ways that our study group has determined to be important. At the bottom of the slide, there are three bullet points that clarify the data on the report. Line 7 shows the total number of Septic Shock cases in the core measure for each month. It is a subset of line 1, which is all cases in the core measure, ER and inpatient. Line 4 is the total percent mortality for patients included in the core measure, and line 9 is the mortality rate for all patients coded with Severe Sepsis and/or Septic Shock. It is not limited to the core measure population. This group of patients typically number from 50 to 65 patients per month. We consider this an important population to monitor because this was the group of patients that we looked at monthly prior to the SEP-1 core measure, and doing so allowed us to keep a historical perspective intact as we transitioned into SEP-1.

This slide shows the data collection tool that we developed early on. It was designed to conform to the IHI guidelines that we were using throughout the Providence system to evaluate our performance at the time. This form was used starting back when we were on paper medical records and its use continued as we adopted the use of our EMRs. The top portion holds the patient identification data. The body of the form is broken into two parts, data pertinent to the six-hour bundle elements and the 24-hour bundle

elements, which were in use at the time. I used one of these forms for each case. The raw data for each individual case was tallied manually and entered into the Rate Base Report, as seen in the prior slides. This form was also updated along the way to reflect the changes in the Surviving Sepsis Campaign as soon as they were published by the IHI. This form was retired when the SEP-1 measure began. Currently, the raw data is tallied in much the same way as before, transferred to the Rate Base Report and archived electronically.

Prior to SEP-1, I abstracted all cases with ICD coding for Severe Sepsis and Septic Shock. Typical volume during those years ran 60 to 80 cases per month. We abstracted those cases in accordance with specifications from the Providence system office in an effort to have data collection and reporting consistency between our hospitals. At that time, we reported outcomes to a system dashboard. My role evolved dramatically, as all Providence hospitals began focusing on submitting data for the SEP-1 quality measure. Although my many years of involvement with our sepsis team was a tremendous help, there was a definite learning curve at first. I made it my habit to query CMS through the *QualityNet* website for the purpose of clarification during abstraction. Along with that, I queried *QualityNet* on assisting with the development of documentation tools that would accurately capture the needed data points and have a result stand up well to CDAC audits. To further ensure accuracy and increase learning, I conducted monthly inter-rater reliability exercises with our Sepsis Coordinator. The coordinator would independently review five cases per month, and then we would meet to compare results. As a sepsis abstractor, I'm the first one to know if we miss a measure. Because of my familiarity with the medical record at the time of the abstraction, I do a write-up detailing what part of the measure was missed and the circumstances leading up to the miss. Then, I forward that to our peer review RN. That nurse does a deeper dive into the record and verifies and/or clarifies my findings. That serves as a double check before a case is presented to our medical staff for peer review. As mentioned before, I complete the Rate Base Report and archive the raw data. Having archived raw data has proven useful at times for producing answers quickly when questions

regarding utilization, mortality, and compliance have arisen in our regional collaborative and our sepsis study group.

This was the first teaching tool that we developed to educate the medical and nursing staff. It too was based on the IHI guidelines in place at the time. Laminated copies were distributed to the nursing stations and other locations used by staff for documentation. We used four colors to identify the phases of sepsis, starting with SIRS. We chose colors commonly identified with an increasing level of alarm associated with an increasing progression of sepsis. In this way, we were trying to get the staff to look at sepsis differently than before. We wanted them to see sepsis as a progressive disease with these four phases, and that it requires an urgent response. This was also presented at the annual update for nursing education. As with the other reports and tools we created, this also was updated along the way to keep it current.

This is our current sepsis continuum, updated to conform to the SEP-1 measure. We kept the color scheme with minor modification and, to best meet the educational needs of our staff, it contains the information that defines the elements of clinical criteria for Severe Sepsis and Septic Shock. Along with its general distribution, this tool has also been incorporated into our core measure handbook for nursing education. That wraps up my portion of today's presentation. Thank you all for your time and attention.

Jamie Eng: Thank you, Steve. Along with the updated sepsis continuum that Steve mentioned, we also distributed and posted the sepsis algorithm to help guide providers through the three- and six-hour bundles.

This is an example of the medical staff letter sent to all physicians on staff explaining the core measure and bundle component.

This is the daily sepsis watch list that was generated by our Sepsis Coordinator and distributed to nursing supervisors. This was an effort to promote early identification and increase suspicion and awareness of potentially septic patients.

As you can imagine, compliance and consistency are significant challenges among providers in a single hospital. We found success in ensuring consistent and standardized care through the development and implementation of Sepsis Order Sets, as well as Antibiotics by Source Order Sets.

These next two slides are screenshots of our first Order Sets for sepsis. This approach has several advantages. It visually reminded providers what the core measure components were, such as blood cultures, serial lactic acids, and IV boluses. It narrowed the spectrum of various combinations of broad spectrum antibiotics that could be chosen, and it streamlined workflow, thereby increasing efficiency.

ED leadership aggressively implemented this for ED providers. Again, all fallouts with regards to bundle components and antibiotic selection were referred to peer review and ED leadership for review.

In the same vein, we found the same results with documentation. We created a template that would not only prompt the provider for completion bundle elements but also streamlined data abstraction by ensuring that the same information was recorded for every sepsis patient in a single format. ED physicians were educated regarding its use, and it was quickly operationalized. Based on PI department chart reviews and queries to CMS, this template underwent several revisions over the years.

This is an example of one of the original templates our physicians used to document the care of sepsis patients.

Another way we brought more attention and resources to our sepsis patients in our day-to-day operation was using a CODE SEPSIS alert. This is an internal overhead announcement similar to Code Blue or Code STEMI that can be initiated by physician or nursing and was created to mobilize resources to that particular patient. It allows for timely execution of orders to stabilize and diagnose the patient, and, secondarily, ensures that the bundle components can be met.

In a hectic ED, we also quickly realized that our nursing staff could help physicians in a checks-and-balances manner by using a sepsis checklist. The list includes all sepsis core measures and closes the loop between the nurse and physician prior to the patient's transfer to the inpatient floor.

These next two slides show one of our early checklists, which we have significantly simplified over the years to ensure compliance.

On the inpatient side, we have our Rapid Response Team, which, among its other duties, serves to expedite care for sepsis patients on the floor. This includes screening patients for possible sepsis, based on MEWS 4 alerts or rapid changes in clinical condition, immediate responses to MEWS 5 alerts, nurse-initiated orders for the SEP-1 bundle, and rapid communication with the admitting physician regarding clinical status and any missing components on the bundle.

Lastly, we have found that chart review in all timeframes was an effective way to keep sepsis on our radar. We refer all sepsis cases that do not meet the measure or appear to be misdiagnoses to the department peer review. This occurs every two months and is protected under the medical staff. Our PI department also does near contemporaneous reviews and notifies ED leadership of potential fallouts and failures in clinical process. This in turn is discussed with the sepsis ED work group to reassess the process or directly with the attending physician to re-educate and clarify clinical care.

Ultimately, what have all these efforts gotten us? Here's our performance so far. In 2017, our SEP-1 bundle compliance was 81 percent. Our 2017 mortality was 16 percent, compared to seven years prior at 28 percent. This works out to a mortality reduction of 42 percent.

So, what do we do? To boil it down, these next two slides show a short list of the major building blocks of our sepsis program over the years.

In summary, our sepsis journey has been long in the making with many trials and errors, modifications, and adjustments. Over the course, our team felt that these next few points were our biggest lessons learned which contributed to our overall success. One: A multi-disciplinary team is a

necessary component. All the stakeholders must be present to effectuate an appreciable change in clinical process and, subsequently, quality of care. Two: Physician-driven leadership, participation, and implementation is crucial. While clinical champions are key to facilitating most PI projects, having a physician champion can provide significant influence with the medical staff. Three: Similarly, strong nursing leadership is critical to drive consistency and operations across the entire hospital when it comes to sepsis. From the early recognition of sepsis, completion of orders, including antibiotics, and communication with physicians, nurses play a large role in the care of these patients and will require the same education, support, and leadership as [other] medical staff. Four: Frequent review and revision of clinical operations, templates, Order Sets, and compliance tools must occur in order to remain up-to-date with current changes in guidelines and queries. As soon as an issue is identified, it needs to be corrected in real time, then corrected going forward in a systematic fashion. Five: This last point is not on the slide, but as I've heard it, the PI staff are the headlights on the car. Without PI's review, data collection, queries, and familiarity with the data trends, we would not be able to respond nimbly to the changes in care required for our sepsis patients. Developing and preserving a close partnership between nursing, physicians, and PI has allowed us to achieve so much in the last decade.

So, where do we go from here? We plan on continuing to participate in Providence St. Joseph's Health System-Wide Sepsis Collaborative, where 50 hospitals have sent representatives to discuss sepsis in multiple sessions. Dr. Vovan will speak in detail about the collaborative in just a few minutes. Meanwhile, we continue to search for ways to improve and streamline our care of sepsis patients. One example is the discussion of creating a dedicated sepsis unit with dedicated nursing staff to further elevate the care of these patients. Finally, anticipation has always been a big part of our strategy. Looking forward, we are already considering the impact of SEP-3 definitions and recommendations and are evaluating how our current processes will be affected. This is the end of my portion of the presentation. I will now hand this over to Dr. Howard Davis, our Chief Medical Officer.

Howard Davis: Yes. So, when I came to Providence Tarzana, it was about four years ago. There was already a lot of work being done on sepsis. You know we have a fairly mature patient population, and sepsis is a very commonly encountered disease entity here at Tarzana, but we also had a lot of work to do.

Challenges that we faced really were two. One was, you know, we don't employ physicians here at Tarzana. All the physicians are either contracted or independent medical staff, and, as most of you know, dealing with independent medical staff is very tricky in the sense that the hospital really has no authority over them. The independent medical staff reports to their own elected leadership, and anything the hospital does with physicians has to go through the elected medical staff leadership, and so it's very important that there be alignment between the medical staff leadership and the hospital. So, any of the work that we did with sepsis really had to be – there were no mandates that we could deploy. Instead, it was all, you know, persuading the physicians to adopt best practices and having the independent medical staff monitor their performance. The other issue that we had was we run very lean here at Tarzana, and, you know, we got some great outcomes, and, you could say that we produced our sepsis outcomes on a shoestring budget, and I would say to that that we didn't even have a shoestring. We were getting by with existing staff, and through our, you know, quality meetings and our department meetings, we were able to develop, you know, some best practices to deploy the Order Sets and to, you know, monitor adoption by the independent medical staff. I would say that, really, the key to the success was the leadership that we had in the emergency department. Our ER doctors were not only, you know, there was one director, but they had so much work to do administratively in the ER that they sort of allocated various functions to some of the leaders in the ER, and they gave us one of their docs who was Dr. Eng, who you heard from, who really took, you know, took the leadership role. Because the ER was so prominent in our medical staff, you know, that the emphasis on sepsis was spread throughout the independent medical staff. Our hospital's group first adopted sepsis as a priority and then that, in turn, spread to the rest of our independent

medical staff. So, you know, I have to hand it to our ER leadership. You know, they took the lead and, instead of the hospital taking the lead, really it was the physicians, the independent physicians, who took the lead, and we just supported them the best way we could. That's all I had.

Andre Vovan: Thank you very much. For our future considerations, one of the goals for Providence St. Joseph is to have all of our hospitals address sepsis in a uniform manner because sepsis is our number one cause of inpatient mortality. With one of our highest constant readmission rates, it is a system imperative. Our goal is to decrease mortality and also decrease the cost of treating sepsis by decreasing clinical and operational variation.

The approach that we need to do has to go across all 50 of our hospitals and one of the adages that we are using to get everybody to work together comes from an old African proverb that says, "If you want to go fast, go alone, but, if you want to go far, go together." We think that we can both go fast and far by taking advantage of the system we have. We will use the individual hospitals to try new things and, as they are proven, we will then scale it quickly across our system. For instance, at the moment, we have proven that having a sepsis nurse function to be available 24/7 will decrease mortality and cost, and we have proven that across at least five of our hospitals, and now we are pushing that across all 50 hospitals as a function.

The challenge for us as a system is due to our size. The problem is that we have 50 hospitals spread across seven states. We have eight critical access hospitals. We have hospitals that have more than 500 beds. We have hospitals that are less than 100 beds. We have hospitals in rural settings, in suburban settings, in high-density settings of metropolitans, as well as hospitals in very remote settings in Alaska and in the redwood forests. So, we feel we have a nice cross-section of all of the healthcare delivery models across the US. As you know, sepsis is also difficult because the stakeholders responsible for the delivery of sepsis include ED physicians, hospice nurses, intensivists, and primary care physicians and getting everybody to be on the same page is difficult. In addition, our system has three EHRs. We have three instances of Epic, three regions using a

common Meditech platform, and Allscripts. As you can see, if we can get this working in our system, we think that this is a good blueprint for the nation in terms of getting a very complex healthcare delivery system to have uniform care.

Our collaborative is a collaborative made up of a tier structure representing the hospitals at a frontline layer, followed by an organization at a regional layer, and then coordinated by the system. We have decided to break our sepsis journey into three phases. Phase one will be a one-year trial to hardwire the three- and six-hour bundle as guided by the Surviving Sepsis Campaign and CMS SEP-1 guideline. Our hope there is to decrease mortality. Phase 2 for us is patient placement and flow through the hospital, because we realize that room and board cost is a safety risk as well as a cost variation that we need to control. Our room and board costs make up anywhere between 40 percent to 60 percent of our overall cost for sepsis and, therefore, patient usage of the ICU and telemetry and step-down units as they progress and improve need to be controlled. Phase 3 for us deals with discharge, readmissions, and the post-acute phase, including the sepsis syndrome. We have ministry hospitals and regions that are on different part of the phases in our system, but, because we have already spelled out what needs to be completed at each of the phases, this allows for our system and our regions to be moving together but quickly adapting our pathways and know-how individually.

The result for our system is that we have seen a steady decrease in our mortality rate. This is a graph of our sepsis mortality as defined by CMS by the ICD-10 codes. Monthly, we have roughly 4000 cases identified in our system across the seven states. On a per year basis, we reach approximately 50,000 cases. So, this is a 12-month running rolling average of our mortality rate. Our mortality rate has dropped approximately from roughly 12 percent to a little bit north of 10 percent, currently. Our goal is to get into the top 25 percentile of sepsis mortality for the system and, hopefully, show that, as an entire region, we can have uniform care with uniform outcomes. Each 1 percent decrease in mortality for our system represents an additional 500 lives saved. Our journey is

progressing. We started roughly a year and a half ago, and we are progressing towards our three-year journey, and, hopefully after the end of three years, we will also be putting in safeguards to maintain the gains and hard pathways and delivery into our system. Thank you.

Noel Albritton: Hello and thank you for joining us today to review frequently asked questions for the SEP-1 measure related to the specification manual, version 5.4. Our objectives for the presentation today are to help participants better understand the guidance by providing responses to many of the frequently asked questions we have received for version 5.4.

As a reminder, SEP-1 overall hospital performance public reporting begins with the July 2018 *Hospital Compare* Release. The quarters publicly reported for this release will be the first quarter of 2017 through the third quarter of 2017. With each release, the most recent quarter is added, and older quarters are removed. So, a full rolling year's worth of performance data are included, similar to other chart-abstracted measures. The first full year of data would be in October when a full year for 2017 will be reported.

Jennifer Witt: Our first frequently asked question is regarding the Blood Culture Collection data element. If the Severe Sepsis Presentation Date and Time is 7/1/18 at 0900, and the patient received an IV antibiotic 7/1/18 at 0930, what is the timeframe for the blood culture to be collected?

Noel Albritton: From this question, we can see that an antibiotic was administered within three hours after the Severe Sepsis Presentation Time. So, the blood culture collection timeframe would be 24 hours before the Severe Sepsis Presentation time to three hours after the Severe Sepsis Presentation Time.

This complete example further demonstrates the blood culture being collected within the specified timeframe. In this example, we can see that the IV antibiotic was administered within three hours of the Severe Sepsis Presentation Time. Therefore, we can look in the 24 hours before the Severe Sepsis Presentation Time through three hours after the Severe Sepsis Presentation Time and abstract the earliest blood culture collection within that timeframe. In this example, the blood culture was documented

as collected at 0600, which is within 24 hours before the Severe Sepsis Presentation Time. So, value 1, or "Yes," should be selected for the Blood Culture Collection data element. July 1, 2018, at 0600 would be abstracted for the Blood Culture Collection Date and Time data elements.

Jennifer Witt: Also referring to the Blood Culture Collection, if the patient received an IV antibiotic 7/1/18 at 2100, and the Severe Sepsis Presentation Date and Time is 7/2/18 at 0900, what is the timeframe for the blood culture to be collected?

Noel Albritton: The Blood Culture Collection timeframe in this scenario is 24 hours prior to the administration of the antibiotic through three hours following the Severe Sepsis Presentation Date and Time. It's important to note the difference between the timeframe mentioned on this slide compared to the timeframe mentioned on the previous slide. Your blood culture collection timeframe will depend on when the IV antibiotic is administered in relation to the Severe Sepsis Presentation Date and Time.

Here's a complete example for the abstraction of the Blood Culture Collection. In this example, we can see that the IV antibiotic was administered within 24 hours before the Severe Sepsis Presentation Time. Therefore, we would look in the 24 hours before the IV antibiotic through three hours after the Severe Sepsis Presentation Time and abstract the earliest blood culture collection within that timeframe. In this case, the timeframe for the blood culture collection would be June 30 at 2100 through midnight on July 2 of 2018. In this example, the blood culture was documented as collected July 1, 2018, at 1800, which is within 24 hours before the IV antibiotic. So, value 1, "Yes," should be selected for the Blood Culture collection data element, and July 1, 2018, at 1800 would be abstracted for the Blood Culture Collection Date and Time data element.

Jennifer Witt: This frequently asked question is related to the Broad Spectrum or Other Antibiotic Administration Selection data element. If the physician documents left leg wound with MRSA starting Vancomycin, is the documentation acceptable to select value 1, "Yes," if IV Vancomycin is started within three hours after Severe Sepsis Presentation Date and Time?

Noel Albritton: Value 2, "No," should be selected in this case because the physician documentation in this case does not meet the requirements outlined in the data element.

To suffice the Broad Spectrum or Other Antibiotic Administration Selection data element when a monotherapy or combination therapy antibiotics are not administered, the guidance specifies physician, APN, and PA documentation referencing the results of a culture from within five days prior to the antibiotic start time and the documentation must include the date of the culture results, which must be within five days prior to the antibiotic start time and include a suspected cause of organism from the culture result and its antibiotic susceptibility. If the physician, APN, and PA documentation includes the required documentation, and the susceptible antibiotic was administered within three hours following the Severe Sepsis Presentation Time, value 1 would then be selected for the Broad Spectrum or Other Antibiotic Administration Selection data element.

To demonstrate how acceptable documentation may appear, this example demonstrates documentation including a reference to a culture, when the culture was obtained, the cause of organism, and susceptibility. With the Severe Sepsis Presentation Time identified, we can see that IV Vanco[mycin] was administered within three hours of the Severe Sepsis Presentation Time. Since the clinician clearly documents the date of the culture, we can see that the culture was collected within five days. The clinician also includes the cause of organism and susceptibility, which demonstrates the antibiotic administered within three hours of the Severe Sepsis Presentation Time as acceptable. Therefore, value 1 should be selected for the Broad Spectrum or Other Antibiotic Administration Selection data element.

Jennifer Witt: This next question is for Crystalloid Fluid Administration data element and crystalloid fluids used to dilute medications. If there's a single order for a normal saline 30 milliliters per kilogram over two hours and, during the 30 milliliter per kilogram infusion, an IV antibiotic diluted and normal saline is administered at a 150 milliliters per hour, do we have to include the normal saline used to dilute the IV antibiotic toward the target ordered volume?

Noel Albritton: Yes. The crystalloid fluids, or normal saline in this case, used to dilute the IV antibiotic should be used toward the target ordered volume of crystalloid fluids. The guidance within the Crystalloid Fluid Administration data element states crystalloid fluids given to dilute medications are acceptable. Therefore, crystalloid fluids started within the timeframe specified with a complete order and documentation of fluid administration should be used toward the target ordered volume of fluids. If the acceptable fluids are used to dilute medications within the specified timeframe, the fluids should be used toward the target ordered volume.

Jennifer Witt: Also, regarding Crystalloid Fluid Administration, if two or more crystalloid fluid infusions are running at the same time, how do we calculate the completion time of the target ordered volume?

Noel Albritton: To calculate the completion time of the target ordered volume, combine the milliliters per minute during the time, or times, the infusions are running simultaneously. To further demonstrate this, let's review an example.

In this example, we will use crystalloid fluids given to dilute medications, as well as an order for 2000 milliliters of normal saline. The first liter of fluids started at 0800. The second litter started at 0900, at the same time the fluids used to dilute the medication. In this example, the first infusion is running alone, so we can see that 1000 milliliters infused between 0800 to 0900. Infusions 2 and 3, which include 1000 milliliters of normal saline and 250 milliliters of normal saline used to dilute the medication, are infusing at the same time. The patient needs 2100 milliliters to meet the target ordered volume.

To continue this example, since we know that 1000 milliliters were infused by 0900, that leaves 1100 milliliters still needed to meet the target ordered volume. We can combine the milliliters per minute for infusions 2 and 3, so infusion 2 is infusing at 16.67 milliliters per minute, and infusion 3 is running at 4.2 milliliters per minute. Since the infusions were running simultaneously, we combine the milliliters infusing per minute for infusions 2 and 3, which would equal 20.87 milliliters per minute. Then, divide 1100 milliliters by 20.87, since 1100 milliliters is the amount

remaining to the meet the target ordered volume. Upon dividing 1100 milliliters by 20.87 milliliters per minute, we get approximately 53 minutes. Therefore, using the fluids ordered to dilute the medication, we can determine if the target ordered volume was completely infused by 0953.

Jennifer Witt: This question regarding the Crystalloid Fluid Administration data element is often asked. When calculating the target ordered volume, can we use the minimum volume within 10 percent lower than the 30 milliliters per kilogram as the target volume to determine when the fluids were completely administered?

Noel Albritton: Only crystalloid fluids ordered that are within 10 percent lower than the 30 milliliters per kilogram total volume are acceptable. If the physician ordered the complete 30 milliliters per kilogram volume, the complete 30 milliliters per kilogram volume is required. When calculating the completion time for the target ordered volume in this case, the completion time should reflect the time the total target ordered volume was completed. To further clarify, only crystalloid fluids orders can be used to determine the target ordered volume. Administering or abstracting less than the ordered amount is not acceptable.

Jennifer Witt: For the Directive for Comfort Care data elements, what if a palliative care consult is ordered within the timeframe, but the palliative care team does not see the patient until after the timeframe. Can value 1, “Yes,” be selected?

Noel Albritton: Yes. The physician, APN, or PA order for palliative care consult documented within the specified timeframe, which is prior to or within six hours after the presentation of Severe Sepsis for the Directive for Comfort Care Severe Sepsis data element or prior to or within six hours of the presentation of Septic Shock for the Directive for Comfort Care and Septic Shock data element, would suffice for selecting value 1, “Yes.”

Jennifer Witt: For determining Initial Hypotension, if within the six hours before through six hours after the Severe Sepsis Presentation Time, we have multiple

blood pressure readings, but only two readings are hypotensive that are not consecutive, is this considered Initial Hypotension?

Noel Albritton: Value 1, "Yes," should be selected when two hypotensive blood pressures are documented within the timeframe of six hours before through six hours after the Severe Sepsis Presentation Time. For initial hypotension, the two hypotensive blood pressures do not have to be consecutive. The two hypotensive blood pressures need to be from different readings, which means they cannot be taken at the same time, and abnormal systolic blood pressure and an abnormal MAP, both taken at the same time, would only be used for one hypotensive blood pressure.

Jennifer Witt: Another frequently asked question regarding initial hypotension is, if the Severe Sepsis Presentation Time was 1100, hypotensive blood pressures documented at 1000 and 1330, and the target ordered volume of crystalloid fluids completed at 1130, what value should be selected for Initial Hypotension?

Noel Albritton: With the target ordered volume of crystalloid fluids completing prior to the second hypotensive blood pressure, value 2, "No." should be selected for Initial Hypotension. Initial Hypotension can only be present before the target ordered volume is completely infused because persistent hypotension is assessed after the target ordered volume has completely infused.

Jennifer Witt: If there are two hypotensive blood pressures within the specified timeframe but no IV fluids were ordered do you still abstract Initial Hypotension?

Noel Albritton: If the patient did not receive the complete targeted ordered volume, or did not receive any fluids at all, and the blood pressures were within the appropriate timeframe, the abstracter would select "Yes" for Initial Hypotension. Then, upon reaching the Crystalloid Fluid Administration data element, value 3 would be selected if no crystalloid fluids were ordered.

Jennifer Witt: Regarding the Initial Hypotension data element, if the following blood pressure readings were documented within the timeframe for Initial Hypotension, which time should be used?

Noel Albritton: As you can see here on this slide, there are multiple blood pressures documented within the six hours before the Severe Sepsis Presentation. The second hypotensive blood pressure recorded in the timeframe was 1600. Therefore, 1600 would be abstracted for the Initial Hypotension Time data element.

Jennifer Witt: For Persistent Hypotension, why is value 3 selected when multiple blood pressures are documented within the hour, but the last blood pressure reading is hypotensive?

Noel Albritton: The guidance states, when multiple blood pressures are documented within the hour to assess for Persistent Hypotension, refer to the last two blood pressures in the hour. The rationale for implementing this update was due to the last two blood pressures in the hour provide an accurate picture of whether hypotension persists or not. There may be multiple blood pressures in the hour, but determining if the hypotension persists and the next steps after that rest on the blood pressures at the end of the hour. This update was also initially motivated by the need to routinely follow up on hypotensive blood pressures within the hour to assess for Persistent Hypotension. Since Persistent Hypotension is determined within the one-hour timeframe, hypotensive values documented within that hour must be followed up on. If hypotensive blood pressures are not followed up on within the hour, then the last blood pressure is a single hypotensive reading, and Persistent Hypotension is unable to be determined.

Here's an example to demonstrate the rationale for updating the guidance in Persistent Hypotension. In this example, three blood pressure readings are recorded in the hour to assess for Persistent Hypotension. Since multiple blood pressures are recorded, we refer to the last two in the hour. There is a normal blood pressure at 1435 followed by hypotensive blood pressure at 1450. Since no other blood pressures were documented in the remaining time to assess for Persistent Hypotension, value 3 is selected because we're not able to determine if hypotension persisted or not. As you can see, the hour to assess for Persistent Hypotension was 1415 to 1515, and the last blood pressure was documented at 1415. As previously stated, to accurately determine if hypotension persists in the hour

following the fluid resuscitation, we refer to the last two readings in the hour. However, since the last reading documented at 1450 is hypotensive, and this was not followed up on, we're unable to determine if hypotension persists even though there was ample time remaining to follow up on the hypotensive blood pressure. We do understand that there is potential for other scenarios in which blood pressures may be documented at various times within the hour. We are continuing to monitor feedback to determine if there is a need for further updates in a future version of the specifications manual. I do want to remind everyone that only the blood pressures documented during the hour to assess for persistent hypotension should be considered, as well as know that hypotensive readings must be followed up on.

Jennifer Witt: One frequently asked question related to the Repeat Volume Status and Tissue Perfusion Assessment Performed data element is whether the documentation example on this slide is acceptable for physician, APN, PA documentation indicating or attesting to performing or completing a physical examination, perfusion assessment, sepsis-focused exam, or system review. The findings of an exam documented in an H&P are provided.

Noel Albritton: For the physician, APN, or PA documentation attesting to the performance of a physical exam or focused exam, documentation of the findings of the exam alone are not sufficient. The bullet point related to the physician, APN, or PA documentation attesting to the performance of a physical exam only include attestation documentation reflecting the physician, APN, and PA performance. To suffice the attestation documentation, the physician, APN, or PA documentation should reflect statements such as, "I performed a physical exam" or "sepsis exam performed." These are only a couple examples of attestation documentation, but, as you can see, the acceptable documentation is not documentation of the findings of an exam. Documentation of the findings of an exam, however, can be used to suffice individual components of the Repeat Volume Status and Tissue Perfusion Assessment Performed data element, such as the cardio pulmonary assessment or skin color and condition.

Jennifer Witt: With the transition away from the elements that make up the focused exam and the introduction of the Repeat Volume Status and Tissue Perfusion Assessment Performed data element, we have seen numerous questions and comments regarding whether the focused exam is still a requirement.

Noel Albritton: The answer to this is no, but to be clear, originally the focused exam was one of two ways that a clinician could demonstrate they performed a perfusion assessment. Over time, based on abstracter and clinician feedback, the somewhat restricted requirements for the focused exam loosened, and additional options were added to more accurately reflect clinician documentation that an exam of the patient was performed to assess perfusion. In version 5.4, the data elements that comprise the focused exam were removed, and a more flexible set of options for demonstrating an exam to assess for perfusion was added. This is the Repeat Volume Status and Tissue Perfusion Assessment Performed data element. The intent of this data element can be attained by the clinician documentation attesting to performing or completing an exam, or evidence of assessing different physiologic parameters, or evidence of performing one of several tests.

Jennifer Witt: Our next few frequently asked questions are related to the Severe Sepsis Present data element, starting with, “If the physician noted thrombocytopenia related to chronic Hepatitis C, can we exclude all platelet values for organ dysfunction?”

Noel Albritton: Since the physician documentation in this example is referring to thrombocytopenia in general rather than a single specific platelet value, all low platelet values would be disregarded as this documentation considers the platelet count to be due to the chronic condition.

Jennifer Witt: Similar but slightly different than the previous question, if the physician noted platelet 75 related to chronic Hepatitis C, could we exclude all platelet values for organ dysfunction?

Noel Albritton: This documentation contains specific low platelet count and the chronic condition. The inclusion of the platelet count of 75 and the chronic

condition and the same physician, APN, and PA documentation would allow the platelet count of 75 to be disregarded. As you can see, this documentation contains a specific value rather than a general reference to the platelets. Therefore, only the specific value is disregarded in this case. It's important to note that the documentation of the SIRS criteria, or sign of organ dysfunction, or a reference to either, and the documentation of being normal for the patient due to a chronic condition or medication is required to be in the same documentation so that an inference does not have to be made that one is due to the other.

Jennifer Witt: This question will focus on organ dysfunction documented as due to an acute condition. If the PA documents elevated lactate due to seizure, should the elevated lactate be used or not used for evidence of organ dysfunction?

Noel Albritton: In this case, the sign of organ dysfunction is documented as due to an acute condition, which is the seizure. Based on the guidance and the data element, the sign of organ dysfunction should be used. To exclude the sign of organ dysfunction, we would look further for physician, APN, or PA documentation considering the acute condition, the seizure, to be due to a non-infectious source. If there is physician, APN, or PA documentation stating the acute condition is due to another source, and referencing a medical resource determines that source to be a non-infectious source of process, then the sign of organ dysfunction would not be used. As an example of further physician, APN, or PA documentation considering the acute condition to be due to a non-infectious source, seizures related to alcohol withdrawal, after consulting a medical resource, we can determine that alcohol withdrawal is a non-infectious source. Therefore, the elevated lactate in this case would not be used.

Jennifer Witt: This next frequently asked question demonstrates when acceptable documentation to not use elevated INR or aPTT levels when a patient is given an acceptable anticoagulant. The question is, within the H&P, Xarelto is listed under the Home Medications section. Should the elevated INR be used as a sign of organ dysfunction?

Noel Albritton: With the anticoagulant documented on the Home Medications section of the H&P, the medication would be considered given unless otherwise documented as not given. Based on this documentation, an elevated INR or aPTT would not be used as a sign of organ dysfunction. The second documentation, including the administration date and time for an anticoagulant on the hospital MAR, would also allow the elevated INR to not be used as a sign of organ dysfunction since this documentation demonstrates the patient has been given an acceptable anticoagulant.

Jennifer Witt: Which physician documentation is acceptable to disregard tachycardia when A-fib is documented?

Noel Albritton: As you are aware, the guidance in the data element allows for SIRS criteria and evidence of organ dysfunction to not be used if documented as normal for the patient due to a chronic condition, or medication, or due to an acute condition that is further documented as due to a non-infectious source. As you can see, there are multiple ways A-fib is documented in this question. For the physician documentation under number one, which is A-fib with RVR, and number two, A-fib with tachycardia, the documentation includes A-fib and a general reference to the elevated heart rates. However, since there is not further documentation considering A-fib to be normal for the patient, or due to a chronic condition, or due to an acute condition with a further documented non-infectious source, the elevated heart rate should be used. For the documentation under number three and four, both consider A-fib to be a chronic condition and reference the elevated heart rates. Therefore, the elevated heart rates in this case should not be used.

Jennifer Witt: This question addresses a scenario that is frequently asked about. What allowable value should be abstracted for Severe Sepsis Present with the following physician documentation?

Noel Albritton: We can say the physician documentation on 7/15/2018 at 0800 considers Severe Sepsis likely due to influenza and, then on 7/16/2018 at 1800, there is physician documentation simply concluding that the patient now has Septic Shock. Per the guidance in the Severe Sepsis Present data element,

if Severe Sepsis is met by physician, APN, or PA documentation only, and it is documented as due to a viral, fungal, or parasitic infection, the documentation of Severe Sepsis should not be used. Therefore, the documentation on 7/15 at 0800 would not be used. Since Severe Sepsis was not present previously, we would continue abstracting for the Severe Sepsis Present data element. The next documentation on 7/16 at 1800 includes documentation of Septic Shock. Since the documentation of Septic Shock does not conclude that Septic Shock was due to a viral, fungal, or parasitic infection the documentation of Septic Shock would be used to select value 1, "Yes." for the Severe Sepsis Present Data element with a presentation date and time of 7/16 at 1800.

Jennifer Witt: This question also asks about the abstraction for the Severe Sepsis Present data element. How should Severe Sepsis Present be abstracted for the following documentation?

Noel Albritton: So, we have all three Severe Sepsis Present clinical criteria met by 0800, which would give us the Severe Sepsis Presentation Time. Then, we can see within six hours of the Severe Sepsis Presentation time, there's a PA note stating the patient is not septic. At this point, value 2, "No," would be selected for Severe Sepsis Present and the case would be excluded. The documentation of Septic Shock at 1300 would not be considered because, for the purposes of the measure, only the first episode of Severe Sepsis is considered.

Jennifer Witt: A last frequently asked question to review includes documentation of Severe Sepsis or Septic Shock that is present on admission. The question is, "In the following scenario, which date and time should be abstracted for the Severe Sepsis Presentation Date and Time?"

Noel Albritton: We can see in this documentation when the patient arrived to the ED and Severe Sepsis was documented as present on admission 7/1 at 2300, the admin order at 2315, and status change at 2320. However, per the guidelines in the manual, when Severe Sepsis or Septic Shock is documented as present on admission, we are looking for the documentation of the earliest documented hospital observation inpatient

admission time, which is most accurately reflected by the documentation of the time of arrival to the floor or unit for admission. In this scenario, there is nursing documentation that the patient arrived to the unit 7/2 at 0330. Therefore, 7/2 at 0330 would be abstracted for the Severe Sepsis Presentation Time in this case. We've received quite a few questions related to the abstraction of the presentation date and time when present on admission is documented. For the purposes of the measure, the documentation of "present on admission" is taken literally to mean when the patient was admitted to the hospital, rather than infer that Severe Sepsis or Septic Shock was present at another time, such as arrival to the ED or when the admission order was written. Therefore, abstracting the medical record at face value and using the earliest documented time of arrival to the floor unit for admission is appropriate.

Jennifer Witt: That concludes a review of version 5.4 frequently asked questions. We hope this has been helpful. Thanks again to everyone for joining us today. Candace, I will turn it back over to you.

Candace Jackson: Thank you, everyone. Again, I'd like to thank our speakers from Providence Tarzana for providing information on their sepsis journey and also to Noel and Jennifer for providing abstraction guidance and clarification on the data elements. We will now go into our live Q&A session for about 15 minutes, as time allows. Please remember that there was a large amount of questions submitted to the chat tool, so we will be unable to get to all of your questions today. All of the applicable questions will be responded to and posted at a later date to our *QualityReportingCenter.com* website. We'll go ahead and get started with a couple of questions for our group from Providence Tarzana. Our first question is, "How is the watch list created and what is the information reported?"

Jamie Eng: Hi. This is Jamie Eng. So, our watch list is actually manually generated by our Sepsis Coordinator every day. By the way, our Sepsis Coordinator works Monday through Friday. I don't know his exact hours, but they're daytime hours for the most part. He would take the ED admit report generated every day through our EHR, and he would screen himself the admitting diagnosis. So, patients admitted with sepsis, cellulitis,

pneumonia, acute PILO, who were admitted, their names and medical record numbers were generated onto a list. This list was distributed to health supervisors and charge nurses on each floor in an effort to make sure to notify physicians of any change in vital signs or clinical condition. This is how our sepsis watch list was generated.

Candace Jackson: Thank you, Jamie. Our next question is, "What interventions do you feel are the most significant and contributing to your success?" Again, this I believe is directed to Providence Tarzana.

Jamie Eng: Well, again going back to the slide Lessons Learned, I think the most critical components was having a multi-disciplinary committee driving a lot of the data review, as well as the process changes with the checks and balances to ensure that any action items that were generated were followed through and completed with data tracking to ensure that that process change actually gave us the improvement we were looking for. Secondly, having physician and nursing leadership very involved in implementation and development was very critical, as well as the frequent reassessment and revision and real time process changes again effectuated through the sepsis work group.

Candace Jackson: Okay, thank you, Jamie. Our next question is in regard to slide 19. The total number of cases, is that a sample, or all septic patients for your hospitals, or is it 100 percent?

Steve Perry: This is Steve Perry. I can answer that. This is a sample, and our total number of patients that we see that would be ICD coded with Severe Sepsis and Septic Shock is a larger number. That population is reflected in the mortality rate down on line 9 in the blue section of this slide. We have a third-party vendor, Premier, which does our sampling for us. My typical sample is 22 cases a month for the core measure. Of that 22 cases, usually somewhere around five cases, give or take, end up being discarded. They don't meet the parameters to get into the measure because they are usually just simply sepsis and not Severe Sepsis. When the core measure was designed, they cast a wider net than we were using previously, and they included sepsis, Severe Sepsis, and Septic Shock in the final coding.

We've done a lot of work ahead of time to clearly define which patients met what parameters. We are not seeing a lot of patients coded sepsis that have Severe Sepsis, and we're not seeing a lot of patients, you know, who, when they have Severe Sepsis, they meet that criteria that, you know, they definitely meet it. So, we did a lot of work prior to the SEP-1 core measure to get that part of it right. Hopefully, that answers the question.

Candace Jackson: Thank you, Steve. We'll address one more question here for Providence Tarzana before we shift gears. Our next question is, "How did you go about setting up your sepsis alert? What documentation system do you use? Is this an automated alert through the EHR or manually called by the nursing staff?"

Steve Perry: Hi. This is Steve again. In my discussion with our Sepsis Coordinator, he explained to me that, and my discussion with our Rapid Response staff, that they get a list. They're able to generate a list of MEWS 4 scores, and, if a score rises to MEWS 5, then it would page the Rapid Response, and that would be an automatic page. That patient would get evaluated. Every Rapid Response gets screened for sepsis. What they would do, what their list that they would generate of MEWS 4 patients is, they would do proactive rounding on those patients, and that list would be available to charge nurses and Rapid Response as well. If anybody knows anything more about that than I do, please chime in.

Candace Jackson: Thank you, Steve. Any other comments from any of our speakers from Providence Tarzana? Okay, we'll switch gears a little bit and go over a few abstraction questions. When a patient has two low blood pressures or main arterial pressures in the ambulance, do we enter the actual time or the ED arrival time for Initial Hypotension? Can we enter a time prior to arrival?

Noel Albritton: Hi. This is Noel. So, for the blood pressures for Severe Sepsis you would enter the take-in or obtain time if documented. So, if the EMS service documents a time that they obtain the blood pressure, then that's the time that you would use to consider your other Severe Sepsis criteria.

Candace Jackson: Thank you. On that same line on Slide 66, can you abstract Initial Hypotension, if the target IV fluids are not given?

Noel Albritton: Hi. It's Noel again. So, yes, you would abstract Initial Hypotension. If you continue abstracting and you determine that the target ordered volume of crystalloid fluids was completed prior to the second hypotensive blood pressure, then you would go and select value 2, "No," for Initial Hypotension. Yes, I'll leave it at that, Candace.

Candace Jackson: Okay, thank you, Noel. Our next question: "Do infection or suspected infection have to be physician documentation? Could it also be nursing documentation?"

Noel Albritton: Yes. It can be physician, APN, or PA, or nursing documentation, or pharmacist documentation. So, it does not have to be just a physician.

Candace Jackson: Thank you. Our next question, "If the crystalloid fluid isn't in the time-frame, does it need to be at a rate of greater than 125 milliliters per hour?

Noel Albritton: Yes. This is Noel again. So, crystalloid fluids, the only acceptable crystalloid fluids would have to be infusing at greater than 125 milliliters an hour. So, any fluids running less than 125, or equal to 125, would not be used toward the target ordered volume.

Candace Jackson: Thank you. Our next question is in regard to slide 73. Is the phrase "review of systems" sufficient to answer "Yes" to the focused exam question?

Noel Albritton: So, as far as the physician documentation attesting to their performance of an exam, if the physician documented they performed a review of systems, then, yes, that will suffice the Repeat Volume Status and Tissue Perfusion Assessment Performed data element.

Candace Jackson: Okay, thank you. On that same line, in regard to focused exam, does the physician need to enter a complete set of vital signs or does "vital signs reviewed" suffice? Excuse me. Does it matter if all the vital signs are by the same physician?

Noel Albritton: Okay. So, there's a couple of different ways to meet this portion of the Repeat Volume Status and Tissue Perfusion Assessment Performed data element. The physician can document in single documentation the blood pressure, pulse, temperature, and respiratory rate, or they could document that they reviewed the vital signs. Either one of those will suffice. Then, if they document the vital signs like blood pressure, heart rate, pulse, heart rate, respiratory rate, and temperature, that all needs to be by the same physician and the same documentation.

Candace Jackson: Okay, thank you, Noel. we'll go back here for a couple questions for Providence Tarzana Medical Center. Does your SEP-1 chart abstracter stop abstracting cases once they fail or do they complete each record to record failure points?

Steve Perry: Hi. It's Steve Perry again. I absolutely look at the whole chart. We try to learn as much as we can from each fallout because, as abstractors know, if you fall out early with something like antibiotic selection, you also might have missed an element of the Septic Shock bundle or something. All those go on the Rate Base Report, and they also go into the write up of any failure. So, there's a list of all the different points, all the different measures, that we would have missed if we do have a fallout like that.

Candace Jackson: Thank you, Steve. Next question: "How did you tackle challenges of finding your sepsis patients? Have you had success with physicians documenting sepsis in a timely manner?"

Jamie Eng: Hi. This is Jamie Eng again. So, I'm a little unclear on the question, but I'll speak to the parts I understand. Our ED physicians document sepsis at the time that it occurs. In terms of documentation within the notes, we use the template and that allows for specific time of recognition, and, at that time, they're documenting it. As part of the medical staff in general, they're required to complete their documentation within 24 hours. So, those sepsis patient charts from the ED are completed within 24 hours. If they're not, we receive a phone call, and we feed that back to our physician so that gets captured. If that doesn't answer the question, please let me know.

Candace Jackson: Thank you. We do have time for one last abstraction question. Does the entire 30 milliliters per kilogram fluid bolus need to be completed within six hours from presentation of Septic Shock or does it just have to be started?

Noel Albritton: This is Noel again. The target ordered volume or 30 milliliters per kilogram crystalloid fluids is not required to be completed within a specified timeframe. The data elements provide guidance for when the crystalloid fluids need to be started, which would be that six hours prior to three hours after Initial Hypotension or Septic Shock, but again, they're not required to be completed within a specified timeframe.

Candace Jackson: Thank you. Again, I know we did not get to everyone's questions today, and those will be posted at a later date. Again, I'd like to thank all of our speakers from Providence Tarzana Medical Center for providing their information today and for Noel and Jennifer for providing abstraction guidance. I would now like to turn the presentation over to Dr. Deborah Price to go over a brief summary of the CEU process. Dr. Price.

Deborah Price: Thank you. You must report your own credit to your respective boards. Complete the survey and then register for your certificate. Registration is automatic and instantaneous.

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