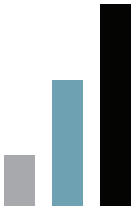


SEPSIS

CASE FOR CHANGE



Current national mortality rates:¹

- Sepsis: 10% to 20%
- Severe Sepsis: 20% to 50%
- Septic Shock: 40% to 80%

28,692 to 114,770

is the potential number of lives to be saved nationally with a 10% to 40% reduction in sepsis.¹

BOLD AIM & KEY DRIVERS

Reduce mortality rates in patients with sepsis by

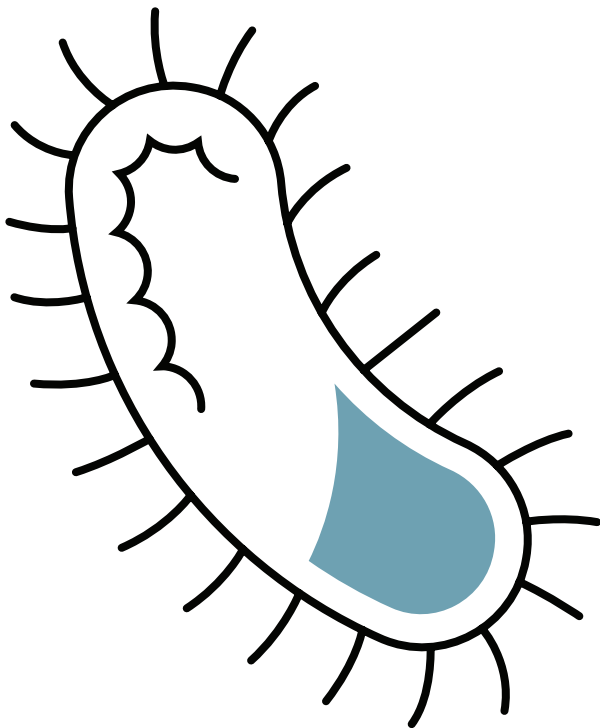
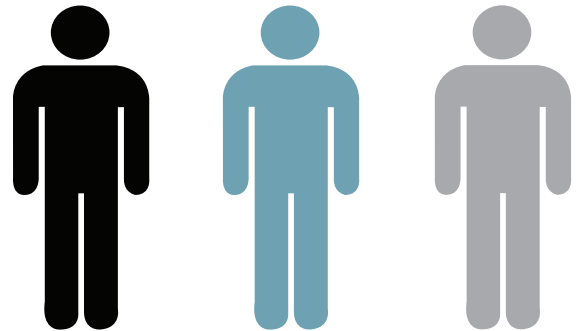
20

PERCENT
by 2019.

- ◀ Communication
- ◀ Culture and Teamwork
- ◀ Tools and Education
- ◀ EHR and Data

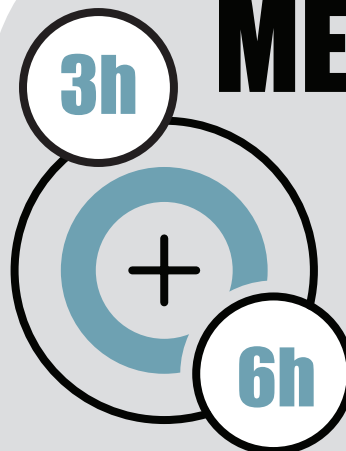
LEAPT KEY LEARNING

- Concurrent management of sepsis bundles
- Develop and broadly implement EHR triggers and warnings
- Collaborate with primary care, emergency management, skilled nursing, LTC and home health
- Engage community to raise public awareness



MEASURES

3h



Process:

- Severe sepsis and septic shock three hour management bundle compliance
- Severe sepsis and septic shock six hour management bundle compliance

Outcome:

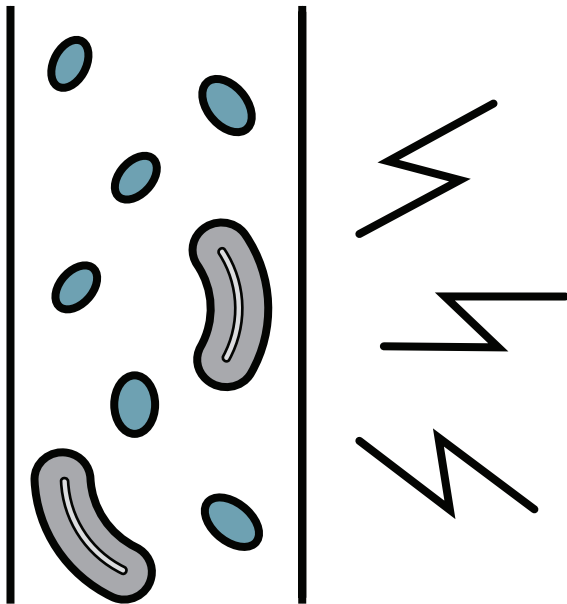
- Postoperative sepsis rate

SEPSIS

RAPID CYCLE INNOVATIONS

EHR and Data

- Utilize electronic health record (EHR) to help identify sepsis, trigger initiation of bundle elements, notify providers of critical lab values, and identify delays and omissions in care
- Drill down the data to link to readmissions and identify opportunity for prevention in previous admission
- Expand scope beyond sepsis, severe sepsis, septic shock and septicemia patient populations and track through data, including patients with pneumonia, bacteremia or a UTI
- Implement the use of a sepsis scorecard to communicate trends in compliance with 3- and 6-hour bundle, integrate outcomes, and measure performance trends for mortality, length of stay (LOS) and costs



Culture and Teamwork

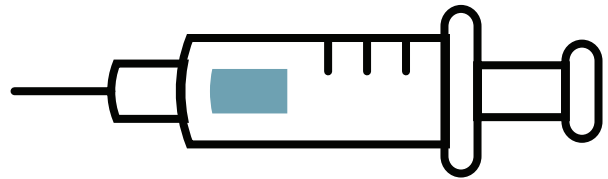
- Engage physicians first to pave the way for implementation of sepsis early recognition and treatment protocols
- Utilize a multi-disciplinary team with local physician and nursing champions
- Identify mentor physicians and hospitals to serve as faculty and consult with hospitals beginning the journey
- Engage all stakeholders that can help disseminate/spread and create momentum as a state/nation
- Stakeholders include IDPH, IMS, emergency physician and nursing associations, Telligent, and malpractice insurers
- Conduct regular multi-disciplinary reviews of sepsis cases

Tools and Education

- Implement Surviving Sepsis Campaign's 3- and 6-hour bundle
- Incorporate sepsis early warning criteria into rapid response protocols and implement in the Emergency Dept.
- Utilize modified early warning score (MEWS) system with the existing sepsis bundle to facilitate identification of sepsis
- Start Early - Emphasize early detection and the Surviving Sepsis Campaign bundles to prevent sepsis progression and to streamline implementation of evidence-based best practices
 - Key portions of bundles to implement early (lactic acid, early fluid resuscitation, and antibiotics after blood culture)
 - Systemic Inflammatory Response (SIRs) - Must meet two criteria to start Sepsis "clock"
- Incorporate sepsis bundle components in pneumonia care protocols.
- Utilize dedicated sepsis teams to evaluate how processes are implemented and refine processes related to the three and six hour bundles based on results
- Implement standardized sepsis care management tool to facilitate auditing of sepsis cases
- Lesson Learned: Central line and CVP may not be an essential portion of bundle if good peripheral access is obtained, especially in small/ rural hospitals and med-surg units

Specialty Population:

- Develop sepsis education (e-modules and simulation tools) as well as a treatment bundle for use in rural hospitals that does not require invasive monitoring
- Initiate sepsis protocols for special populations (such as immune suppressed) as soon as hypoperfusion is recognized and not delayed pending critical care admission



Communication

- Use tools to educate and remind providers of Code Sepsis and decision algorithm to activate a Code
- Badges for all ED and ICU providers in LEAPT hospitals; posters with algorithms for each hospital
- Create a compelling campaign highlighting the life-saving potential of this work statewide and at the community level. (e.g. "These are my people - 418 lives.")
- Share research and references to get physician acceptance, especially in area of lactic acid testing
- **Say Sepsis:** Saying "sepsis" out loud raised immediate urgency which led to better outcomes and, "Tell me why you think it is not sepsis" to rule out sepsis early
- Produce a "Seeing Sepsis" physician simulcast

Source:

1. Martin, G. S. (2012). Sepsis, Severe Sepsis, and Septic Shock: Changes in Incidence, Pathogens, and Outcomes. Expert Review of Anti-infective Therapy: 10(6) 701-706.

Last Updated: September 2017