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INSTITUTE

Beating the Clock to Stop Sepsis in One Hour

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Transformation sensei

- Melissa Lin is a Transformation sensei at Virginia Mason Institute.
- Melissa's national experience in health care strategy consulting has given her breadth and depth across a number of domains, with a particular focus on strategic planning, board governance and strategic partnerships.
- Melissa has also led lean training and coaching for small and large hospital groups, implemented organization-wide strategies and spoken at numerous regional and national health care conferences on the impact of a continuous improvement culture.
- Melissa is certified in the Virginia Mason Production System® and in TapRoot Root-Cause Analysis.



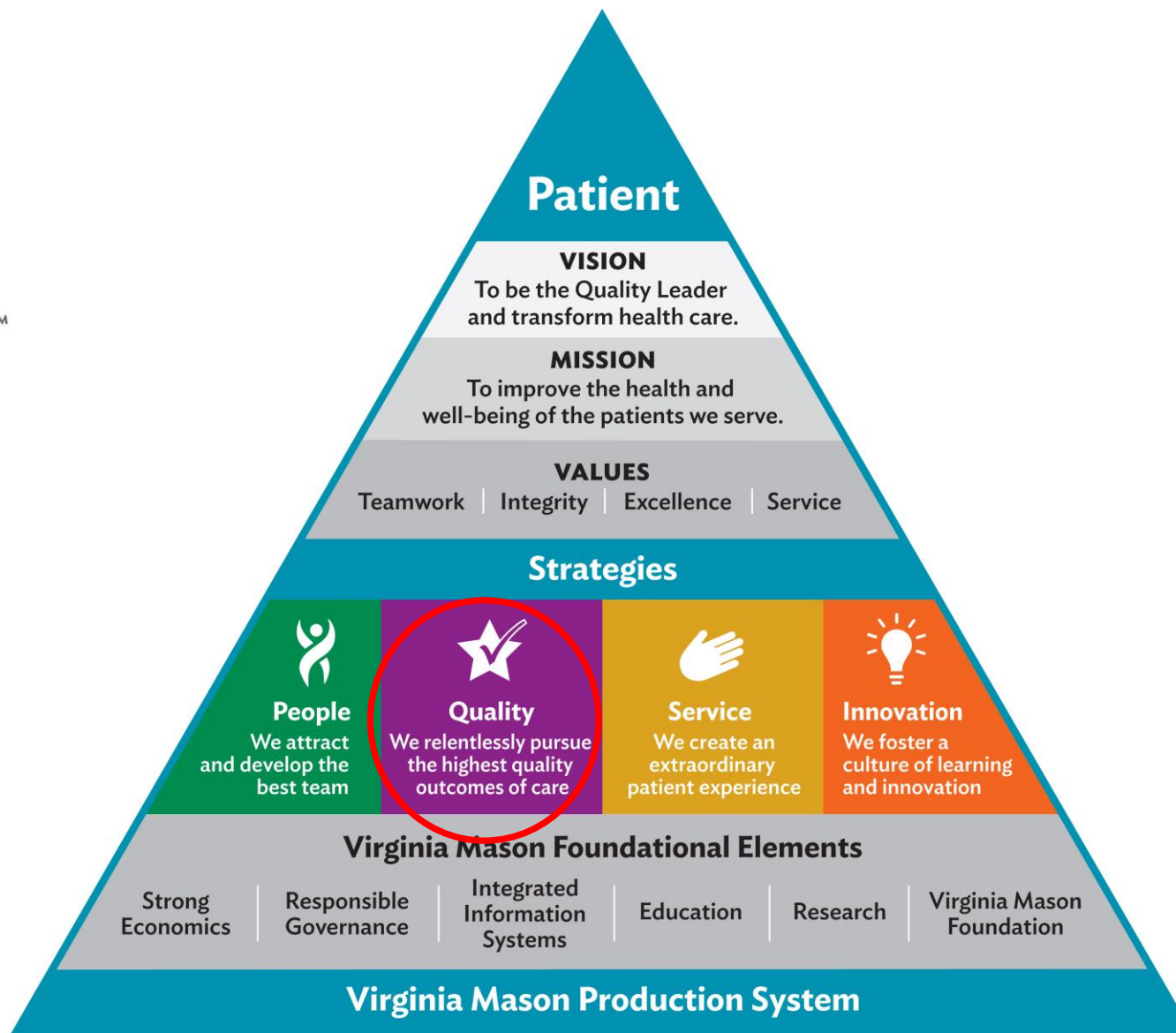
Engaging With Us Today

- Ask questions using the GoToWebinar chat or question tool. We will do our best to address as many questions as possible during the Q & A session or via the chat feature.
- Today's session will be recorded and posted on our website at VirginiaMasonInstitute.org. All questions and answers will also be posted following the presentation.
- Check your inbox for the recording and question/answer document following this session.



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OUR STRATEGIC PLAN



Urgency and Sepsis

- There are more than **18 million** cases of sepsis worldwide each year, and it kills more than **258,000** Americans annually.^{1,2}
- Sepsis is the **primary cause of death from infection**.² Patients diagnosed with sepsis are estimated to have a mortality rate of **28 to 50 percent**.³
- Patients with initially less severe sepsis make up the majority of sepsis deaths. In one study, **septic shock was not present in 68 percent of patients** who died from sepsis.⁴ Improving standardized care for patients with less severe sepsis could drive future reductions in hospital mortality.



¹ Slade, Elizabeth, Pritpal S Tamber, and Jean-Louis Vincent. "The Surviving Sepsis Campaign: Raising Awareness To Reduce Mortality." *Critical Care* 7.1 (2003): 1. Web. 10 July 2017.

² Adapting To The CMS Sepsis Bundle | Healthleaders Media". *Healthleadersmedia.com*. N.p., 2017. Web.

³ Angus, Derek C. et al. "Epidemiology Of Severe Sepsis In The United States: Analysis Of Incidence, Outcome, And Associated Costs Of Care". *Critical Care Medicine* 29.7 (2001): 1303-1310. Web.

⁴ Liu V, Escobar GJ, Greene JD, et al. Hospital Deaths in Patients With Sepsis From 2 Independent Cohorts. *JAMA*. 2014;312(1):90. doi:10.1001/jama.2014.5804.

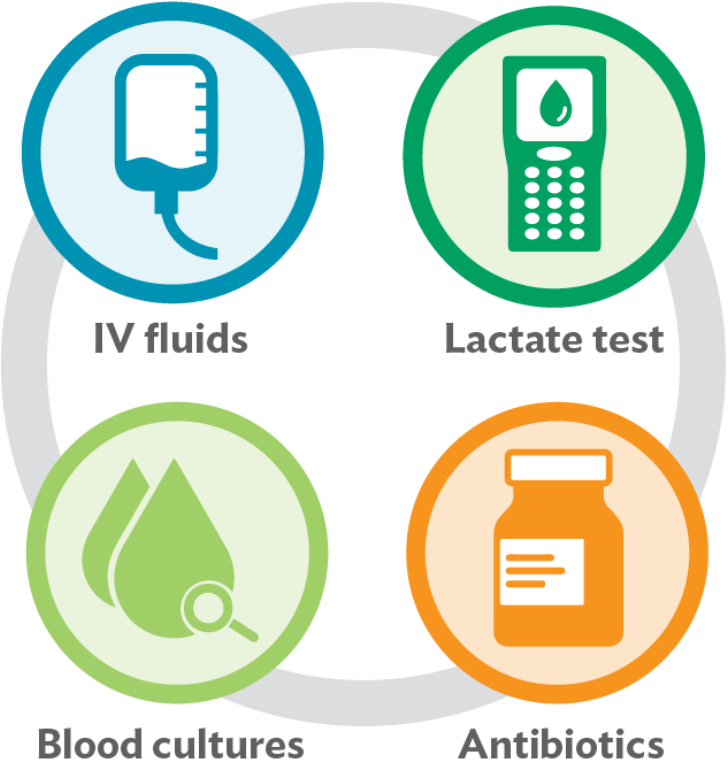
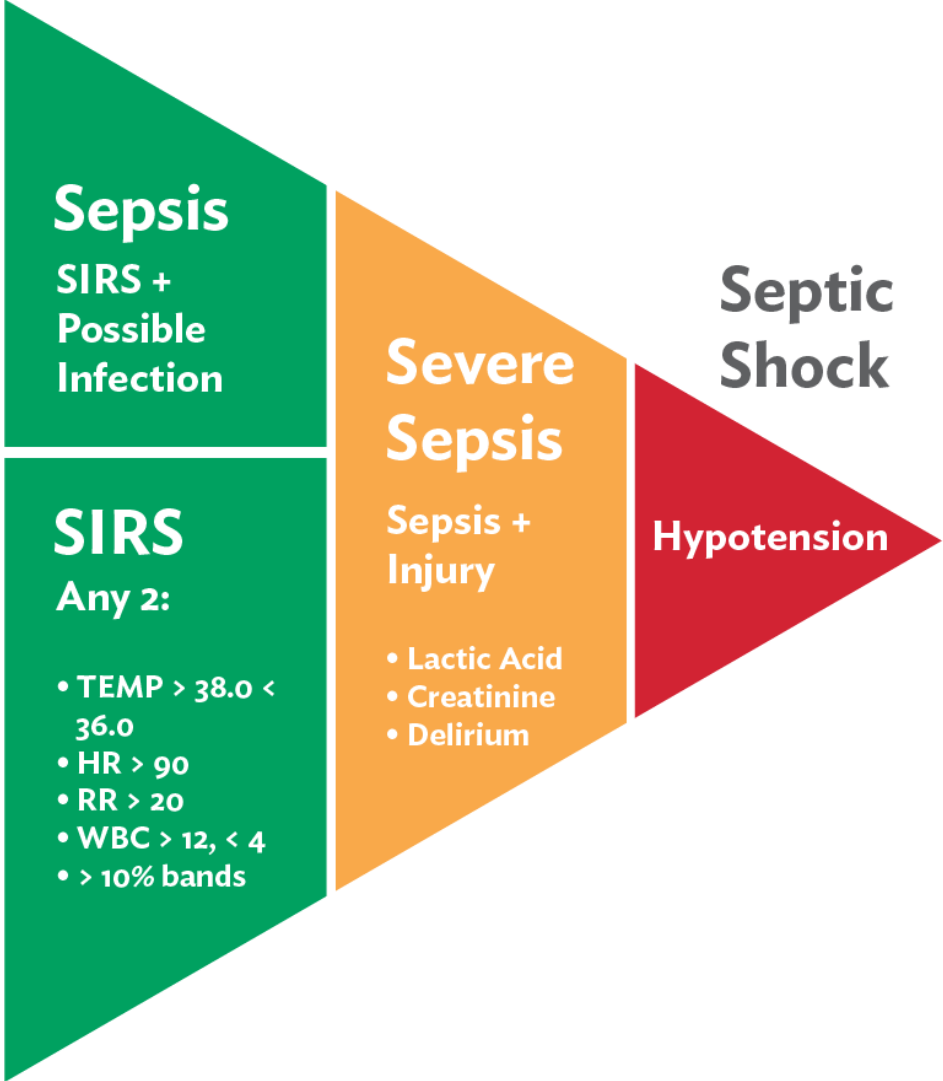
Sepsis Urgency at Virginia Mason Health System

- Sepsis was the major cause of mortality in our institution with 2276 deaths from 2008-2014.
- Sepsis was responsible for 47% of the total mortality cases over this 7 year time period.

Sepsis Survivors Experience

- Longer lengths of stay with high utilization of precious healthcare resources
- Higher rates of readmission
- Experience long term injury and effects of the disease which could be life altering

Early Sepsis Recognition and Treatment



Setting an Aggressive Standard



< 1 hour

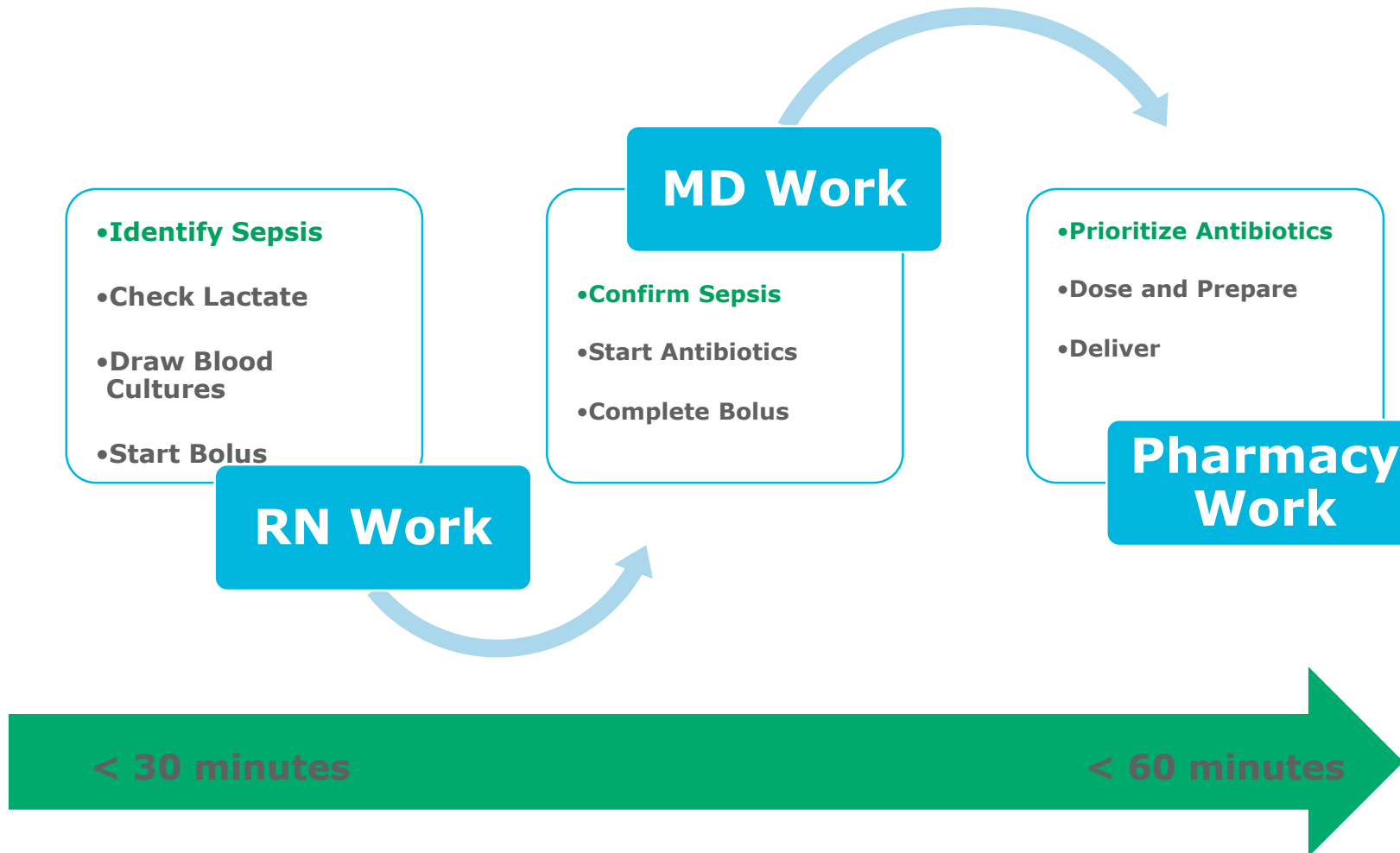
Researchers have found that **each hour of delay** in administering antibiotics results in an average **decrease in survival of 7.6 percent**.¹

Additionally **early sepsis** was targeted because two-thirds of those who die do not have sepsis on arrival.²

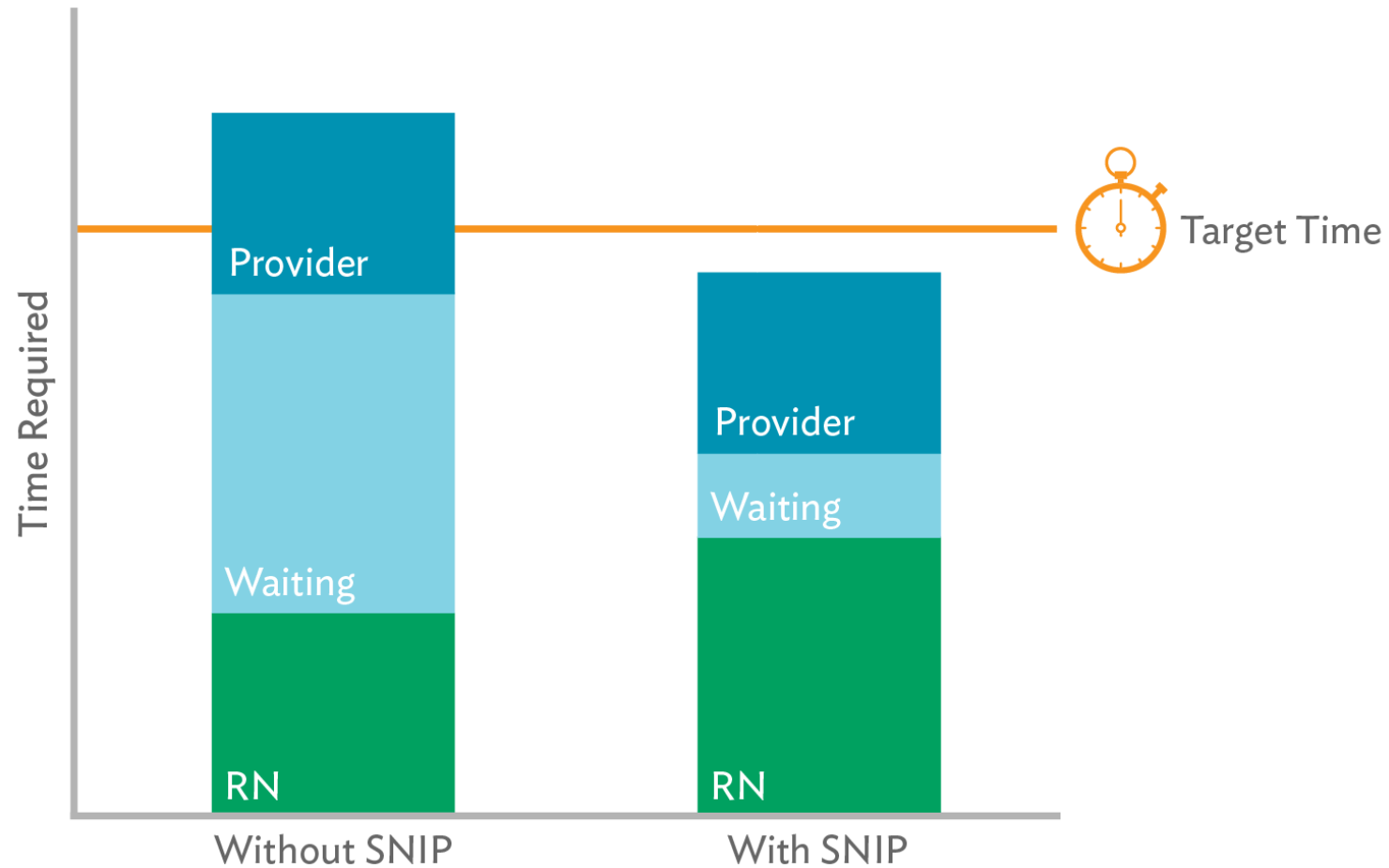
¹ Adapting To The CMS Sepsis Bundle | Healthleaders Media". Healthleadersmedia.com. N.p., 2017. Web.

² Liu et al. Hospital Deaths in Patients With Sepsis From 2 Independent Cohort. JAMA July 2014

Sepsis Power Hour



SNIP: Sepsis Nurse Initiated Protocol



2 Key Elements of Success

Empower your care team to take immediate action.



Rapidly bring services directly to the patient.



Communication and Accountability

Registered Nurse

Nursing Assistant

Phlebotomist

Provider

Pharmacist

Project Manager

Project Manager Oversight

"Dr. Calderon,

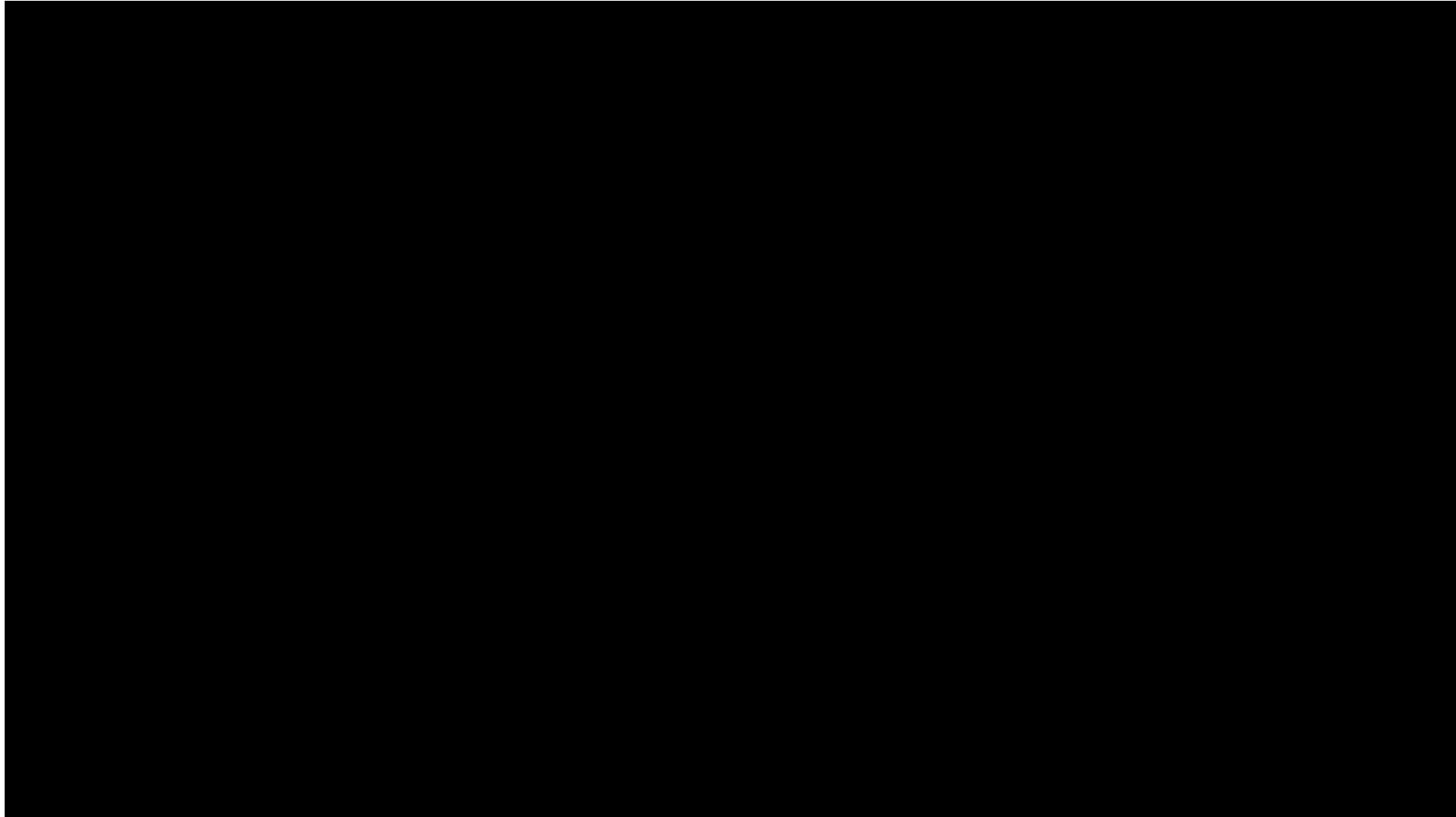
Thank you for using the order set and ordering antibiotics STAT! The patient received antibiotics in 31 minutes, well under our 60 minute target.

***Thanks again,
Alice"***

“I think the best thing about Sepsis Power Hour is that it brings care to the patient without the patient having to wait; it really leverages the whole multidisciplinary team exactly where their skills and strengths are and the ultimate beneficiary is the patient.”

— Alice Ferguson, RN

Sepsis Power Hour at Virginia Mason



Results at Virginia Mason Medical Center

Lead Time Reduction



The average lead time of sepsis bundle completion **decreased by 54%** between 2014 and 2017.

140 min.



64 min.

Sepsis Mortality Rates (2011 versus 2016)



Since 2011, patient mortality due to sepsis **decreased by**

45%

Sepsis Power Hour Bundle



To Learn More About our Sepsis Solution

The Sepsis Power Hour solution

<https://www.virginiamasoninstitute.org/sepsis-power-hour/>

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Question and Answer Session

Ask your questions via the chat feature or the question tool.

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A **lean** journey is a **learning** journey™