



5 Keys to Reducing Sepsis Mortality

The Need for Early detection and Treatment of Sepsis

Michael Wong (Founder/Executive Director, Physician-Patient Alliance for Health & Safety):

Early detection and treatment of sepsis can dramatically improve patient care and save patients' lives.

Over the next few minutes, this video will discuss 5 keys to reducing sepsis mortality. We will also be pointing out technologies that may be helpful in detecting and treating for sepsis.

PPAHS & Sepsis Partners

Wong:

I am Michael Wong, founder and executive director of the Physician-Patient Alliance for Health & Safety. Physician-Patient Alliance for Health & Safety is a national advocacy force for addressing patient health and safety priorities that are shared by patients, physicians, regulators and industry. By doing so, we seek to ensure that the best medications, medical invention and technology can improve care and reduce cost. PPAHS works to advance patient health and safety by developing and highlighting best practices and recommendations through better use and application of clinical practices and experiences, information technologies and checklists, and healthcare information. As a voice in support of ideas and innovation that can improve care, we encourage a health ecosystem culture of patient safety.

PPAHS is proud to be invited to be a member of the Sepsis Alliance and the Global Sepsis Alliance. Both www.sepsis.org and www.global-sepsis-alliance.org are great resources and information about sepsis.

This is a machine transcription of the podcast, so this transcript and the actual interview may differ.

With me to talk about sepsis and what you can do to detect and treat for sepsis is Dr. Ken Rothfield. Dr. Rothfield is a member of PPAHS's board of advisors. An anesthesiologist, he is Chief Medical Officer at Medical City Dallas, which is operated by the Hospital Corporation of America. Dr. Rothfield is not only a doctor, but he developed sepsis following hernia surgery. So, Dr. Rothfield has the unique perspective of knowing sepsis from the point of view of a doctor and a patient.

Dr. Ken Rothfield and Sepsis

Dr. Ken Rothfield (Chief Medical Officer, Medical City Dallas)

In 2002, I found out that I had an inguinal hernia on the morning I was supposed to run the Dublin, Ireland Marathon. Initially, the hernia was small and easily ignorable, but it started becoming increasingly more uncomfortable, and I knew that it was time for surgery.

I scheduled the surgery the Monday before Thanksgiving in 2015 to give myself a long holiday weekend to recover. I went in for a simple procedure and had no idea it would turn into a life threatening venture.

The weekend recovery wound up taking months. One of the staples in the mesh hernia repair fell out after surgery, and a small section of my small intestine became trapped. I developed terrible pain and abdominal distention. I was admitted to the hospital at 3 am on Thanksgiving. By Friday, I was septic. I had an overwhelming infection and was critically ill. Saturday, I had emergency surgery, where they discovered I had a section of gangrenous intestine. That led to a big, open operation.

As a doctor with about 25 years' experience, I understood the potential worst-case-scenario outcomes. I've witnessed enough cases where a patient comes into the hospital with an abdominal catastrophe, and unfortunately doesn't make it back home.

Sepsis in America

Rothfield:

According to the CDC, more than 1.7 million people get sepsis each year here in the United States. Almost 270,000 Americans die from Sepsis every year, and one in three who die in hospital have sepsis.

But, here's what you can do - and I'm speaking to each and every one of my fellow clinicians. You can save lives, if you're committed to early detection and treatment. You

have the ability to decrease the incidence of sepsis mortality. You just have to be committed to trying.

Monitor for sepsis

Rothfield:

I would like you to commit to to early detection and treatment of sepsis, because you may not get a second chance to save your patient's life.

But, first, you have to know when your patient is suffering from sepsis. You must know at the earliest possible time when sepsis is occurring. Clinical studies show that mortality is significantly reduced if septic patients are identified at early stages of the disease process. In my own case, I was admitting on Thursday, by Friday I was septic, but it was not until Saturday that emergency surgery was performed which removed a section of gangrenous intestine. In my opinion, this can best be done through patient monitoring, which would have been able to provide early detection of my sepsis and I could have had earlier intervention.

Monitoring a patient's heart rate and respiratory rate allows clinicians to detect changes over time while supporting hospital protocols for early detection of sepsis. Although nursing assessments taken every few hours may detect sepsis, patient monitoring can alert you at the earliest possible moment when sepsis is developing.

You may not get a second chance to save your patient's life - monitor for sepsis.

Treat Sepsis Early

Rothfield:

Clinicians should be open to the idea that treatment needs to start immediately, without necessarily knowing the source of the infection.

The key elements in treating severe sepsis and septic shock includes early antibiotics, early recognition and intervention, source control, and hemodynamic support.

Sepsis should be treated as a medical emergency. Sepsis should be treated as quickly and efficiently as possible as soon as it has been identified. This means rapid administration of antibiotics and fluids.

A 2006 study published in Critical Care Medicine showed that the risk of death from sepsis increases by an average of 7.6% with every hour that passes before treatment begins.

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The sooner treatment is start, the better the prognosis for reducing the risk of serious complications or death.

Work Collaboratively

Rothfield:

Work with and listen to your colleagues to improve patient safety and care. A Joint Commission book on improving staff communication summed it up best in its title - [“Communication: The Bond to Patient Safety.”](#)

If you are a leader at a hospital, like I am, or a leader of a unit in a hospital, I ask you to lead your team in developing and maintaining a safety culture. As The Joint Commission said in [Sentinel Event Alert #57 on the essential role of leadership in developing a safety culture:](#)

“In any health care organization, leadership’s first priority is to be accountable for effective care while protecting the safety of patients, employees, and visitors. Competent and thoughtful leaders contribute to improvements in safety and organizational culture.”

Getting people to work together collaboratively allows more patients to be helped.

Be Open to Using New Technology

Rothfield:

The use of medical devices and information technologies can improve care.

Be open to using new technology to improve the reliability of this process.

Examples of Some Technologies

Wong:

Here are some technologies that may be helpful in detecting and treating for sepsis. This is by no means an endorsement by us or PPAHS, or an exhaustive list of available technologies. Please determine what technologies best suit your clinical needs and organizational culture.

If adopting a new technology is intimidating, talk to your colleagues in other hospitals or contact PPAHS for a referral - chances are we may know a clinician who is using the technology and may be able to help you out.

Thank You, EarlySense

Wong:

This clinical education podcast is made possible by an unrestricted grant from EarlySense.

Without ever touching the patient, the EarlySense System provides continuous patient monitoring for Heart Rate, Respiratory Rate and Motion, to potentially allow the clinical team to manage:

- Early Detection of Patient Deterioration
- Fall Prevention
- Pressure Ulcers Prevention

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