medisolv

The Medisolv Guide to

Sepsis Performance Improvement

10+ Best Practices for Taking Control of CMS's SEP-1 Measure

Ready to Take Control of Your Sepsis Performance?

Now that CMS is moving the Severe Sepsis and Septic Shock: Management Bundle measure (SEP-1) into the Hospital Value Based Purchasing (HVBP) Program, your hospital finally has the opportunity to earn a financial reward for your SEP-1 performance.

While that's great news, SEP-1 has always been one of CMS's most challenging measures because it is notoriously labor intensive and complicated to track. What's more, under the HVBP Program, CMS will now judge your SEP-1 performance based on where you land on the bell curve of all hospitals nationwide. Fall into a lower national percentile, and you could be looking at significant penalties. Fall into a high percentile, and you could be generously rewarded.

In short, now is the time to take control of your hospital's SEP-1 performance. And to help you get there, we assembled a panel of quality leaders who have all made significant strides in their own sepsis programs in recent months and years. Together, we uncovered more than 10 sepsis management best practices that these top-performing hospitals all have in common. See how many of these ideas you're already doing—and how many you can implement in the year ahead.

SEP-1's Move to Value Based Purchasing

Fiscal Year: **2026**

Baseline Period:

January 1, 2022

↓

December 31, 2022

Performance Period:

January 1, 2024

↓

December 31, 2024

Meet the Panelists

Our panelists represent a diverse range of hospitals, from large 500+ bed acute-care centers to academic teaching hospitals to smaller community hospitals. Each of these hospitals saw a significant boost in their SEP-1 compliance rates—by as much as 65 percentage points—after implementing some or all of the best practices they share in this guide.

Suzette Boyer | Sepsis Program Coordinator
UCHealth Parkview Medical Center

Patterson Burch, MHA | Director of Quality Reporting & Improvement
Medical University of South Carolina

Kathryn Carlson | Executive Director of Operations
Warren General Hospital

Maby George | Primary Sepsis Data Abstractor
Keck Medical Center of USC

Carrie Herrmann | Sepsis Quality Improvement Specialist
Stormont Vail Hospital

Lisa Johnson | Executive Administrator for Quality and Outcomes
Keck Medical Center at USC

Shelby Kolo, PharmD, CPHQ | Assistant Professor
Medical University of South Carolina

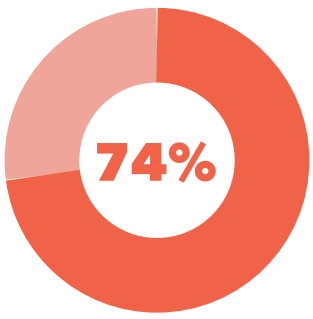
Christie Merritt, MSHI, BSN, RN | Manager for Quality Outcomes and Regulatory Performance
Medical University of South Carolina

Danielle Bowen Scheurer, MD | Chief Quality Officer
Medical University of South Carolina

Vickie Wu, MD | Lead Physician Advisor and Sepsis Physician Champion
Keck Medical Center of USC

Average SEP-1 Compliance Rate

Among Our Experts' Hospitals:



Among All Hospitals Nationwide:

Best Practice #1:

Have a Dedicated, Multidisciplinary Sepsis Committee

Lesson learned:

Sepsis compliance is not just the quality improvement team's job. Include representation from every stakeholder group in the process of SEP-1 improvement, from your clinicians to your pharmacy to your IT team. Create a standing meeting to regularly review the data, identify patterns of success and failure, and develop system-wide solutions to repeat challenges.

Here's what our clients say:

"We started as a larger sepsis work group and then revamped into a smaller sepsis committee comprised of a dedicated team of stakeholders who are essential to our SEP-1 success. The committee is interdisciplinary and includes ED and hospitalist champions, nurse managers, and informaticists. We come together monthly to do a deep-dive into any non-compliant cases and to identify trends and actionable items. Then our committee members take the findings back to their regular staff huddles."

Carrie Herrmann | Stormont Vail Hospital

"Our sepsis team includes members of our ED, pharmacy, lab, ICU, med-surg floors, and hospitalists. Our hospital is a teaching hospital, so having our residents and pulmonary fellows involved in the team is also critical to our success. We meet monthly to review our data and our bundle compliance, as well as review any changes or updates to both the CMS bundle and the Surviving Sepsis campaign. We also review two to three patient case studies to see what we did well and what we could improve on."

Suzette Boyer | UCHealth Parkview Medical Center

"We meet once a month with our physician leaders to go over our data. If you're going to do that, you have to be prepared to answer their questions. That means having someone who can speak confidently and accurately about abstraction in your team meetings. If you can't give them the answers—the "why" behind what you're doing— your physicians will become frustrated and disengaged."

Kathryn Carlson | Warren General Hospital

100%

*of hospitals interviewed have an **interdisciplinary sepsis working group** that meets regularly.*

Best Practice #2:

Engage at Least One Provider to Be Your Sepsis Champion

Lesson learned:

Providers listen to other providers. Your efforts to educate your providers on SEP-1 requirements will go a lot further if you have a physician champion who is taking your message to the frontlines. And your designated champion can't be half-hearted—they have to be all-in on helping you turn the tide.

Here's what our clients say:

"Getting the providers involved and engaged in the measure at first was hard to do because we needed to make it important to them. Now I have two really engaged and responsive provider champions in place. They're the ones that are really taking the message out to the teams. It's probably the one thing that's turned our performance around the most for us in the last year."

Suzette Boyer | UCHealth Parkview Medical Center

"The conversations and engagements that our sepsis physician champion has with our physicians and APPs are so impactful. Her approach is always exploratory: "I see you documented XYZ, help me understand what you were thinking," or "what are your thoughts around ordering subsequent labs or subsequent antibiotics on this case?" When the conversation comes from a peer—and focuses more on asking questions more than simply pointing out a fallout—it leads to much greater progress."

Lisa Johnson | Keck Medical Center at USC

100%

of hospitals interviewed have ***dedicated sepsis champions*** *on the provider side.*

Best Practice #3:

Admit to Your Clinical Teams That SEP-1 Isn't Perfect

Lesson learned:

There is a big difference between CMS's sepsis requirements and how clinicians are trained to treat sepsis. Openly and honestly acknowledge the differences to your clinicians, empathize with their frustrations—and then help them understand why CMS's requirements still matter.

Here's what our clients say:

We do have a lot of difficult conversations with providers about the difference between what SEP-1 dictates versus how they've been trained. It's really a fine line, and they often feel like they're stuck between a rock and a hard place. So, we always stress the following: do what's right for the patient first, but always document why you did what you did. That way we know it wasn't that you just didn't want to follow the bundle; you did what was right for the patient. For example, we have a lot of conversations around the fluid bolus: if you are dealing with renal failure, fluid overload, whatever the issue is, just document it clearly!

Suzette Boyer | UCHealth Parkview Medical Center

For us, physician education all comes down to making it clear what the SEP-1 bundle asking for. It's not about educating physicians on how to treat sepsis, because 99.9% of physicians know how to identify and treat it. However, treating it and meeting the SEP-1 guidelines are two very different things. That's where I come in as the sepsis physician champion. They know they don't have to understand the measure completely; they just have to know that I'm here to help guide them through all the nuances of it. That way they can focus on doing what's right clinically for the patient, and then together we can make sure that whatever they're doing for the patient is appropriately demonstrated in the notes they're writing.

Vickie Wu, MD | Keck Medical Center of USC

Best Practice #4:

Put Your Clinicians and Abstractors in Each Other's Shoes

Lesson learned:

Because CMS's sepsis requirements don't universally align with clinician training, there will likely be some clinical resistance to your quality team's (namely your abstractors'!) feedback and requests. You can eliminate this friction by giving each team the opportunity to learn how the other side works.

Here's what our clients say:

When our rates were low, our doctors' first instinct was to tell us the data was bad. So, we had to educate them on how the measure was calculated as well as all of the chart information that led to those calculations. This required really walking them through what the measure looks like on the abstraction side: we have to have these elements, within these time frames, and this type of documentation to support it. It was an a-ha moment where they realized that if they documented differently to match the abstractors' requirements, we could use it to our collective advantage. Those kinds of conversations, repeated over time, led to better engagement with the providers. Now, they're as proud of our scores as we are.

Kathryn Carlson | Warren General Hospital

Another piece, too, is making sure our abstraction team is embedded with our clinical team as much as they can be. We have a rule of thumb that, if a clinical team is reviewing core measure abstracted data, we make sure the assigned abstractors are present. We want our abstractors to completely understand the clinical workflow so that they're not just blindly abstracting in the chart.

Shelby Kolo, PharmD, CPHQ | Assistant Professor | Medical University of South Carolina

Best Practice #5:

Make the SEP-1 Rules Easy to Remember

Lesson learned:

By now it's probably clear that clinician education is absolutely critical to your SEP-1 success. But don't just host a training session and then call it a day. Create tools and workarounds that will make it easy for your clinicians to remember the less-than-intuitive tasks that CMS is asking them to do when it's go-time.

Here's what our clients say:

We have across-the-board resources and training, so now SEP-1 requirements are just a part of our culture here. All our new providers and hospitalists go through the same sepsis training so that they understand our documentation and the expectations that we have. We also have yearly competencies—yearly education modules—that are sent out to all of our providers and nurses. I make sure they're updated per the most recent bundle specs. On top of that, we provide our staff with a lot of tools, like sepsis badge buddies, sepsis screening tools to help our nurses with patient hand-offs, and our MEWS [modified early response score] monitors that make it easier for our teams to jump in and facilitate treatment.

Carrie Herrmann | Stormont Vail Hospital

We do an annual competency, but we really do a lot of education with new staff when they get here. For all our new nursing staff, I give them a presentation during their on-boarding orientation. We also do an orientation for the new class of residents and fellows that comes in each year, because they all have learned sepsis a little different. We also have badge reminders and pamphlets that we give out to all providers that come in.

Suzette Boyer | UCHealth Parkview Medical Center

We have sepsis reminder cards at every inpatient-area computer. They were the vision of our Shared Governance Quality Council, which is primarily made up of front-line nurses, respiratory therapists, and the like. Coming from the clinical staff it had a major impact because it was created by them for them, so it clearly captures what they knew would be most helpful.

Lisa Johnson | Keck Medical Center at USC

BONUS TIP: *Give your Abstractors a Cheat Sheet, Too!*

We have our entire abstraction workflow—from where you find the data elements in our EHR to where you enter them into Medisolv—documented in a Word document. It's a living document that gets refreshed as soon as anything changes.

Patterson Burch, MHA | Medical University of South Carolina

Best Practice #6:

Review Cases in As Close to Real Time As Possible

Lesson learned:

Letting your sepsis cases sit for too long means you lose valuable opportunities to course-correct your potential fallouts and improve patient care. Odds are, the closer to concurrent reviews you can get, the better your compliance rate will be.

Here's what our clients say:

When I joined the Quality Improvement team, it became clear to me that we were always going to be playing catch-up unless we started looking at our sepsis cases in real-time. So now we run a report twice a day in which potential sepsis cases can be identified. I review each of those cases individually, and if I identify a case that meets the clinical criteria or has the potential for becoming a SEP-1 case, I abstract it concurrently. If we discover that there is a crucial clinical action that has to be taken in order to get the bundle completed, I notify the sepsis physician champion immediately. Fortunately, those are pretty few and far between. The majority of the time it's a fallout that's simply due to documentation, so we just have to go back and make sure the provider can indicate correctly on the notes that there were exceptions. That is much easier to do when the case is fresh in the providers' minds.

Maby George | Keck Medical Center of USC

We do a concurrent review, which means I review any charts that involve sepsis while the patients are still here. In the ED, they will actually call me and let me know if they have a sepsis alert, so I can follow those patients and see if we're doing the right thing. We also send out a sepsis feedback bundle form to let the clinicians know when they've met everything, and what could have improved. It's a lot of legwork, a lot of following the patients, but it's all for the good of the patient.

Suzette Boyer | UCHealth Parkview Medical Center

Best Practice #7:

Create a Process for Learning From Your Fallouts

Lesson learned:

Don’t let your fallouts go by the wayside. Create a consistent and repeatable process for reviewing your fallouts with your clinical teams and your sepsis committee so that they become meaningful tools for learning and growth.

Here's what our clients say:

"We've started meeting every Thursday morning at 9:30am to review every failure. We have representation from each hospital in our system participate on the call. We call them "Fail Fast" calls. You fail, you review it promptly, and you move forward. Whatever the issue is—abstracting, coding, clinical input—we identify the lessons learned, get decisions made, and, if needed, get the appropriate documentation incorporated into the EHR to help us pass the case."

Danielle Bowen Scheurer, MD | Medical University of South Carolina

"I do weekly chart audits. If I identify a non-compliant case, I create a slide with all the elements at play: where we were when our bundle elements should have happened, and all of our opportunities to improve. That slide is sent out to the applicable managers, providers, and sepsis champions. So, the education happens almost immediately. Then it's our sepsis committee's job at the monthly reviews to look at the non-compliant cases holistically in order to identify trends and system-wide action items."

Carrie Herrmann | Stormont Vail Hospital

Check out our Sepsis Top Tips blog

blog.medisolv.com/articles/top-tips-succeeding-with-sepsis

Best Practice #8:

Focus in On Your Fluid Compliance

Lesson learned:

Nearly every hospital we interviewed cited fluid compliance as one of their toughest SEP-1 hurdles. And nearly every hospital, when they lasered in on the problem, realized the solution simply came down to better documentation. Take the time to analyze your own fluid fails. A little provider education on this topic could transform your numbers.

Here's what our clients say:

"Weekly sampling is especially helpful for us with the fluids part of the measure. That's the area where we most often see physicians failing to document properly. Typically, there is a legitimate reason why a patient was not given the full amount of fluids that's required. With timelier review of cases, we are almost always able to remove these failures by adding an addendum to the medical record documenting why a lesser volume of fluids was given."

Shelby Kolo, PharmD, CPHQ | Assistant Professor | Medical University of South Carolina

"We've had a lot of improvement with our fluid compliance. With the majority of our sepsis cases starting in the ED, we had not realized the differences in documentation that existed between the ED and our inpatient units. Our inpatient units use a MAR [medication administration record] that alerts the nurses when they need to document certain things, like stop times. Our ED nurses have a navigation tool that didn't do that. So, we added a running infusion portion to the ED navigator, and, just like that, we went from 50% of our fluid fails being due to missing documentation to absolutely no fluid fails due to missing documentation. It's a small data capture change, but thanks to the group effort, it created a big result."

Carrie Herrmann | Stormont Vail Hospital

"A lot of our fallouts are with fluids, meaning the patient did receive some IV fluids, however they did not meet the 30cc/kg bolus that they're supposed to receive. Usually, we just have to go back and review the case and make sure the provider can actually indicate correctly on the notes that there is an exception to the less than 30 cc/kg of fluids being given."

Vickie Wu, MD| Keck Medical Center of USC

"One topic that really stumped our clinicians was the documentation of IV fluids at 30 milligrams per kilogram per hour. They would tell us, "We're ordering fluids, what's the problem? We're providing the correct care!" In many ways they were. They just weren't documenting it well. So, we had to dissect it: "Yes, you're ordering a 1,000-milligram bolus or 1,000-milliliter bolus, but that doesn't meet the measure. You have to document it more specifically." We really walked them through where to document, how to document, what document. Now they're doing a much better job of providing the care and documenting it, which then, of course, leads to better outcomes on the abstraction side."

Lisa Johnson | Keck Medical Center at USC

Best Practice #9:

Create a Failsafe For Repeat Lactates

Lesson learned:

Just like fluid compliance, the repeat lactate requirement was a stumbling block for nearly every hospital we interviewed. Providers are great about ordering the initial draw—but the repeat draw often gets lost in the shuffle. Look for ways you can automate the process for all involved and reduce the risk for human error.

Here's what our clients say:

We have two ways we try to make compliance easy. The first thing is we educate our physicians on the triple component. Meaning that if you're giving IV antibiotics, then there should be a blood culture. And if you're drawing blood cultures, there should be a lactic acid that's drawn at the same time. Those three steps should always go together if you suspect sepsis.

Then the second part is that, once the lab draws the first lactic acid, if that lactic acid is actually positive, we have a system in place that does not require the physician to go in to place another order. Our lab will come back to draw the second one within that three-hour time frame, so there won't be a fallout from a repeat lactate not being drawn.

Vickie Wu, MD | Keck Medical Center of USC

Lactic acids were a common fallout for us. We were missing that second lactic acid draw and we would miss it by a frustratingly small window, maybe three minutes. We said, okay, we need to build a better mousetrap because clearly there are too many human factors involved here. So, we built a reflex order. If the initial lactic acid is two or greater, it will reflex to a repeat lactic acid order within four hours of the first draw so that it will always meet the six-hour draw time. That has worked really well for us.

Kathryn Carlson | Warren General Hospital

For us, with the repeat lactate question, our abstractors will often mark it as yes and enter in a date and time when it should be marked no. That affects the accuracy of our overall data. So much of our success with sepsis relies on the accuracy of our abstractors, which is why we created an abstraction workflow cheat sheet.

Christie Merritt, MSHI, BSN, RN | Medical University of South Carolina

Best Practice #10:

Celebrate Your Success

Lesson learned:

SEP-1 compliance is hard. Like...really, really hard. It can be easy to get frustrated. As a quality leader, protecting your team's morale is just as important as reviewing your fall-outs or your fluid documentation. Look for opportunities to regularly pat your team on the back and—dare we say?—even make sepsis compliance a little fun.

Here's what our clients say:

"To some of our providers, they would see that our sepsis improvement had gone up by 10 percentage points or so, and they would think that's not that big of an improvement. So, we also started focusing on our mortality. In 2015, our mortality was higher than the national average. Now, it's right around 9.2%. When I show our providers that, it makes a huge impact. It's the same population and it's a clear measure of the real difference we're making."

Suzette Boyer | UCHealth Parkview Medical Center

Ideas for Boosting Team Morale

1. Celebrate World Sepsis Day on September 13 – make it a hospital-wide day of learning and fun
2. Host congratulatory pizza parties whenever group milestones are reached
3. Create a Sepsis Superheroes program to recognize team members' individual contributions
4. Have each department set their own smaller, more specific goals and create a friendly competition to see who can reach their goals
5. Take opportunities to bring in donuts, send thank-you messages, or demonstrate other small gestures of appreciation

More Best Practices to Consider

Oversample to Get a More Accurate Picture of Your Care

For a hospital of our size, the recommended sample is 20 per month. But we are a hub for other smaller hospitals, so we get a lot of transfers in, and we have a very large sepsis population. So, I audit 10 cases a week, 40 a month. We want to make sure that we are truly looking at our sepsis cases, and having that oversample helps us weed out exclusion cases. It's our way of making sure what we're doing is accurate and specific to our facility and to what we need to do for our patients.

Carrie Herrmann | Stormont Vail Hospital

Switching EHRs Anytime Soon? Prepare Your Sepsis Team Now!

In 2021, we purchased a new EHR as an affiliate for an already built system. When we were a single hospital, we had a lot more control; we were able to set up our order sets in a way that worked for our clinicians, and we were able to adjust them right away when we uncovered a problem. Switching EHRs meant that none of the order sets were set up in a way we were used to seeing, and we no longer had the same level of control over if and when things could be changed. To overcome this challenge, we had to have key physician champions in our ED to help us develop and document workarounds within the EHR that all our clinicians could follow. Then we created cheat sheets and badge cards to make sure these workarounds were always top of mind team-wide.

Suzette Boyer | UCHealth Parkview Medical Center

Use All of CMS's Resources to Your Educational Advantage

As an abstractor, I'm always reading the CMS guidelines, but I also try to go above and beyond that. I look at CMS's Q&A sections because a lot of facilities post questions that CMS responds to. I join a lot of webinars and then, after the webinars, there's usually a transcript available. It's great to read those and share those with the rest of your sepsis team.

Maby George | Keck Medical Center of USC

Final Thoughts:

Remember Why We Do This

Lesson learned:

As with any IQR program requirement, CMS's ultimate goal with the SEP-1 measure is not to crack the regulatory whip, but to draw awareness and action around a critical healthcare issue. You're a quality leader because you believe in making healthcare better for us all. The daily challenges you face with SEP-1 will come and go, but the improvements you're making will save countless lives—and that's the most rewarding outcome of all.

Here's what our clients say:

"Because of this measure, I think we're recognizing the signs and symptoms of sepsis earlier than we would have before because we're more actively looking for anything that could indicate sepsis. Before we might see a patient, who came in with pneumonia and we would treat them for pneumonia. Now we're looking at the patient as a patient with pneumonia who could maybe also have sepsis. That leads to improved mortality rates and an incredibly positive impact on patient outcomes. The improved outcomes are something that the whole team can see and support."

Kathryn Carlson | Warren General Hospital

"We have shifted into what we call "sustainability mode" with this measure. But what was really important for us to recognize was that achieving our goal was not the end of our effort. Instead, knowing that sepsis is one of the top killers in healthcare organizations, we're continuing to grow our organizational approach to and understanding of this measure. That means being willing to start over when something's not working. Taking a true and authentic look at what's been successful and what hasn't. And then trying to come up with a better strategy to get where we need to go."

Lisa Johnson | Keck Medical Center at USC

Visit the link below for more quality sepsis content

blog.medisolv.com/articles/cms-sepsis-measures-hvbp

You Don't Have to Face Your Sepsis Requirements Alone.

Medisolv is here to help. Our ENCOR for Hospital Abstracted Measures software helps you **take control of your sepsis charts with automated workflows, timely alerts, and clear reporting.** Plus, as a Medisolv client, you'll have a dedicated Quality Advisor—accessible to you day in and day out, with no time restraints or extra costs—who can guide you to better SEP-1 compliance. It's the complete support you need to take control of your sepsis performance and **improve patient outcomes every day.**

Get to Know Us

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