

SAVING TIME, SAVING LIVES

How Technology is Transforming
Sepsis Care



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COMMUNICATION TECHNOLOGY: A CRITICAL COMPONENT OF SEPSIS RESPONSE SYSTEMS

Sepsis is a leading cause of mortality in the U.S., accounting for 270,000 deaths a year.¹ With \$62B spent annually for acute sepsis hospitalization and skilled nursing, it also is the costliest medical condition to treat in this country.² Time is of the essence when treating sepsis. Saving valuable time can save lives and reduce length of stay. The risk of sepsis mortality increases 4% every hour that treatment is delayed.³

An effective sepsis program includes surveillance, communication, clinical decision support, and a trained response team. Although most programs focus on sepsis detection and response, the communication process can be a major point of delay or outright failure. Since sepsis is a classic time-sensitive diagnosis, any communication problems can result in patient harm. The communications system must be reliable and robust, reaching the appropriate caregiver(s) with actionable information at the right time, ideally providing clear instructions about what to do next.

- 1. The Critical Nature of Clinical Context:** A goal of your sepsis communication plan should be to include as much contextual information about the event as possible, since the person or team responding to a potentially septic patient may not have intimate knowledge of the patient's condition. Don't simply alert the nurse there is a septic patient in room 101. Modern communication systems should be able to extract relevant information

from the EHR and present it to responders as part of the alarm notification. Provide more detailed patient-centric information such as why the alert was triggered (e.g., hypotension), relevant labs (e.g., renal function), patient demographics like age, weight, resuscitation status, and decision support such as what to do next. By doing so, you create an optimal patient-centric event-centric message.

2. Make Alerts Reliable: It is unfortunately too easy for nurses to develop alert fatigue due to the ever-expanding amount of information being generated by hospital systems and subsequently delivered directly to the nurse's communication device. Health systems need to be more careful than ever when deciding what information should be delivered, and in the case of clinical alerts, monitor their positive predictive value; ensure alerts are meaningful and actionable. Sepsis alerts should be presented differently than the routine messages a nurse receives so that they don't get lost in the shuffle. Although sending them to caregivers on their mobile device of choice is optimal for these critically important alerts, make sure you build in escalation rules so that if the intended recipient is not available, the alarm is sent to another caregiver who is available and can act. Alternatively, consider sending critically important clinical messages such as these to more than one person at the outset.

Vocera collaborates with providers of sepsis and other clinical surveillance solutions to deliver accurate, reliable, and actionable alerts. Deploying the right communication technology, designing intelligent workflows, driving care team engagement, and managing performance improvement against a set of goals are keys to a successful sepsis program. ■

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**CHRISTOPHER
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NEW DATA ON SEPSIS PREVALENCE AND COSTS 'ASTONISHED' DHHS RESEARCHERS

The largest sepsis study ever conducted with Medicare data found a 40% increase in the rate of Medicare beneficiaries hospitalized with the deadly infection from 2012 to 2018.

Sepsis is diagnosed in at least 1.7 million adults annually in the United States, according to the Centers for Disease Control and Prevention. About 270,000 Americans die from sepsis every year, and 1 in 3 patients who die in hospitals are diagnosed with sepsis, the CDC says.

The new study was conducted by researchers from the U.S. Department of Health and Human Services. The journal of Critical Care Medicine has published the research in three articles:

“We were astonished by the study’s results. To save lives in public health emergencies, we must solve sepsis. The findings of this study have implications not only for patient care, particularly after patients are discharged, but also for investments by industry, non-government organizations, and government agencies,” Rick Bright, PhD, a study co-author, DHHS deputy assistant secretary for preparedness and response, and director of the Biomedical Advanced Research and Development Authority, said in a prepared statement.

RESEARCH DATA

The study features several key data points:

- > From 2012 to 2018, the annual number of fee-for-service Medicare beneficiaries with an inpatient hospital admission and a sepsis diagnosis increased from 811,644 to 1,136,889.
- > During the study period, the total annual cost of inpatient hospital admissions among fee-for-service Medicare beneficiaries increased from \$17.8 billion to \$22.4 billion.
- > The total annual cost of skilled nursing facility (SNF) care for fee-for-service Medicare beneficiaries in the 90 days after a hospital inpatient discharge with a sepsis diagnosis increased from \$3.9 billion to \$5.6 billion.
- > For Medicare Advantage beneficiaries with a sepsis diagnosis, the total annual cost of inpatient admissions and SNF care increased from \$6.0 billion to \$13.4 billion.
- > The total annual cost for fee-for-service Medicare and Medicare Advantage beneficiaries with an inpatient admission for sepsis and SNF admission increased from \$27.7 billion to \$41.5 billion.
- > The study includes a conservative forecast for sepsis care costs in 2019 for all Medicare beneficiaries and private payer patients. Last year, the cost of sepsis care for inpatient admissions and SNF admissions for these patients was estimated at more than \$62 billion.
- > The 6-month mortality rate among fee-for-service Medicare beneficiaries with an inpatient hospital admission was about 60% for septic shock (the most serious form of sepsis) and 36% for severe sepsis.
- > The 40% increase in the rate of Medicare beneficiaries hospitalized with sepsis from 2012 to 2018 cannot be accounted for fully by increased Medicare enrollment, which rose 22% during the study period.

INTERPRETING THE DATA

The total cost of sepsis care is significantly higher than earlier estimates, according to the DHHS study.

A highly cited study published in 2016 estimated the cost of all acute hospital inpatient care for sepsis in 2013 was \$23.7 billion. The DHHS study was limited to Medicare beneficiaries, who accounted for 61.5% of the patients in the 2016 study. So, the earlier study estimated the total cost for inpatient care among Medicare beneficiaries at about \$15 billion.

“We observe that the projected 2019 cost of inpatient sepsis care alone (not including SNF) for Medicare FFS beneficiaries alone (not including Medicare Advantage) is \$23.5 billion,” the DHHS study co-authors wrote.

The study provides new insights for the cost of sepsis care and the public health response necessary to address sepsis, they wrote.

“We now know the actual national expenditures for sepsis to far exceed widely cited contemporary estimates. The question is ‘exceed by how much?’ Answering this question requires new public-private partnerships that harmonize definitions of sepsis, that facilitate internal analyses and preparation of comparable summary data, and above all that promote the sharing of those summary data into the public space. Only when we understand the burdens, the trajectories, the predispositions, and the costs of sepsis can the nation fairly and prudently allocate the resources necessary to solve sepsis.”

Sepsis is a significant burden on Medicare beneficiaries, their families, and the Medicare program, the DHHS study co-authors wrote.

“The human and economic burdens of sepsis experienced by Medicare beneficiaries continue to grow. Although there are improvements in mortality and in cost-per-case throughout a pragmatic hierarchy of sepsis severity, the year-over-year growth of the beneficiary population, the year-over-year increase in the total number of sepsis deaths, and the year-over-year increase in the total cost of sepsis care highlight the need to understand how beneficiaries become septic, their clinical courses once septic, and how sepsis survivors fare following discharge from the acute care hospital,” they wrote.

Prevention and early detection of sepsis are critically important, the study co-authors wrote.

“Those strategies, which likely will require innovation in public health as well as improving individual immunoinflammatory health, are among the most promising strategies toward protecting populations and saving lives. Once sepsis is established, improving the immediate postsepsis trajectory—either by actions during the inpatient hospitalization or by actions during and after transfer to a facility offering prolonged care—appears to be an essential step toward value-based transformation of sepsis care.” ■



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EMPLOYING THE POWER OF AI AND INTEROPERABILITY TO REDUCE SEPSIS MORTALITY

Augusta Health is a community hospital nestled in Virginia's beautiful Shenandoah Valley focused on improving the health and well-being of our community. The statewide sepsis mortality rate in Virginia is 12.7%, while at Augusta Health it is 4.76%. We have been able to achieve a significantly lower sepsis mortality rate by employing the power of artificial intelligence (AI) and communication technology. So far, we have saved 355 lives that could have been lost to sepsis.

Mortality from sepsis increases by as much as 8% for every hour that treatment is delayed. Our nurses are highly trained and are skilled at detecting early symptoms of sepsis based on standard indicators. They are also very busy. Aware of how many patients our nurses care for and the many tasks nurses juggle at once, our leadership team wanted to provide our nurses with additional support. Among the resources provided was a program to identify symptoms of sepsis sooner.

We formed a Sepsis Team and Taskforce in 2016 to take advantage of AI and communication capabilities and give our nurses an extra set of eyes to automatically review patient data and alert them as soon as a patient shows signs of being septic. Our goal was to detect and treat sepsis as early as possible and save lives.

AUTOMATED PROCESS FOR SEPSIS RISK DETECTION AND ALERTS

We began by using the four traditional criteria to identify sepsis – a temperature greater than 38°C, heart rate greater than 90, respiratory rate greater than 20, and an abnormal white blood cell count. In addition, we monitored mean arterial pressure and shock index. Our Sepsis Team and Taskforce then began a retrospective study of the data to determine which variables had the highest correlation to Sepsis.

We used the results of that study as a benchmark for developing an automated process that analyzes and compiles real-time data from medical systems each hour and assigns each patient a score. If the score is above a specific threshold, a sepsis alert is sent automatically to team members caring for that patient. Team members receive the alert with contextual information on their mobile communication device, which might be a hands-free Vocera Badge or a smartphone running a Vocera app.

SYSTEM INTEROPERABILITY INCLUDING REAL-TIME COMMUNICATION

The automated process involves interoperability among three systems:

- > Our electronic medical record (EMR), MEDITECH
- > Our predictive analytics tool, which scours critical data in a patient's record
- > The Vocera clinical workflow and communication system

We considered other sepsis alert tools that flagged potential sepsis cases within patients' EMRs. However, those tools provide clinicians with sepsis alert flags only when they open the patient's medical record. By contrast, the system we built alerts the care team immediately on their Vocera Badge or smartphone, without any manual intervention. Sepsis alerts are automatically sent to the right care team to initiate care quickly when early signs of infection are identified.

System interoperability has been key to ensuring the right data with situational information gets to the right clinicians at the right time. Upon receiving an alert, the assigned staff member immediately screens the patient for sepsis. If sepsis is identified, they begin early intervention.

SAVING TIME, SAVING LIVES

In the United States, more than 1.7 million people develop sepsis each year, and approximately 270,000 of them die. To decrease mortality rates and increase the likelihood of reversing the damaging outcomes of sepsis, early detection is critical. Hundreds of lives that could have been lost to sepsis have been saved because of our Early Sepsis Alert System; since April 2016 we have been able to save 355 lives.

The work done by our teams at Augusta Health to reduce mortality rates from sepsis has been a collaborative effort. Health Quality Innovators (HQI) named our hospital the Health Quality Innovator for Virginia in the category of Data-driven Care in 2018. U.S. News & World Report recognized Augusta Health as a Best Hospital in the Shenandoah Valley for 2020-21.

We are very proud of these honors and are happy to have the opportunity to share our work with other facilities around the state so more lives can be saved. ■

ANTIBIOTICS DELAY IN TREATMENT OF ER SEPSIS PATIENTS LINKED TO INCREASED MORTALITY

BY CHRISTOPHER CHENEY

In the emergency department setting, timely administration of antibiotics to patients with clinical sepsis saves lives, recent research indicates.

Sepsis is a common and life-threatening reaction to infection that affects at least 850,000 adult patients treated in EDs annually. Sepsis kills nearly 270,000 Americans each year, and 1-in-3 of patients who die in hospitals have sepsis, according to the Centers for Disease Control and Prevention.

The recent research published in CHEST associated each additional hour from emergency room arrival to antibiotic administration to 10% increased odds of 1-year mortality.

The lead author of the study told HealthLeaders that speedy recognition and treatment of sepsis is crucial in the ED.

“Our research adds to the evidence that every hour matters when it comes to initiation of appropriate antibiotics for sepsis, impacting not just short-term but also long-term mortality. The fact that the association was fairly linear

suggests there is no acceptable window of delay,” said Ithan Peltan, MD, MSc, an attending physician in the Department of Medicine at Intermountain Medical Center in Murray, Utah.

The research features data collected from nearly 11,000 patients, who experienced a 19% 1-year mortality rate.

‘THIS DATA IS CONVINCING’

The evidence is strong that early administration of antibiotics for sepsis patients in the ED is beneficial, Peltan said.

“The association of antibiotic timing and mortality observed here is logical, supported by pre-clinical data, and consistent in direction and magnitude with other large, well-designed studies of using different outcomes and different criteria to identify sepsis patients. Overall, at this point, this data is convincing,” he said.

Peltan cautioned that emergency medicine clinicians need to keep antibiotics stewardship in mind when treating suspected cases of sepsis.

“Our data support efforts to initiate appropriate antibiotics as soon as possible for patients with sepsis to reduce both short-term and long-term mortality. Efforts to speed antibiotic delivery, however, must be designed so as not to encourage the indiscriminate treatment we sometimes saw associated with pneumonia care.” ■

PRIORITIZE SEPSIS ASSESSMENTS IN YOUR OVERCROWDED EMERGENCY DEPARTMENT

BY CHRISTOPHER CHENEY

Emergency department crowding leads to a significant increase in door-to-antibiotic time for septic patients, recent research shows.

On an annual basis, sepsis affects about 1.7 million American adults and the infection is linked to more than 250,000 deaths. Prompt administration of antibiotics is the standard of care for patients who have been identified with sepsis.

The recent research found only 46% of emergency department sepsis patients received antibiotics within 3 hours of ED arrival when the emergency room was crowded compared to 63% receiving timely antibiotics when the ER was not crowded.

The researchers examined data collected from more than 3,500 sepsis patients.

“We observed a consistent association between increased ED crowding and decreased antibiotic timeliness. When ED occupancy rate was in the highest quartile, the adjusted probability of starting antibiotics within 3 hours was more than 50% lower than when ED occupancy rate was at or below the 25th percentile,” the researchers wrote.

ACHIEVING STANDARD OF CARE UNDER CROWDED ER CONDITIONS

Even in a crowded ED and with the diagnostic challenges of sepsis, meeting the 3-hour standard of care for administration of antibiotics to sepsis patients is a reasonable expectation, the lead author of the research told HealthLeaders.

“Myocardial infarction treatment and stroke treatment also require a team evaluation and multiple aspects of clinical evaluation—there is intensive resource mobilization. However, for MI or for stroke, we don’t say, ‘The ED was overcrowded, so it’s OK that we didn’t achieve our one-hour time to treatment goals,’” said Ithan Peltan, MD, MSc, an attending physician in the Department of Medicine at Intermountain Medical Center, Murray, Utah.

EDs should have a similar approach to sepsis treatment as MI and stroke treatment, with the acknowledgement that sepsis diagnosis is definitely not as clear cut, he said. “We should determine how we can achieve our treatment goals for sepsis without increasing harm to patients—without increasing overtreatment or giving antibiotics unnecessarily to patients.”

ACCELERATING SEPSIS ASSESSMENT

Peltan’s research team found that delayed administration of antibiotics results mainly from challenges in the early stage of patient care.

“Crowding-associated antibiotic delays resulted from delays in initial patient assessment (patient triage, evaluation by a clinician, and diagnostic data collection) rather than delay occurring between initial assessment completion and antibiotic initiation,” the researchers wrote.

There are methods to improve early-stage care of sepsis patients in crowded EDs, Peltan told HealthLeaders.

“One factor is that the earliest stages of sepsis treatment are critical. You need to recognize the patients who might have sepsis. That is not to say we are going to diagnose sepsis right away, immediately start treatment, and give antibiotics indiscriminately. That is clearly not the right thing to do,” he said.

In the early stage of patient care, identifying patients who are at high risk of sepsis is pivotal, Peltan said. “Identifying patients who are at increased risk for sepsis can be based on clinician suspicion with increasing education of our frontline providers and more advanced sepsis prediction models.”

Once an ED patient has been identified as high risk for sepsis, the assessment process should be accelerated, Peltan said.

“The next step is to do what we have done for stroke and MI, which is to take measures that expedite the assessment that is necessary before the treatment decision can be made for patients. We should bring all of the resources into the room, we should get the blood tests done quickly, we should conduct point-of-care tests, we should have the nurses getting IV access, we should get a basic chest X-ray done, and we should collect a urinalysis sample.”

Although speeding up the assessment process is challenging in a crowded ED, it is an essential step to reach an initial decision on whether sepsis is present or more assessment is necessary, he said. “This approach is helpful when there is ED crowding. One of the big challenges that ED crowding poses is for the physician at the bedside to have all of the data needed to make decisions.” ■



BRIAN WARD

CASE STUDY: AUTOMATING SEPSIS ALERTS AT HARBORVIEW MEDICAL CENTER

Using a simple EMR alert, the hospital reduced sepsis fatalities by 41%

Sepsis is the body's extreme response to an infection. The condition is life-threatening, common, and on the rise. In 2014 alone, there were 1.7 million sepsis hospitalizations and 270,000 sepsis deaths in the U.S. And in 2017, it was reported that even though sepsis is only present in 6% of hospitalizations, it accounts for 15% of in-hospital deaths.

Sepsis mortality rates increase quickly when the condition is left untreated, even for just a few hours. However, there isn't a simple test for sepsis. Instead, providers have to watch for patterns and symptoms that could indicate sepsis. As a result, it's common to have misdiagnoses or delays in diagnosis.

Sepsis is also the most fatal complication for burn victims, accounting for 50%–60% of burn injury deaths. That last issue is a particular concern for places like Harborview Medical Center in Seattle. The 413-bed facility is the only designated Level I trauma and burn center in Washington state and is the regional trauma and burn referral center for Alaska, Montana, and Idaho. It has around 17,000 admissions, 259,000 clinic visits, and 59,000 emergency department visits annually.

Rosemary Grant, BSN, RN, CPHQ, is the sepsis coordinator at Harborview. She says her facility chose to focus on sepsis detection because the condition is “prevalent, expensive, and deadly.”

“When we looked at data from our hospital and others, we saw that patients who develop sepsis in the hospital have a much higher mortality than patients who arrive in the emergency department with sepsis,” Grant says. “So we knew we needed to focus on faster identification of sepsis in our inpatient population.”

In 2011, the Harborview team decided to fight sepsis by changing the way they detected it. Working in-house, they developed an automated flagging system for their electronic health record (EHR).

When a patient is admitted to Harborview, the patient’s vitals are plugged into the EHR several times each day. The system searches for patterns, trends, and symptoms that might indicate sepsis. If found, a red box appears around the patient’s name, and the nurse is assigned a task in the EHR to screen the patient for infection.

The nurse then assesses the patient for non-sepsis causes for the readings. If the nurse decides the readings could indicate sepsis, then the physician is alerted. The system is designed so it won’t sound more than every 12 hours, she says, meaning nurses won’t get more than one alert per patient per shift.

“I think the most important component of our system is that it incorporates the bedside nurses’ clinical judgment,” says Grant. “The alert is just a computer algorithm, and if it paged the provider every time, they would become tired of it very quickly. Instead, it asks the nurse who is spending his/her shift with a patient whether infection is suspected based on abnormal vitals and the patient’s overall clinical picture. It’s only if and when the nurse suspects infection that the provider is notified.”

Since the system’s inception, Harborview has seen remarkable results. Sepsis mortality has gone down 41% from 2011 to 2017, and over 95% of alerts are addressed by a nurse within two hours. There’s also been an increased awareness of the condition and its risks, Grant adds.

SEPSIS PATTERNS

Currently, Harborview’s system uses systemic inflammatory response syndrome (SIRS) criteria to determine if a patient has sepsis. SIRS is defined as a combination of the following symptoms:

- > Temperature less than 36°C (96.8°F) or greater than 38°C (100.4°F)
- > Heart rate greater than 90 beats per minute
- > Respiratory rate of more than 20 breaths per minute or an arterial carbon dioxide tension (PaCO₂) of less than 32 mmHg
- > Abnormal white blood cell count (either greater than 12,000/μL or less than 4,000/μL, or greater than 10% immature band forms)

Harborview's system also looks for:

- > Systolic blood pressure less than 90 mmHg
- > Lactate level greater than or equal to 2 mmol/L

Grant does note that there are slightly different criteria for burn patients, pediatric patients, and burned pediatric patients.

While sepsis and SIRS are closely linked, sepsis isn't the only possible cause for SIRS or SIRS symptoms. A patient could register on the SIRS scale if he or she has been more active, is in pain, has a bad cold, etc. That's why a nurse has to make the final call.

"If a patient has two or more of these criteria, the bedside nurse is asked if he/she is concerned for infection," she says. "If the nurse says yes, the provider is automatically paged to come to the bedside. If the nurse says no, he/she is asked to explain why the patient has abnormal vitals if it's not infection."

BUILDING THE SYSTEM

The original build for the alert system took 12 months of work, says Grant. That included designing it, getting feedback and buy-in, building it in the EHR, and implementation. Then, in September 2016, Harborview held a weeklong rapid process improvement workshop (RPIW) to further refine the system based on provider feedback.

Approximately 15 team members were in attendance for the RPIW: attending physicians, resident physicians, bedside nurses, APRNs/PAs, a data analyst, a quality improvement specialist, and IT support. Afterward, the system was updated, with a continuing back and forth between the RPIW team on what changes to keep or drop.

“Since the implementation of those changes in February 2017, we have seen further decreases in mortality for hospital-acquired sepsis as well as increased three-hour [sepsis] bundle compliance,” she says.

If your facility is considering setting up its own automated sepsis flagging program (and it should), Grant says that holding an RPIW or similar event with stakeholders is the way to go.

“So much was accomplished having the right people in the room, especially the bedside nurses who will use the system every day,” she says. “They were also able to go back to their units and talk to their colleagues about suggested changes before they were made, and we were able to further refine and improve the system based on that feedback.”

BUY-IN

One of the benefits of gathering stakeholders together was convincing them of the system’s merit. Grant says at the start, there was some pushback from providers who thought their patients were “somehow different than other patients in the hospital.”

“We worked using a ‘pilot’ model where we asked if [the stakeholder] could just try [the system] for three months and see,” she says. “It usually worked out that they realized the benefit of the system.”

The pilot model also allowed Harborview to gather patient safety data as well as metrics that also impact administrators, such as length of stay (LOS). By demonstrating shorter LOS for patients diagnosed with sepsis more quickly and treated efficiently, they were able to get the needed leadership support for the program.

IMPROVEMENT

There is still room for the system to improve; for instance, vital signs currently have to be typed in manually. Time is a major factor in treating sepsis, with each hour of delay in administering antibiotics resulting in a 7.6% decrease in survival on average. Having vital signs automatically updated in the EHR would make it easier and faster for caregivers to notice worrisome changes in a patient's condition.

“I think it would be great to not have to manually enter the vital signs, and there are some groups working on that, although we haven't explored much at Harborview—yet!” says Grant. “I think this would be helpful for a lot of reasons. But the system is still very successful even with the sometimes delayed entry of vitals.”

GET AHEAD OF SEPSIS

Earlier this year The Centers for Disease Control and Prevention (CDC) launched an anti-sepsis campaign to bring attention to the condition. Called “Get Ahead of Sepsis,” the program was launched last August as an educational initiative to protect Americans from the devastating effects of sepsis, including emphasizing the importance of early recognition and rapid treatment, as well as the importance of preventing infections that could lead to sepsis.

The program calls on healthcare professionals to educate patients, prevent infections, suspect and identify sepsis early, and start sepsis treatment fast. In addition, this work urges patients and their families to prevent infections, be alert to the symptoms of sepsis, and seek immediate medical care if sepsis is suspected or if an infection is not improving or is getting worse.

“Detecting sepsis early and starting immediate treatment is often the difference between life and death. It starts with preventing the infections that lead to sepsis,” said CDC Director Brenda Fitzgerald, MD, in a CDC statement. “We created Get Ahead of Sepsis to give people the resources they need to help stop this medical emergency in its tracks.”

HOW STATES ARE FIGHTING SEPSIS

Here are some examples of what states are doing to battle sepsis:

Gabby’s Law – Illinois Senate Bill 2403 (SB 2403)

This law was named in honor of a 5-year-old girl who developed an infection from an undetected tick bite that led to sepsis. It requires hospitals to:

- > Implement an evidence-based process for quickly recognizing and treating adults and children with sepsis
- > Train staff to identify and treat patients with possible sepsis
- > Collect sepsis data to improve the quality of care and provide it to the state (e.g., the Centers for Medicare & Medicaid Services (CMS) Hospital Inpatient Quality Reporting Program)

(New York) Rory's Regulations – NYCRR Title 10 Sections 405.2, 405.4, and 405.7

This law was named in honor of a 12-year-old boy who died when he developed an infection that led to sepsis after falling and cutting himself in a school gym. It requires hospitals to:

- > Implement an evidence-based process, which should include suitable training, resources, and equipment for healthcare providers, for quickly recognizing and treating sepsis in adults and children.
- > Collect sepsis data to improve the quality of care and provide this data to the state annually.
- > Implement a Parents' Bill of Rights to ensure that parents and primary care providers receive vital information about children's care. Some components include:
 - > Allowing parents or guardians to stay with pediatric patients at all times
 - > Reviewing medical tests with the patient or the patient's parent or guardian before discharging a child patient

Reducing Sepsis Mortality in Ohio – Ohio Hospital Association's Sepsis Initiative

This two-year sepsis prevention and early recognition program, funded from CMS' Leading Edge Advanced Practice Topics (LEAPT), focuses on reducing sepsis mortality in Ohio by 30%. The program encourages hospitals to:

- > Conduct a survey to identify gaps in sepsis knowledge and treatment
- > Identify, track, and report sepsis data
- > Provide healthcare provider training for sepsis prevention and early recognition

“Think Katie First” – Wisconsin Hospital Association’s Partners for Patients Initiative

This initiative was named in honor of Katie McQuestion, a 26-year-old healthcare worker who died from sepsis after being hospitalized with flu-like symptoms. It brings Wisconsin hospitals together to:

- > Reduce sepsis mortality through early detection and rapid treatment of sepsis
- > Share sepsis prevention and early recognition best practices
- > Collaboration efforts have led to a 16% decrease in mortality-associated sepsis since 2013.

Source: CDC. ■



ABOUT THE SPONSOR



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