Sepsis

June 18, 2020

Minnesota Hospital Association

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Minnesota Sepsis Agenda

Sepsis HIIN Data

20% ↓ in mortality

Sepsis Committee Workplan

Sepsis Road Map

85

Sepsis Site Visits

15

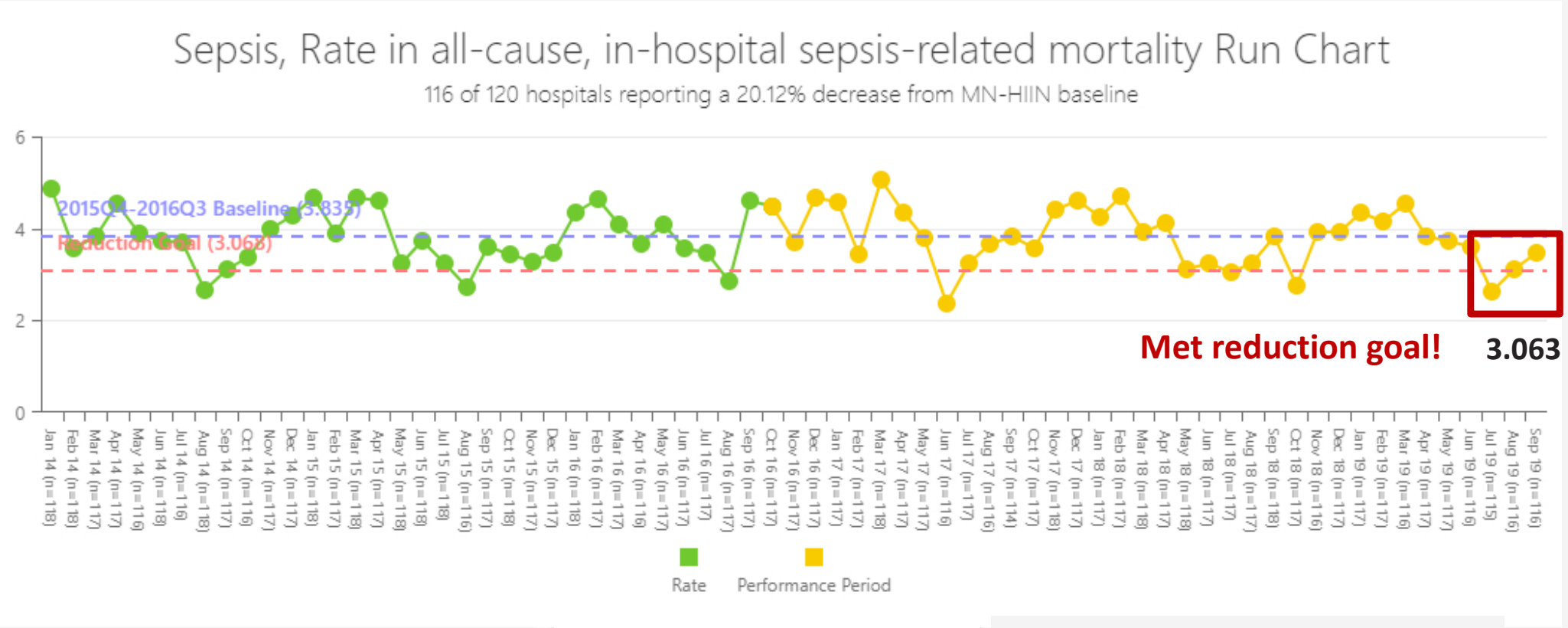
HIIN Data Overview

Minnesota Hospital Association (MHA)

June 19, 2020

Sepsis all-cause, in-hospital mortality, claims

116 of 120 hospitals reporting 20% reduction in Q3 2019



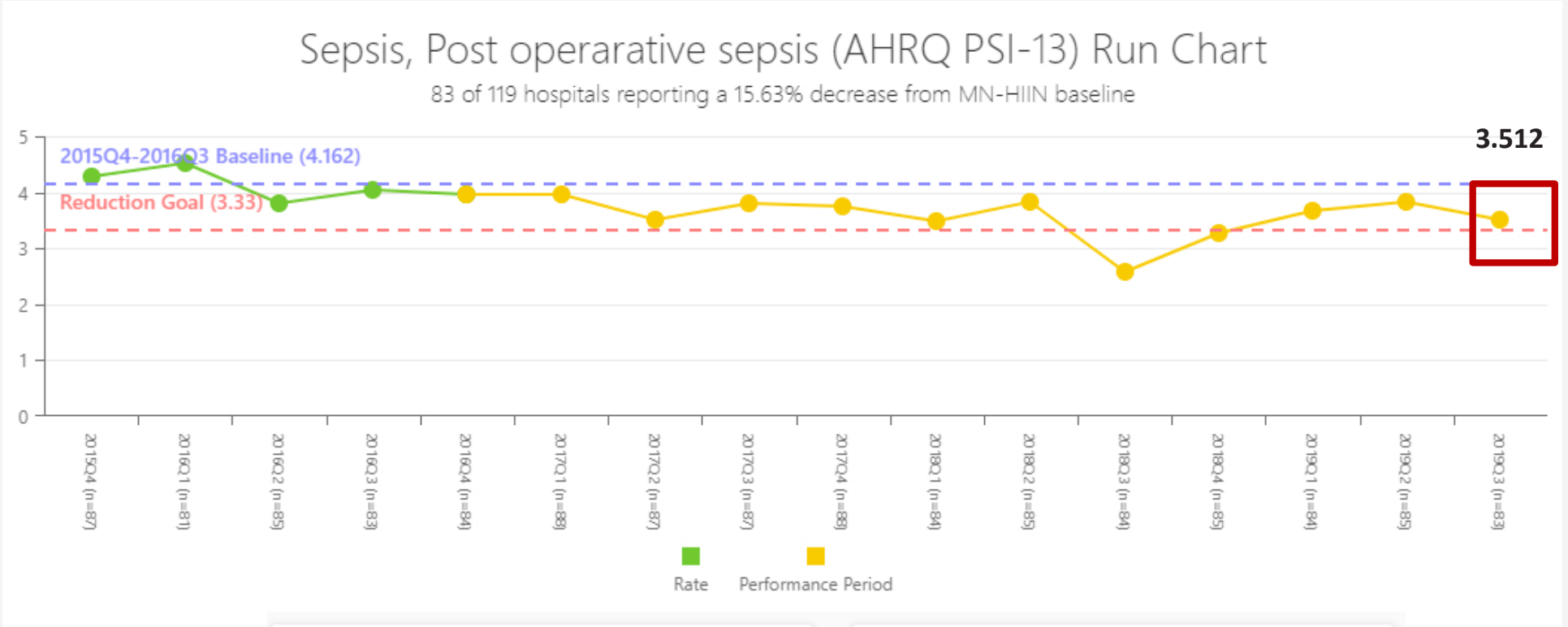
Current Quarter Improvement

2019Q3

20%

AHRQ PSI-13, Claims

83 of 119 hospitals reporting a 15.63% decrease from baseline , Q3 2019



Current Quarter Improvement

2019Q3

16%

Performance Improvement

Oct 2016 - 2019Q3

13%

Improving Sepsis Outcomes

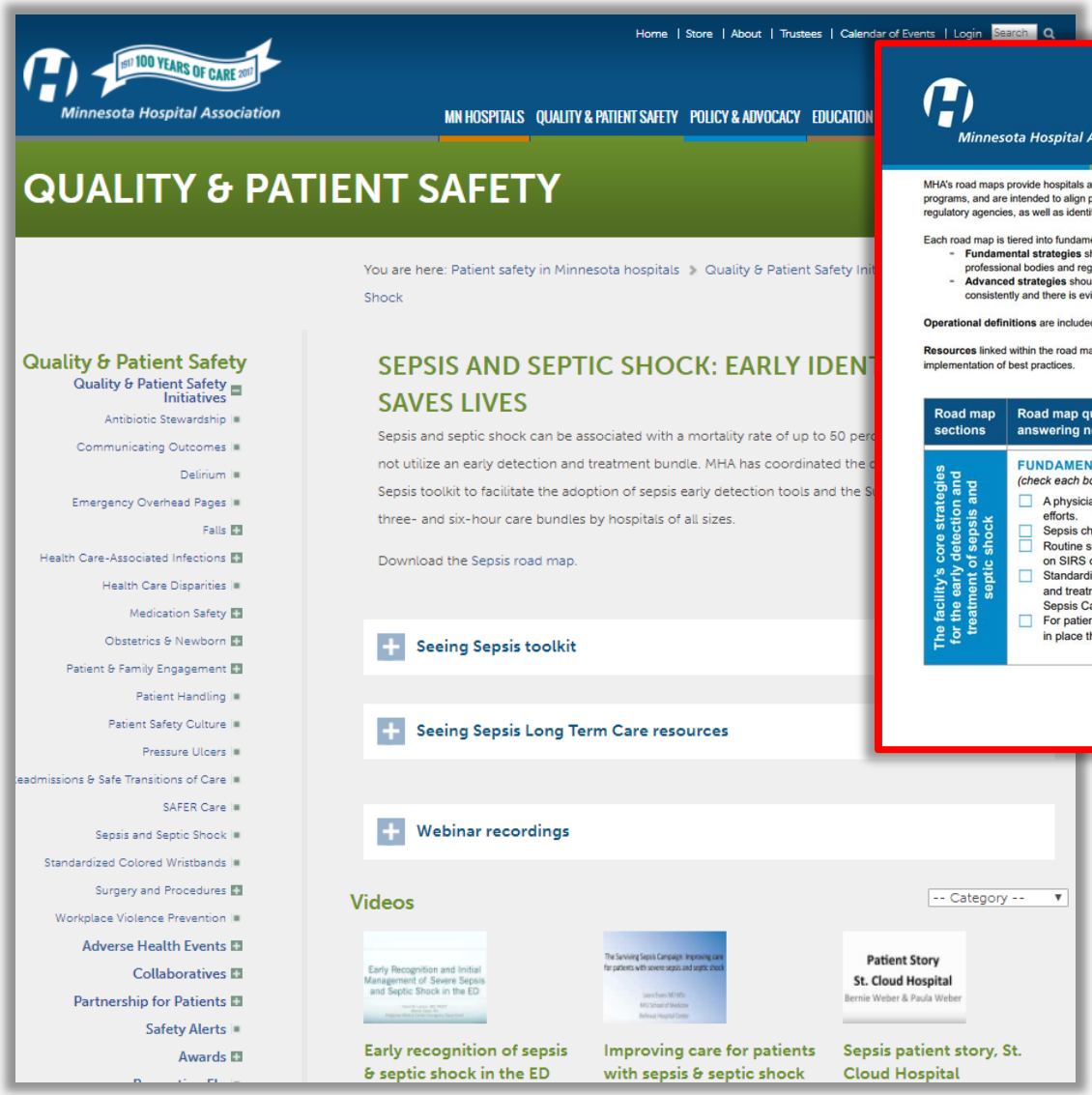
Minnesota Hospital Association (MHA)

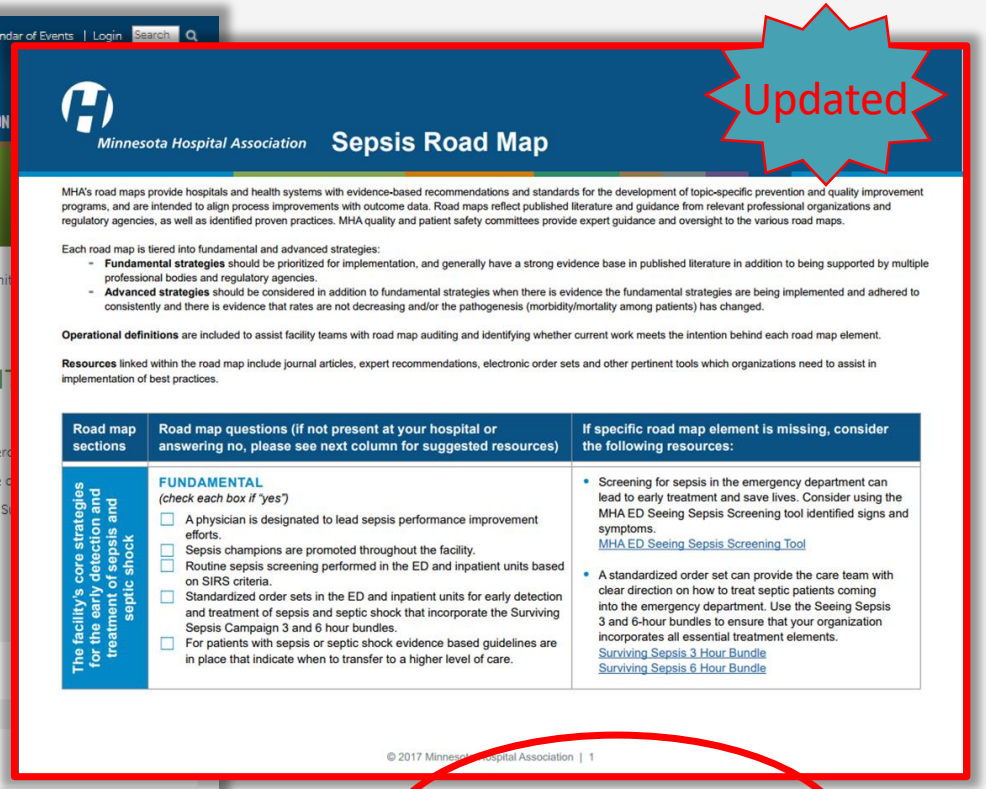
June 19, 2020

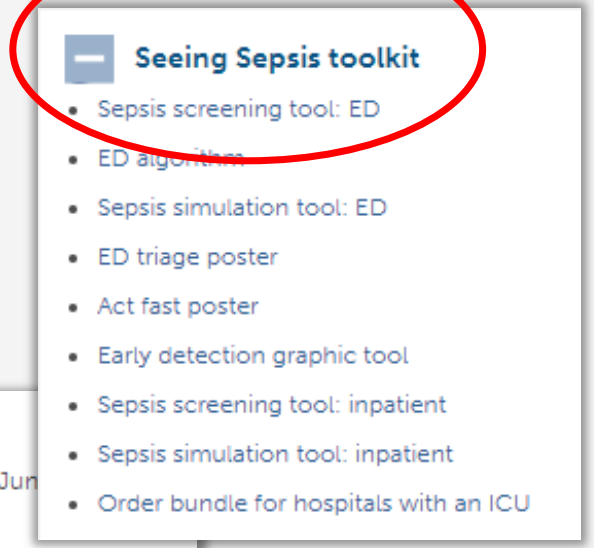
2020 Sepsis Committee Work Plan

Priority 1: Increase implementation and adherence to road map participation

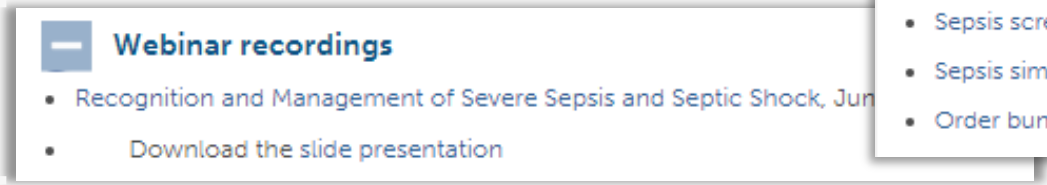
Priority 2: Site visits, outreach, education







Sepsis webinar recordings, videos



Sepsis Road Map

Fundamental or advanced strategies to help with prioritization

Road map sections	Road map questions (if not present at your hospital or answering no, please see next column for suggested resources)	If specific road map element is missing, consider the following resources:
The facility's core strategies for the early detection and treatment of sepsis and septic shock	**FUNDAMENTAL** *(check each box if "yes")* ☐ A physician or advanced practice provider is designated to leader sepsis performance improvement efforts. - Identified person ensures that regular sepsis multidisciplinary team meetings are convened to review cases, sepsis data and quality measures, and promote education. ☐ Sepsis care champions are promoted and recognized by the organization. - All staff that play a role in identification and treatment of patients with sepsis such as nurses, lab, pharmacy, etc. - Acknowledgment of sepsis champions may include early detection recognition, success in bundle implementation. ☐ Routine sepsis screening performed in the ED and inpatient units based on SIRS criteria.	• List of sepsis team participants for sepsis multidisciplinary team participation. • Screening for sepsis in the emergency department can lead to early treatment and save lives. Consider using the MHA ED Seeing Sepsis Screening tool identified signs and symptoms. MHA ED Seeing Sepsis Screening Tool • A standardized order set can provide the care team with clear direction on how to treat septic patients coming into the emergency department. Use the Seeing Sepsis 3 and 6-hour bundles to ensure that your organization incorporates all essential treatment elements. Surviving Sepsis 3 Hour Bundle Surviving Sepsis 6 Hour Bundle

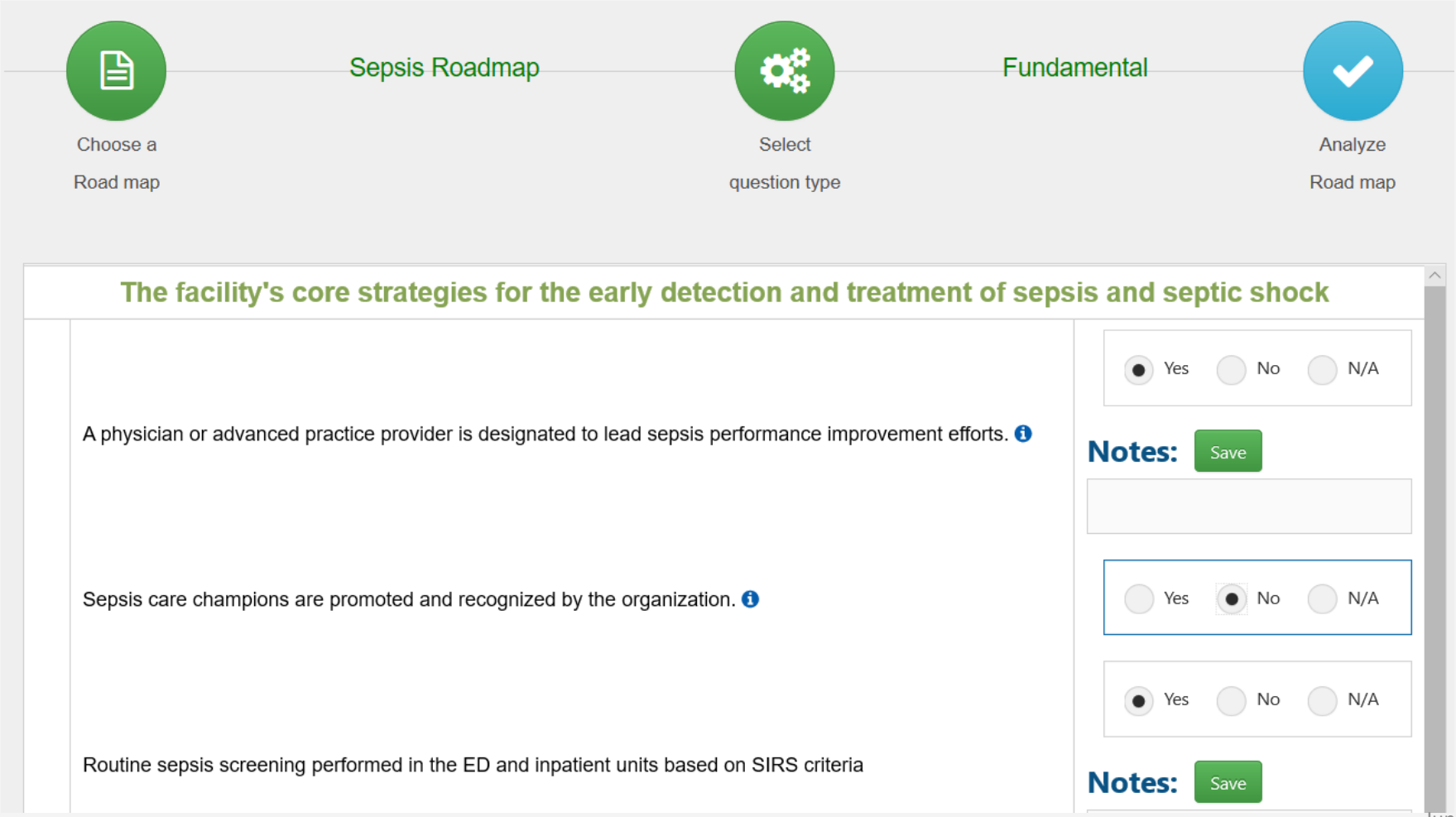
Organized by section to address specific aspects of care

Audit-style format for key elements

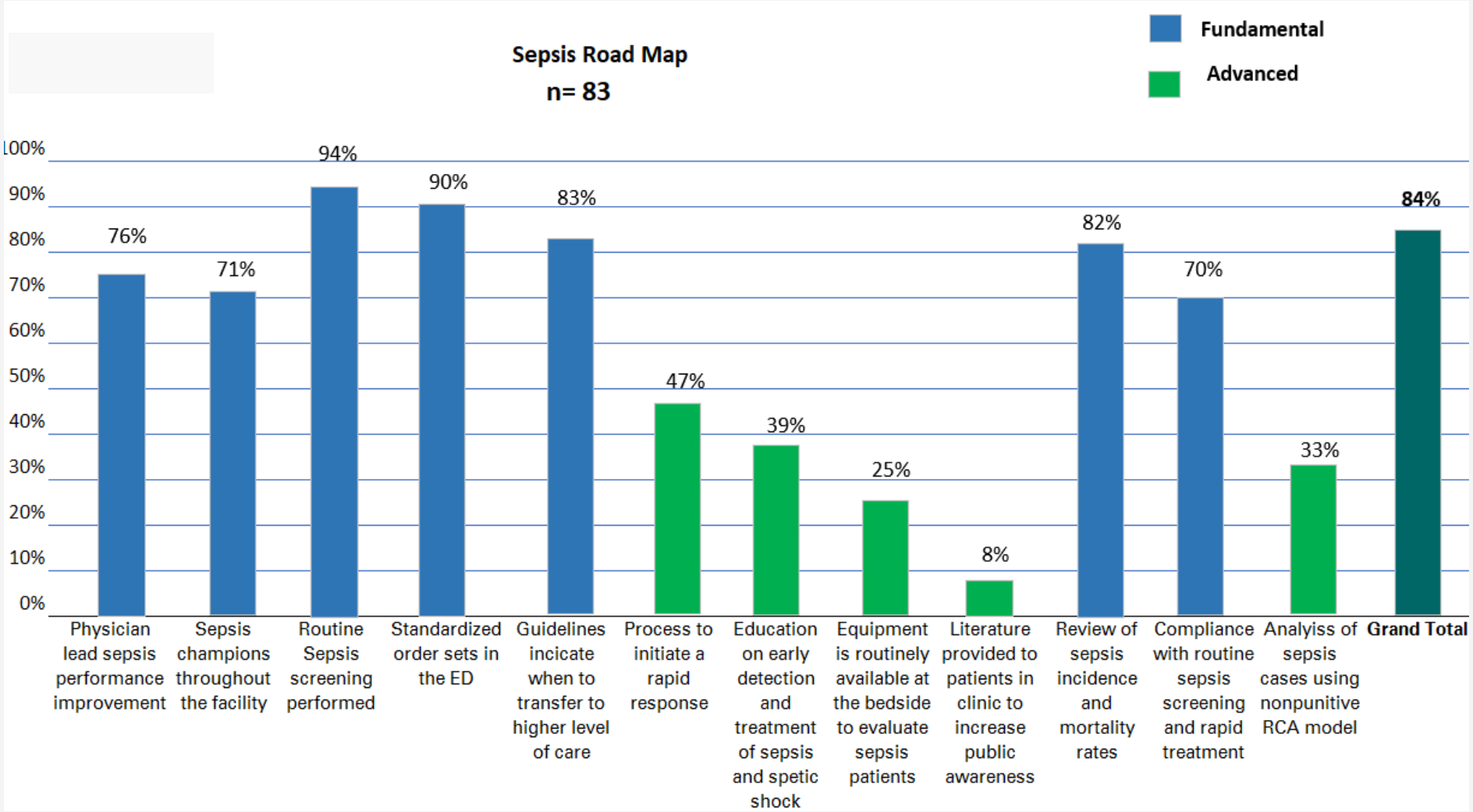
Operational definitions (what yes means)

Mapped resources with live links

Interactive data portal



Sepsis road map participation & adherence



Sepsis Site Visits

Tools & process

- Checklist
- Prep call questions
- Data analysis
- Slide deck

Hospital _____

Date of visit: _____

Sepsis Site Visit Process

- ☐ **Identify site**
  - Outreach based on data
  - Recruit during navigator visits and committee meetings
  - Document tracking sites interested and completed
- ☐ **Schedule site visit**
  - Request time frame from site (day of week, time of day, month that work best)
  - Request times available for Dr. Weinert from Tracy Brown
  - Determine site visit date, time, location – typical visits 2 hours in length
- ☐ **Schedule and complete prep call for site visit**
  - Specialist to lead prep call and invite key site visit planners from site (1 hour call)
  - Send agenda template in advance, after completing highlighted fields
  - Gather data in advance
    - Statewide and site-specific data
      - Sepsis incidence, sepsis mortality, septic shock incidence, septic shock mortality
      - Spreadsheet with recent data and example charts
      - SEP-1 data

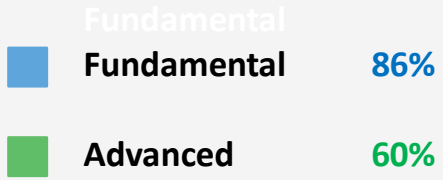
Sepsis site visits

Date	Site	Follow-up
February 21, 2018	Lakeview Hospital	Grand Rounds- August 2018
March 15, 2018	Winona Health Services	
April 18, 2018	United Hospital	
July 12, 2018	Olmsted Medical Center	Grand Rounds- April 2019
September 20, 2018	RC Hospitals & Clinics	
October 16, 2018	Ridgeview Medical Center	
February 14, 2019	Essentia St. Mary's Medical Center	
March 15, 2019	Stevens Community Medical Center	
August 26, 2019	Lake Region HC	
December 10, 2019	St. Joseph's- Fairview	
January 15, 2020	North Memorial Hospital	
January 28, 2020	Hennepin Health	
April 2 ,2020	Lakewood Health System	

Fundamental

Fundamental 86%

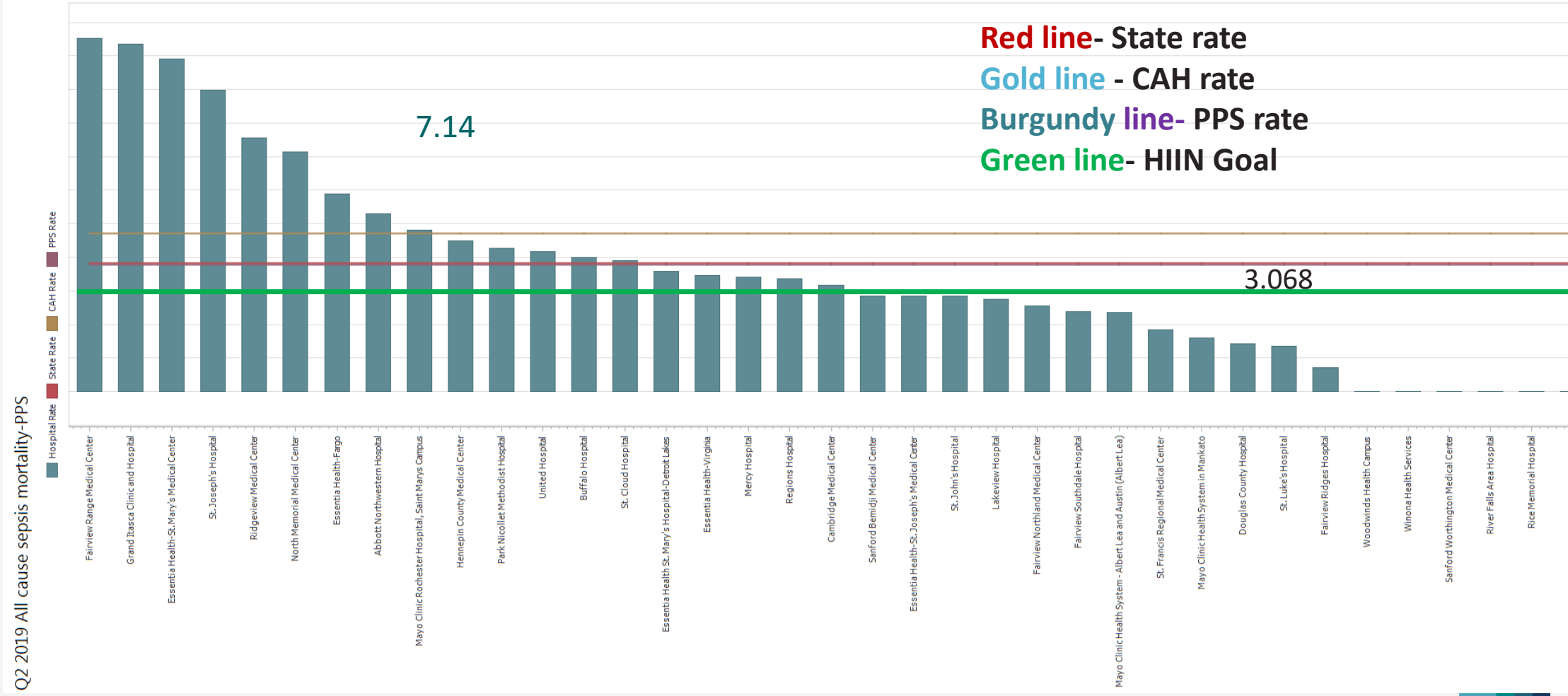
Advanced 60%



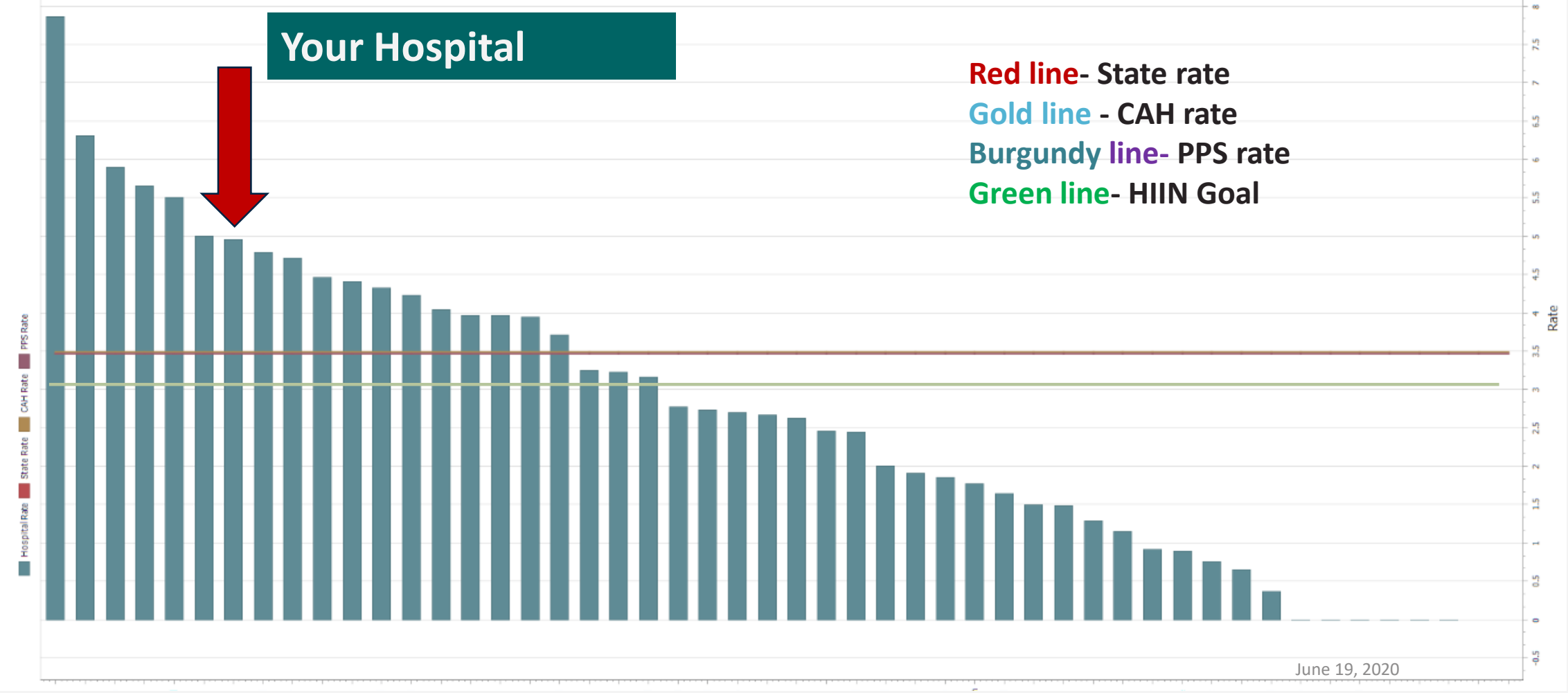
Hospital's Road Map adherence

		Yes	No	Blank
1	Physician designated to Lead	X		
2	Sepsis champions promoted	X		
3	Routine sepsis screen – ED	X		
4	Standard order set – ED & inpatient	X		
5	Transfer of care - guidelines		X	
6	Process to initiate rapid response	X		
7	Ongoing interdisciplinary education		X	
8	Literature provided to patients in clinic		X	
9	Equipment available at the bedside	X		
10	Tracking & monthly review; incidence/mortality; process measure	X		
11	Monthly review compliance; screening & bundles	X		
12	Monthly RCA analysis sepsis cases		X	

Sepsis, all cause, in-patient mortality-PPS: Q2 2019



Sepsis, all cause, in-patient mortality-PPS: Q2 2019



Resource Links

- Sepsis Resources: https://www.mnhospitals.org/quality-patient-safety/quality-patient-safety-improvement-topics/sepsis#/videos/list
- Sepsis Road Map: https://www.mnhospitals.org/Portals/0/Documents/patientsafety/Sepsis/Sepsis%20Road%20Map.pdf

Contact information

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Michigan Health & Hospital Association

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GLPP HIIN Sepsis Improvement Data

Sepsis Mortality

7.1%

Post-Op Sepsis

5.1%

*Per 1000 patient days compared baseline period Q4 2015 – Q3 2016 to performance period 10/1/2016 – 12/31/2019

Michigan's Sepsis Presentation

Sepsis Practice Collaborative Model

A content refresh of sepsis fundamentals

Best Practice Diagram

A compilation of sepsis best practices and lessons learned

Process Discovery Tool

Performing medical record reviews to identify improvement opportunities

Sepsis Simulations

Learning by doing

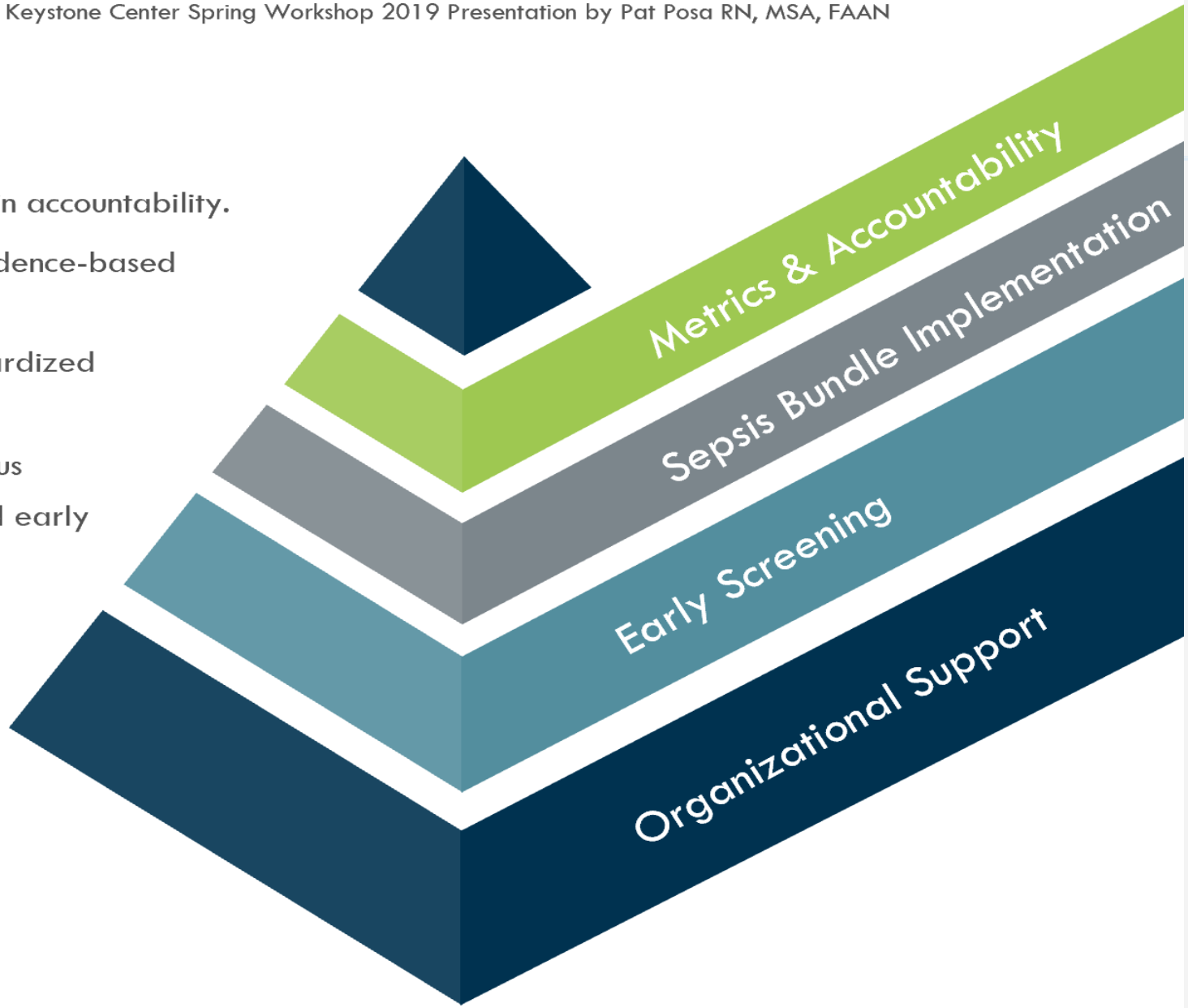
Sepsis Practice Collaborative Model

- High-level overview of sepsis fundamentals
- Visual model providing a content refresh
- Sepsis program development/sustainability
- Ideal for Sepsis Coordinators

Sepsis Practice Collaborative Model

Based on the MHA Keystone Center Spring Workshop 2019 Presentation by Pat Posa RN, MSA, FAAN

- Measure success and maintain accountability.
- Effectively implement an evidence-based sepsis bundle.
- Screen for sepsis with standardized tools and triggers.
- Build organizational consensus that sepsis must be managed early and aggressively.



MHA Keystone Center

A Certified Patient Safety Organization

Collection of Blood Cultures & Antibiotic Administration

Based on GLPP HIIN Gap Analysis Surveys

QUESTION 1

Do all patients screening positive for severe sepsis/septic shock have blood cultures drawn within three hours of presentation?

QUESTION 2

Do all patients screening positive for severe sepsis/septic shock have blood cultures drawn prior to initiating broad spectrum antibiotics?

QUESTION 3

Do all patients screening positive for severe sepsis/septic shock receive an initial dose of a broad-spectrum antibiotic within three hours of presentation?

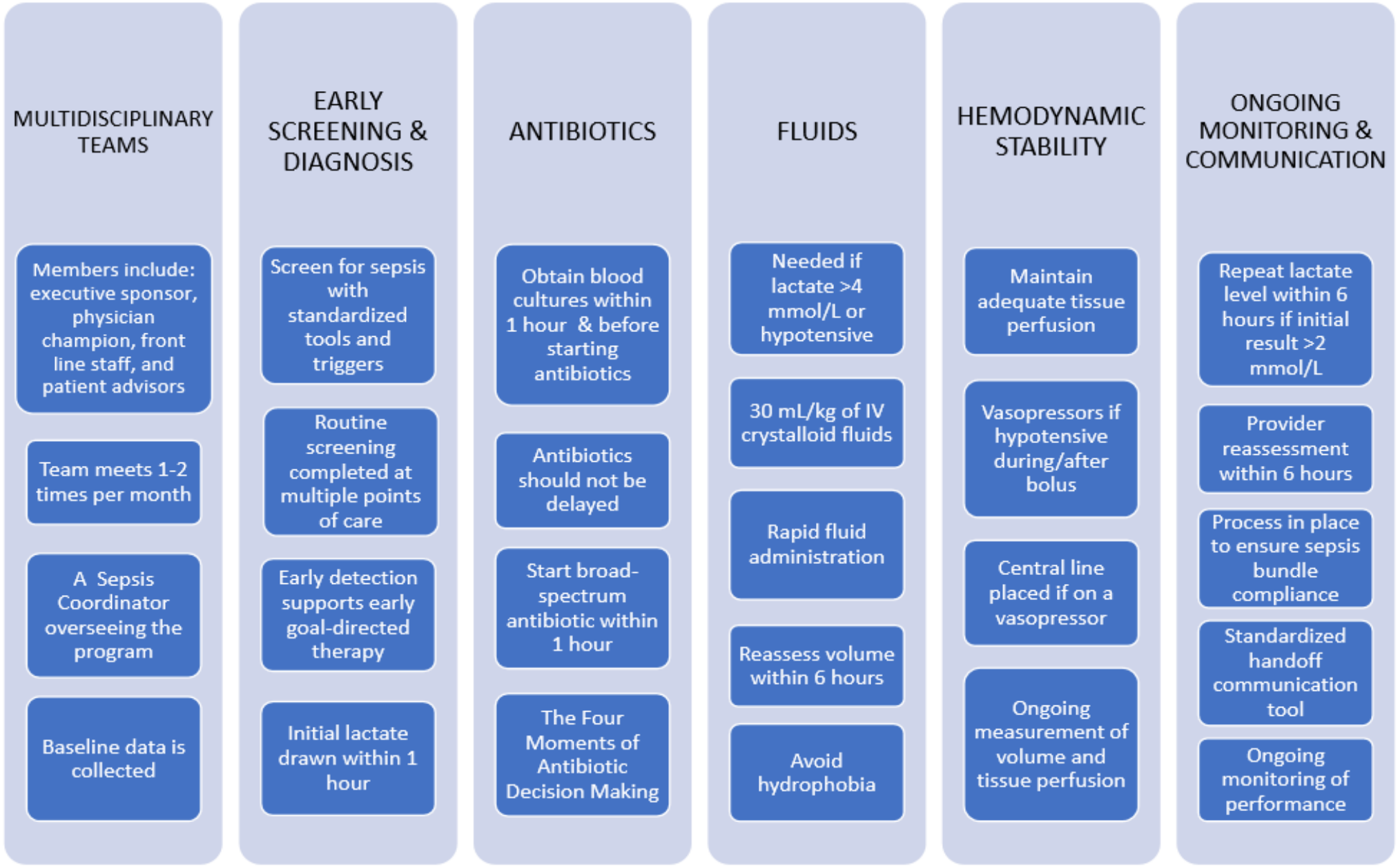
MHA Keystone Center
A Certified Patient Safety Organization

GREAT LAKES PARTNERS FOR PATIENTS
Illinois | Michigan | Wisconsin
Powered by the MHA Keystone Center
Accelerating Improvement at the Point of Care

Sepsis Best Practice Diagram

- Compilation of sepsis best-practices from 2016 to 2020
- Specific to adults in acute care settings
- Outlines 6 crucial elements for an evidence-based sepsis program
  1. Multidisciplinary Teams
  2. Early Screening and Diagnosis
  3. Antibiotics
  4. Fluids
  5. Hemodynamic Stability
  6. Ongoing Monitoring and Communication

Sepsis in Adults - Best Practice Flow Diagram



Process Discovery Tool

- Chart reviews to identify system gaps
- Provides real-data
- Results are used to drive improvement
- Improvement Sprints
  - Can be used as a stand-alone tool

MHA Michigan Health & Hospital Association

The Process Improvement Discovery Tool is meant to help hospitals provide safer patient care by completing an assessment to identify process improvement opportunities. Hospitals can use the results to develop specific strategies to address gaps and identify resource needs. Please complete the tool using patient charts that align with this specific topic.

Sepsis Process Improvement Discovery Tool (Minimum 5 charts/Maximum 10 charts)

Note: Do NOT spend more than 20-30 minutes per chart!

Instructions: (1) If the answer to the question is 'Yes", mark an X in the box to indicate that the desired process was discovered. You may check more than one box per chart. (2) The processes that are not marked with an X may indicate the most common failures and could be a priority focus. (3) Put N/A if the process is not applicable

PROCESS	Chart 1	Chart 2	Chart 3	Chart 4	Chart 5	Chart 6	Chart 7	Chart 8	Chart 9	Chart 10
Screening										
Patient was screened for sepsis within 30 minutes of arrival to the emergency	X	X	X	X	X	X	X	X	X	X
Inpatient sepsis screen completed at least once per shift? (*N/A once sepsis identified in ED or inpt unit*)	N/A	X	X	X	N/A			X	X	X
If sepsis screen is positive, sepsis alert activated overhead with positive sepsis screen?	X	X	X	X	X	X		X	X	X
3 hour bundle compliance										
Blood cultures drawn within 30 minutes of positive sepsis screen **AND** prior to antibiotic administration?				X			X			
Serum lactate drawn and resulted within 60 minutes of positive sepsis screen?	X	X		X	X	X	X		X	X
Broad spectrum antibiotics initiated within 60 minutes of positive sepsis screen?	X	X	X	X		X	X		X	X
Fluid 30ml/kg initiated within 60 minutes of positive sepsis AND completed within 180 minutes of positive sepsis screen for pts with hypotension SBP< 90mmHg and or lactate >2mmol/dL	N/A	N/A	N/A	X			X	N/A		X
6 Hour Bundle Compliance										
Vasopressors administered for MAP <65mmHg?	N/A	N/A	N/A	X	N/A	X	N/A	N/A	X	X
Repeat serum lactate drawn & resulted within 6 hours after initial elevated lactate?		X		X	X	X	X		X	X
Fluid reassessment done at the end of the fluid resuscitation?	N/A	N/A	N/A	X	X		X	N/A	X	X

Sepsis Simulations

- Adults learn best by doing
  - Hands-on, real-life scenarios
- 3 scenarios
  - Emergency Department (ED)
  - Care transitions (ED to Intensive Care Unit)
  - General medical floor
- Train the trainer
  - How to effectively lead a simulation in your organization

Sepsis Simulations

Questions?

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Wisconsin Sepsis Initiatives

Sepsis Transfer Communication

- Nursing protocols and order sets
- Point of Care tacking tool

Sepsis Checklist

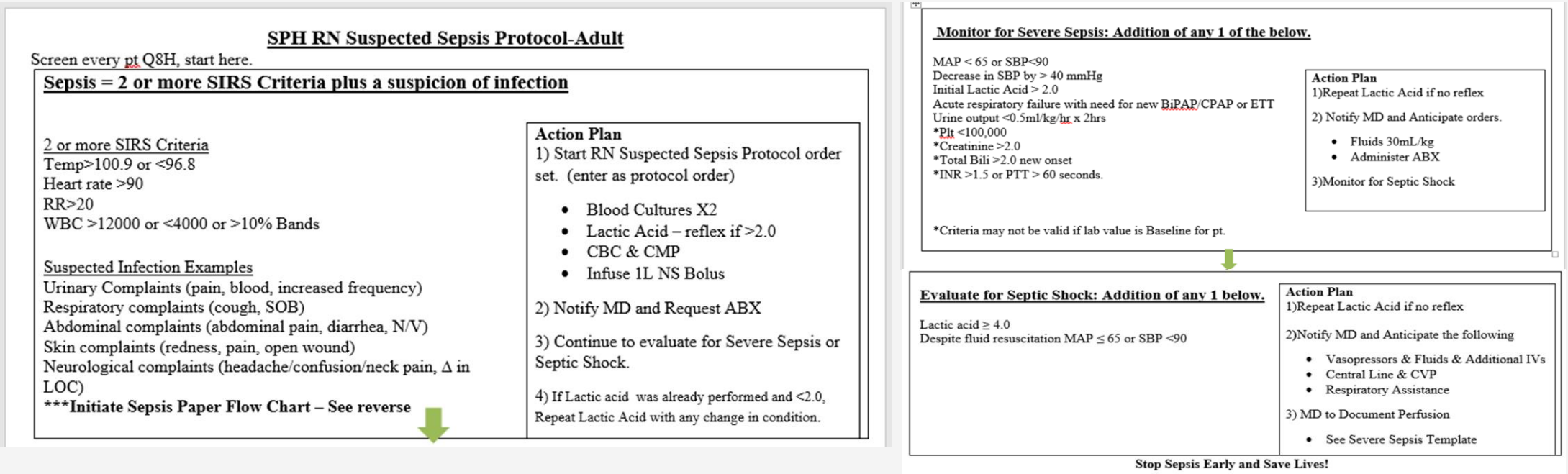
- Proactive Review vs Reactive Review
- Improve communication with providers through use of dashboards

Sepsis IT

- Early recognition
- Decision Support Tools
- Sepsis Rapid Response Team

YouTube Sepsis Videos

Suspected Sepsis Protocol



SPH RN Suspected Sepsis Protocol-Adult

Screen every pt Q8H, start here.

Sepsis = 2 or more SIRS Criteria plus a suspicion of infection

2 or more SIRS Criteria
Temp>100.9 or <96.8
Heart rate >90
RR>20
WBC >12000 or <4000 or >10% Bands

Suspected Infection Examples
Urinary Complaints (pain, blood, increased frequency)
Respiratory complaints (cough, SOB)
Abdominal complaints (abdominal pain, diarrhea, N/V)
Skin complaints (redness, pain, open wound)
Neurological complaints (headache/confusion/neck pain, Δ in LOC)
***Initiate Sepsis Paper Flow Chart – See reverse**

Action Plan
1) Start RN Suspected Sepsis Protocol order set. (enter as protocol order)

- Blood Cultures X2
- Lactic Acid – reflex if >2.0
- CBC & CMP
- Infuse 1L NS Bolus

2) Notify MD and Request ABX

3) Continue to evaluate for Severe Sepsis or Septic Shock.

4) If Lactic acid was already performed and <2.0, Repeat Lactic Acid with any change in condition.

Monitor for Severe Sepsis: Addition of any 1 of the below.

MAP < 65 or SBP<90
Decrease in SBP by > 40 mmHg
Initial Lactic Acid > 2.0
Acute respiratory failure with need for new BiPAP/CPAP or ETT
Urine output <0.5ml/kg/hr x 2hrs
*Plt <100,000
*Creatinine >2.0
*Total Bili >2.0 new onset
*INR >1.5 or PTT > 60 seconds.

*Criteria may not be valid if lab value is Baseline for pt.

Action Plan
1)Repeat Lactic Acid if no reflex

2) Notify MD and Anticipate orders.

- Fluids 30mL/kg
- Administer ABX

3)Monitor for Septic Shock

Evaluate for Septic Shock: Addition of any 1 below.

Lactic acid ≥ 4.0
Despite fluid resuscitation MAP ≤ 65 or SBP <90

Action Plan
1)Repeat Lactic Acid if no reflex

2)Notify MD and Anticipate the following

- Vasopressors & Fluids & Additional IVs
- Central Line & CVP
- Respiratory Assistance

3) MD to Document Perfusion

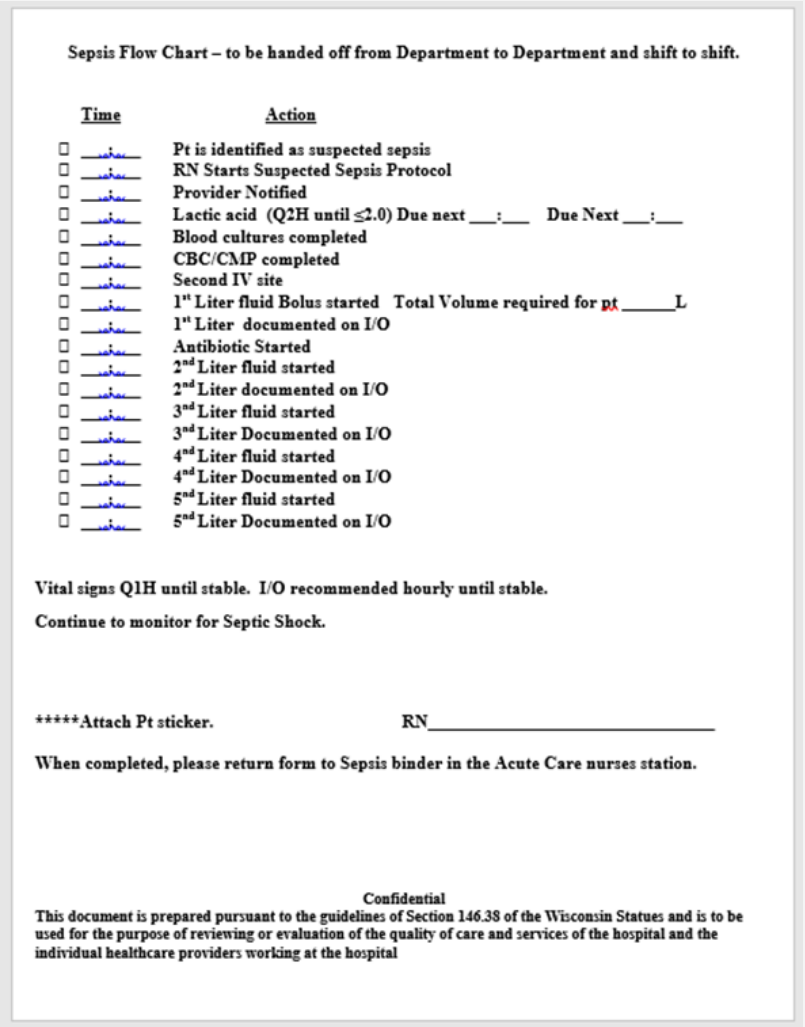
- See Severe Sepsis Template

Stop Sepsis Early and Save Lives!

RN Suspected Sepsis Protocol Order Set

Order	SCH	Start/Stop
RN Suspected Sepsis Protocol		
General		
IV - Insert		
☑ NOW		Today Now
Intervention Text		
Vital Signs - Sepis		
☑ Q1HX4		Today Now
Intervention Text		
Cardiac Telemetry- Continuous		
☑ CONTINUOUS		Today Now
Intervention Text		
Pulse Oximetry - Continuous		
☑ CONTINUOUS		Today Now
Intervention Text		
Blood Culture		
☑ Stat		Today Now
* Quantity	2	
* Specimen	Send someone from the departr	
* MIC Source	Blood	
Specimen Description	Venous	
Obtain cultures prior to initiating antimicrobial therapy as long as it does not delay care by 45 minutes or more.		
Lactic Acid Blood		
☑ Stat		Today Now
* Specimen	Send someone from the departr	
Comments	if result > 2; repeat lactate leve until < 2	
Comprehensive Metabolic Panel		
☑ Stat		Today Now
* Specimen	Send someone from the departr	
Comments		
CBC w Automatic Differential		
☑ Stat		Today Now
IV Fluids		
IV-NS 0.9%		

Sepsis Point of Care Tracking Tool



Sepsis Flow Chart – to be handed off from Department to Department and shift to shift.

	Time	Action
☐	___:___	Pt is identified as suspected sepsis
☐	___:___	RN Starts Suspected Sepsis Protocol
☐	___:___	Provider Notified
☐	___:___	Lactic acid (Q2H until ≤2.0) Due next ___:___ Due Next ___:___
☐	___:___	Blood cultures completed
☐	___:___	CBC/CMP completed
☐	___:___	Second IV site
☐	___:___	1st Liter fluid Bolus started Total Volume required for pt _____L
☐	___:___	1st Liter documented on I/O
☐	___:___	Antibiotic Started
☐	___:___	2nd Liter fluid started
☐	___:___	2nd Liter documented on I/O
☐	___:___	3nd Liter fluid started
☐	___:___	3nd Liter Documented on I/O
☐	___:___	4nd Liter fluid started
☐	___:___	4nd Liter Documented on I/O
☐	___:___	5nd Liter fluid started
☐	___:___	5nd Liter Documented on I/O

Vital signs Q1H until stable. I/O recommended hourly until stable.

Continue to monitor for Septic Shock.

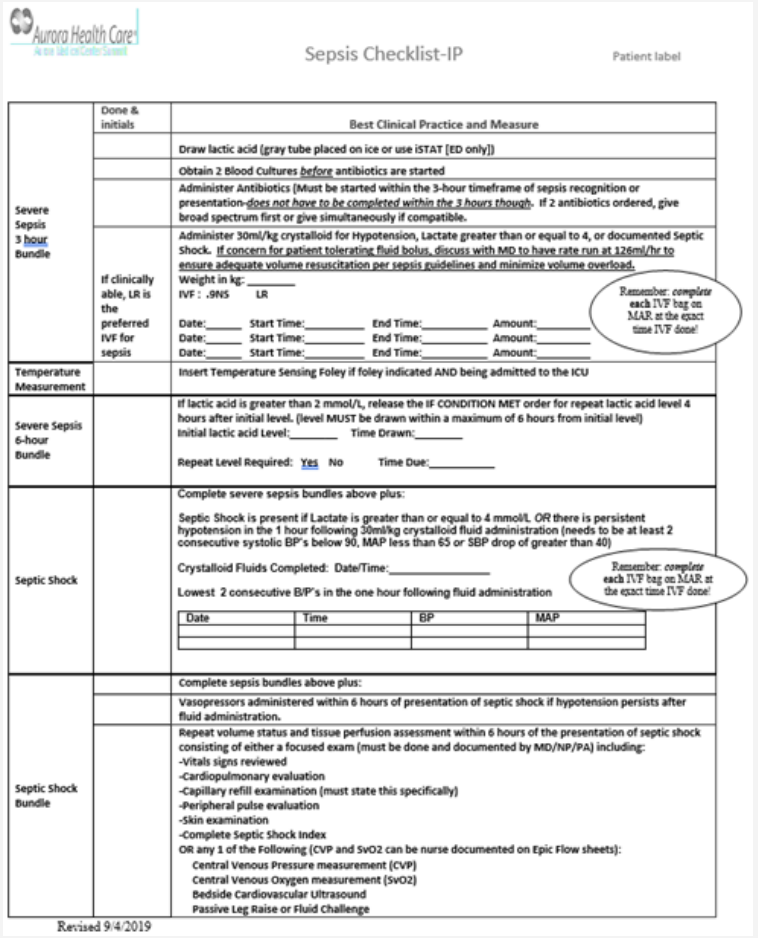
*****Attach Pt sticker.** **RN_____**

When completed, please return form to Sepsis binder in the Acute Care nurses station.

Confidential

This document is prepared pursuant to the guidelines of Section 146.38 of the Wisconsin Statues and is to be used for the purpose of reviewing or evaluation of the quality of care and services of the hospital and the individual healthcare providers working at the hospital

Sepsis Checklist



Aurora Health Care

Sepsis Checklist-IP

Patient label

	Done & initials	Best Clinical Practice and Measure
Severe Sepsis 3 hour Bundle		Draw lactic acid (gray tube placed on ice or use iSTAT [ED only])
		Obtain 2 Blood Cultures *before* antibiotics are started
		Administer Antibiotics (Must be started within the 3-hour timeframe of sepsis recognition or presentation-*does not have to be completed within the 3 hours though*. If 2 antibiotics ordered, give broad spectrum first or give simultaneously if compatible.
	If clinically able, LR is the preferred IVF for sepsis	Administer 30ml/kg crystalloid for Hypotension, Lactate greater than or equal to 4, or documented Septic Shock. If concern for patient tolerating fluid bolus, discuss with MD to have rate run at 126ml/hr to ensure adequate volume resuscitation per sepsis guidelines and minimize volume overload. Weight in kg: _____ IVF : .9NS LR Date:_____ Start Time:_____ End Time:_____ Amount:_____ Date:_____ Start Time:_____ End Time:_____ Amount:_____ Date:_____ Start Time:_____ End Time:_____ Amount:_____ Remember: *complete* each IVF bag on MAR at the exact time IVF done!
Temperature Measurement		Insert Temperature Sensing Foley if foley indicated AND being admitted to the ICU
Severe Sepsis 6-hour Bundle		If lactic acid is greater than 2 mmol/L, release the IF CONDITION MET order for repeat lactic acid level 4 hours after initial level. (level MUST be drawn within a maximum of 6 hours from initial level) Initial lactic acid Level:_____ Time Drawn:_____ Repeat Level Required: Yes No Time Due:_____
Septic Shock		Complete severe sepsis bundles above plus: Septic Shock is present if Lactate is greater than or equal to 4 mmol/L *OR* there is persistent hypotension in the 1 hour following 30ml/kg crystalloid fluid administration (needs to be at least 2 consecutive systolic BP's below 90, MAP less than 65 or SBP drop of greater than 40) Crystalloid Fluids Completed: Date/Time:_____ Remember: *complete* each IVF bag on MAR at the exact time IVF done! Lowest 2 consecutive B/P's in the one hour following fluid administration Date / Time / BP / MAP
Septic Shock Bundle		Complete sepsis bundles above plus:
		Vasopressors administered within 6 hours of presentation of septic shock if hypotension persists after fluid administration.
		Repeat volume status and tissue perfusion assessment within 6 hours of the presentation of septic shock consisting of either a focused exam (must be done and documented by MD/NP/PA) including: -Vitals signs reviewed -Cardiopulmonary evaluation -Capillary refill examination (must state this specifically) -Peripheral pulse evaluation -Skin examination -Complete Septic Shock Index OR any 1 of the Following (CVP and SvO2 can be nurse documented on Epic Flow sheets): Central Venous Pressure measurement (CVP) Central Venous Oxygen measurement (SvO2) Bedside Cardiovascular Ultrasound Passive Leg Raise or Fluid Challenge

Revised 9/4/2019

SEPSIS

SEPSIS	SEVERE SEPSIS	SEPTIC SHOCK
Documented or presumed infection + 2 or more SIRS criteria: • T > 38.3 or < 36 C (> 101 or < 96.8 F) • P > 90 • RR > 20 • WBC > 12 or < 4, or bands > 10%	SEPSIS + one of the following: • SBP < 90, or MAP < 65, or SBP drop > 40 • Lactate > 2 • Creatinine > 2 or UOP < 0.5 mL/kg/hr for 2 hours • Acute respiratory failure Bipap or Ventilator • Bilirubin > 2 • Platelets < 100,000 • INR > 1.5 or PTT > 60	SEVERE SEPSIS + persistent hypotension despite adequate fluids: • SBP < 90, or • MAP < 65, or • SBP drop > 40, or • Lactate >= 4

SEPSIS ANTIBIOTIC SELECTION

(1) antibiotic needs to either be selected from table 5.0 or a combination of (1) from white and (1) from grey in table 5.1

TABLE 5.0 (only 1 needed)		TABLE 5.1 (combination of 2 needed)	
Trade name	Generic Name	Trade name	Generic Name
	Doripenem	Amikacin	Amikacin
Invanz	Eratepenem	Garamycin	Gentamicin
Primaxin	Imipenem/Cilastatin	Kantrex	Kanamycin
Merrem	Meropenem	Nebcin	Tobramycin
Claforan	Cefotaxime	Azactam	Aztreonam
Fortaz	Ceftazidime	Cipro	Ciprofloxacin
Rocephin	Ceftriaxone	Ancef	Cefazolin
Fortaz	Ceftazidime	Mefoxin	Cefoxitin
Maxipime	Cefepime	Ceftin	Cefuroxime
Teflaro	Ceftaroline fosamil	Cefotan	Cefotetan
Avelox	Moxifloxacin	Cleocin	Clindamycin
Avycaz	Ceftazidime/avibactam	Cubicin	Daptomycin
Levaquin,	Levofloxacin	Targocid	Teicoplanin
Zerbaxa	Ceftolozane/tazobactam	Vibativ	Telavancin
Unasyn	Ampicillin sulbactam	Vancocin	Vancomycin
Zosyn	Piperacillin/tazobactam	Zyvox	Linezolid
Timentin	Ticarcillin/clavulanate	Zithromax	Azithromycin
Always give the following medications first without delay:		Erythocin	Erythromycin
Aztreonam, Ceftriaxone, Cefepime, Meropenem, Moxifloxacin, Levofloxacin, and Piperacillin-Tazobactam.		Ketek	Telithromycin
		Ampicillin	Ampicillin
		Nafcillin	Nafcillin
Co-administer medications as able based on compatibility and number of access sites/lumens.		Oxacillin	Oxacillin
		Penicillin G	Penicillin G

COMPATABILITY CHART IS POSTED IN ALL MEDICATION ROOMS

Provider Dashboards

Prasad

2019 Sepsis Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	year to date
Severe Sepsis pass	1	1	0	0	0	1	3	2	0				8
Severe Sepsis fail	0	1	0	0	0	1	0	0	0				2
Septic Shock pass	0	0	0	1	0	1	0	0	0				2
Septic Shock fail	0	0	0	0	0	0	0	0	0				0
% passed measure	100.0%	50.0%	#DIV/0!	100.0%	0.0%	66.7%	100.0%	100.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	83.3%
Chances to use order set	1	2	0	1	0	3	3	2	0				12
Order set used	1	2	0	1	0	3	3	2	0				12
Order set used %	100.0%	100.0%	#DIV/0!	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	100.0%
failed	0	1	0	0	0	1	0	0	0	0	0	0	2
passed	1	1	0	1	0	2	3	2	0	0	0	0	10
total cases	1	2	0	1	0	3	3	2	0	0	0	0	12

GOAL 68.63%

Fallout Causes

January-March	
MRN 3759696	Failed antibiotic selection per CMS guidelines. Needed additional antibiotic administered in initial 3 hours.
April-June	
MRN 1203686	Failed antibiotic selection per CMS guidelines. Needed additional antibiotic administered in initial 3 hours.
July-September	
	None. Great Job!

Total ED Providers

2019 Sepsis Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	year to date
Severe Sepsis pass	8	9	4	6	5	5	8	11	5				61
Severe Sepsis fail	1	3	0	1	2	1	1	1	0				10
Septic Shock pass	1	2	1	5	3	4	6	4	5				31
Septic Shock fail	1	0	0	0	0	0	3	0	1				5
% passed measure	81.8%	78.6%	100.0%	91.7%	80.0%	90.0%	77.8%	93.8%	90.9%	#DIV/0!	#DIV/0!	#DIV/0!	86.0%
Chances to use order set	11	14	5	12	10	10	18	16	11				107
Order set used	9	11	4	11	9	10	16	15	11				96
Order set used %	81.8%	78.6%	80.0%	91.7%	90.0%	100.0%	88.9%	93.8%	100.0%	#DIV/0!	#DIV/0!	#DIV/0!	89.7%
failed	2	3	0	1	2	1	4	1	1	0	0	0	15
passed	9	11	5	11	8	9	14	15	10	0	0	0	92
total cases	11	14	5	12	10	10	18	16	11	0	0	0	107

GOAL 68.63%

ED Order Set Statistics

Total sepsis cases	11	14	5	12	10	10	18	16	11				107
total with order set	9	11	4	11	9	9	16	15	11				95
passed with order set	8	10	4	10	8	9	14	15	11				89
failed with order set	1	1	0	1	1	1	3	2	0				6
% passed with order set	88.9%	90.9%	100.0%	90.9%	88.9%	100.0%	87.5%	100.0%	100.0%	#DIV/0!	#DIV/0!	#DIV/0!	93.7%
% failed with order set	11.1%	9.1%	0.0%	9.1%	11.1%	11.1%	18.8%	13.3%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	6.3%
total without order set	2	3	1	1	1	1	1	1	0				11
passed without order set	1	1	1	0	1	1	1	1	0				7
failed without order set	1	2	0	1	0	0	0	0	0				4
% passed without order set	50.0%	33.3%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	63.6%
% failed without order set	50.0%	66.7%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	36.4%

Using the sepsis order sets greatly increases the chance of successfully treating your severe sepsis and septic shock patients.

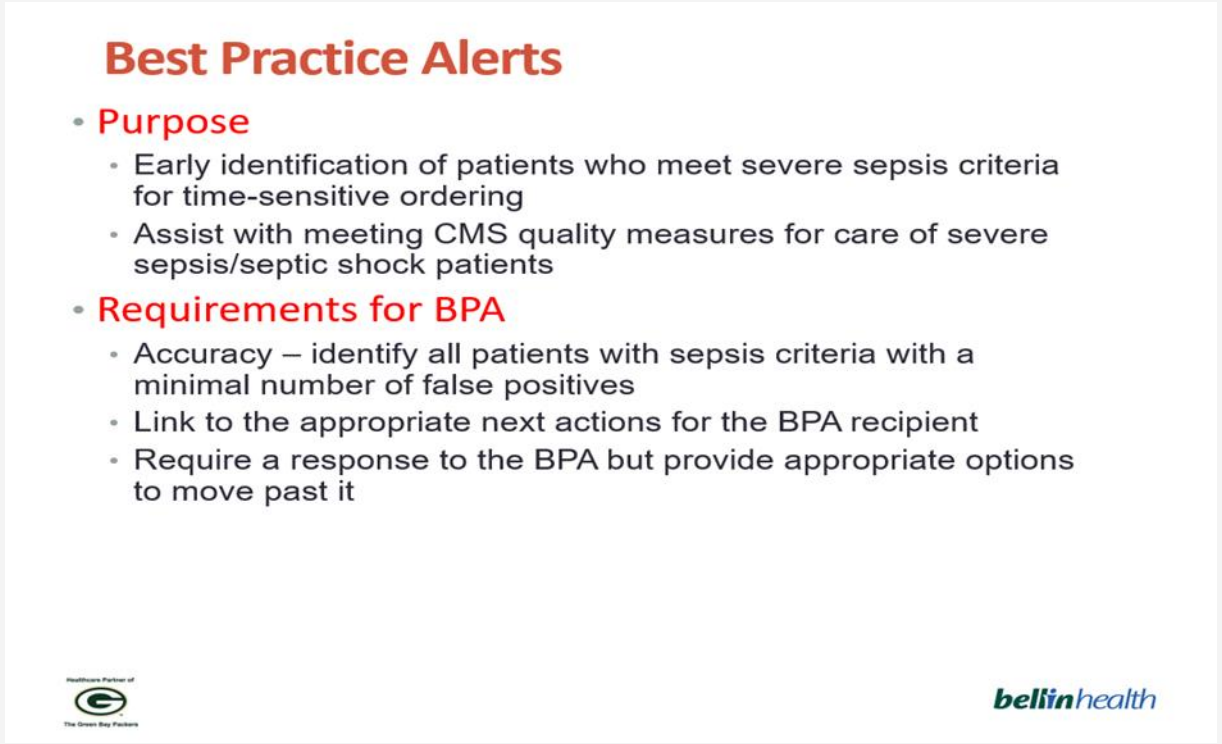
Sepsis Information Technology

- MEWS
  - Automated data-gives a risk score
  - 20-25 clinical triggers (data) pulls lab results, assessments
  - All the results have points associated with each value and the values are totaled to produce a risk score
  - The sicker the patient, the higher the score.
  - Real time configuration-interventions can change the score.

Sepsis Rapid Response Team (SWAT)

- SWAT team focus on HIGH RISK scoring patients
- Review these patient's ongoing condition at least every 12 hours
- Document visit, interventions, outcomes

Development of the BPA



YouTube Sepsis Playlist

https://www.youtube.com/playlist?list=PLGeSYWaz3y8udBTkxTNN0dIYooeZzAP8y

- Introduction to Sepsis
- Key Elements of the SEP 1 Core Measure
- SEP-1: The Repeat Lactate
- Sepsis Townhall Event: Sepsis and the SEP-1 Core Measure
- Sepsis and the SEP-1 Core Measure: Downcoding and Claims Denials
- Avoid Hydrophobia: “30 by 3” despite comorbidities in Sepsis

Illinois Health and Hospital Association

Adam Kohlrus MS, CPHQ, CPPS
Assistant Vice President
Quality, Safety and Health Policy

June 19, 2020

Illinois's Sepsis Presentation

Implementation Playbooks

Journey to Sepsis Improvement Playbook

INTRODUCING THE PLAYBOOKS

GLPP HIIN Implementation Playbooks

Implementation Playbooks

- Reducing C. difficile Infections
- ED Recidivism and Unnecessary Hospital Admissions and Readmissions
- Daily Interdisciplinary Safety Huddle (DISH) on Device Utilization and Hospital-Acquired Infections
- Journey to Sepsis Improvement (coming soon!)
- Antimicrobial Stewardship Program
- Enhancing Partnerships to Address SDOH
- SDOH Screening in the ED

https://health.dotankdo.com/illinois-health-and-hospital-association/

Introduction

ABOUT THIS PLAYBOOK

Playbook Steps

STEP 1
Read the playbook guidelines and appreciate the context and the people that are involved.

STEP 2
Walk through each of the process steps and take advantage of the external information where available. You may need to refer back to the guidelines from time to time. The Playbook aims to inspire hospitals to be able to pick this up, knowing nothing about the process, and after reading it have a good handle on what the process is and what steps they could take to replicate it.

STEP 3
Digest the results and impacts and review where the process steps make sense and/or could be a challenge for your hospital.

STEP 4
Gather your team and gameplan your critical next steps to making this happen at your hospital.

How it Came to Be

Our strategic partner, Do Tank, worked closely with the IHA and hospital teams throughout the Innovation Challenge to design strategies, implementation plans, and these playbooks. The document that you are reading emerged over a 4 week process that involved interviews, mining documentation, reflections on the yearlong Challenge, and multiple iterations.

do tank
do business design, redesigned

The Cast of Characters

The storyline behind the Playbook involves these wonderful people, places and organizations.

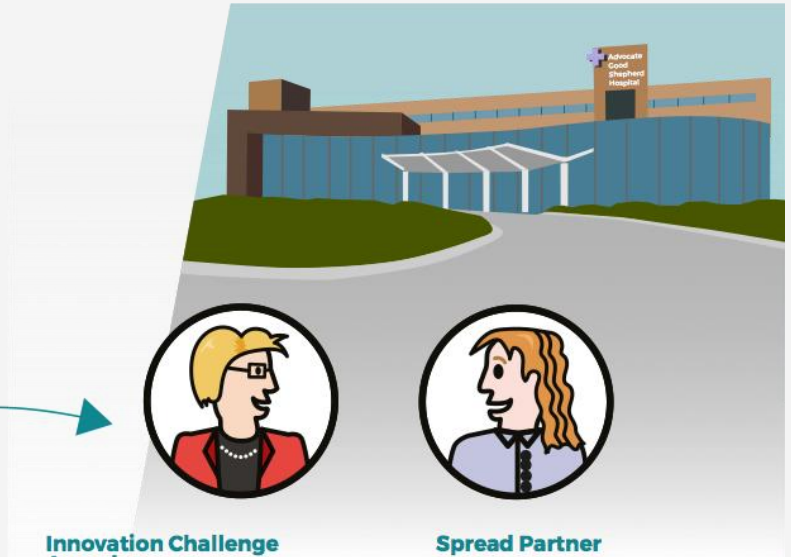
Additional Content

You will find additional content in the Playbook via links to external resources.

DON'T MISS THEM!

(Look for this icon)

Extra Resouces



Innovation Challenge Awardee

Dawn Moeller
Clinical Manager for Emergency and Trauma Services
Emergency Department at Advocate Aurora Health (Award Site)

Spread Partner

Jennifer Mowen
Administrative Director, Performance Improvement & Management Systems
Illini Community Health (Spread Site)

The Challenge

CHALLENGE

ED Recidivism & Unnecessary Hospital Admission & Readmission

Project background

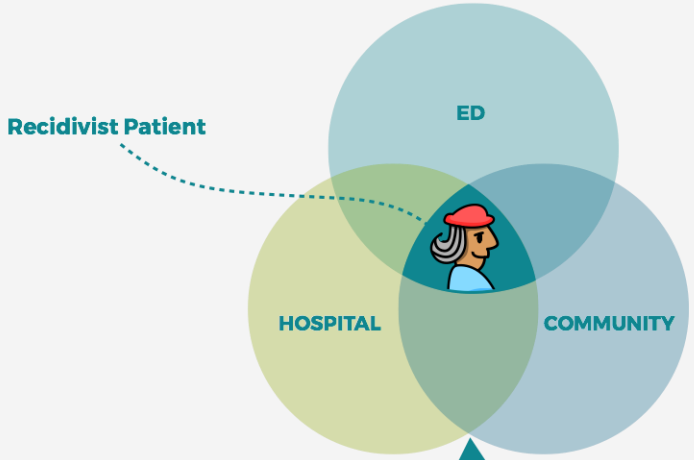
Hospital ED recidivism and readmissions are up due to a number of factors including increased substance use disorders and mental illness. ED recidivism and readmission can be reduced, and with that a tremendous cost savings, by developing an ICP (Individual Care Plan) for frequently admitted patients in order to best meet their needs.

Why it's IMPORTANT to do

The ED delivers episodic care, and patients get fragmented care when they keep coming back. Providers feel frustrated when they can't deliver the kind of care these patients need. The ICP was designed to get at the root causes of readmission by providing a plan for frequent ED patients and a network of resources to address these problems. The team was able to empower patients to access community resources that make a difference in their own care.

Recidivism and readmission was reduced dramatically.

AdvocateAuroraHealth



INNOVATION

ED ICP Program Overview for IHA

Facility Assessment Worksheet

ICP

(Individualized Care Plan)

The ICP program identifies the ED recidivist patient and then uses a team approach to facilitate access to appropriate care, treatment and resources for that patient. The goal is to create a unified and safe approach that is unique to the patient. The care plan begins in the ED but the success of the innovation is the collaboration with family, community and hospital resources . The interdisciplinary core group treats the patient holistically: body, mind and spirit.

The Steps

UNIT REPORTING

Each unit reports variables at DISH, including device use, indications and plans for removal. Isolation cases in their units are also reported.

3

KEY ACTIVITIES

- Daily 15-minute DISH meeting at 8am
- CVC and IUC usage are reported by nurse managers. The ICP reviews indications, duration, and plans for device removal.

KEYS TO SUCCESS

- Increased awareness of central venous catheters and urinary catheters and their impact on device utilization
- A new, holistic level of awareness for front line staff
- Better collaboration amongst staff - a healthy and interactive culture of safety
- Reduction in device use.

CHALLENGES

- When barriers for removal remain, such as provider preference, the CNO, Medical Director of Infection Control or Chief Quality Officer are involved
- Ensuring same day resolution of issues.

WHO IS INVOLVED?

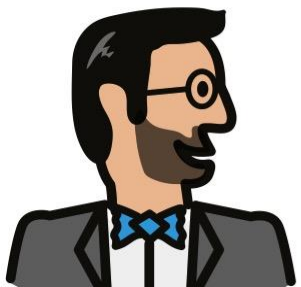
Representatives of all units and departments in the hospital.

Key Participants Include:

- Chief nursing officer (CNO)
- Infection control practitioner (ICP)
- Managers of all hospital units.

Impact of Hospital Wide DISH

Some of the barriers were changes in leadership, commitment from leadership but the results speaks for itself



We attended rounds to increase awareness of physicians by asking "why do we need to have that device?"

Journey to Sepsis Improvement

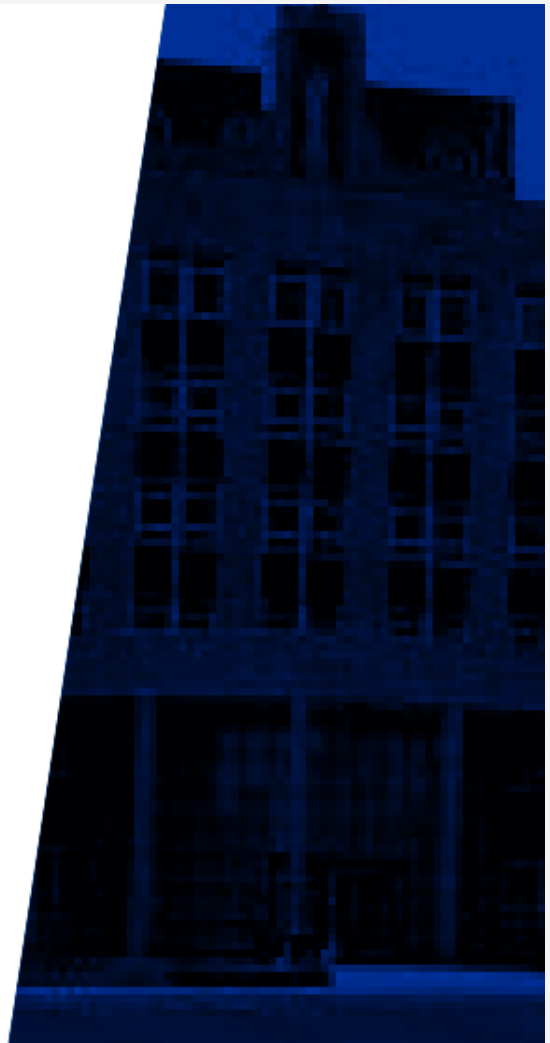
IHA IMPLEMENTATION CHALLENGE: IMPLEMENTATION PLAYBOOK

HSHS St. Anthony's Memorial Hospital Journey to Sepsis Improvement

18% IMPROVEMENT IN MORTALITY RATE

517 LIVES SAVED SINCE 2014

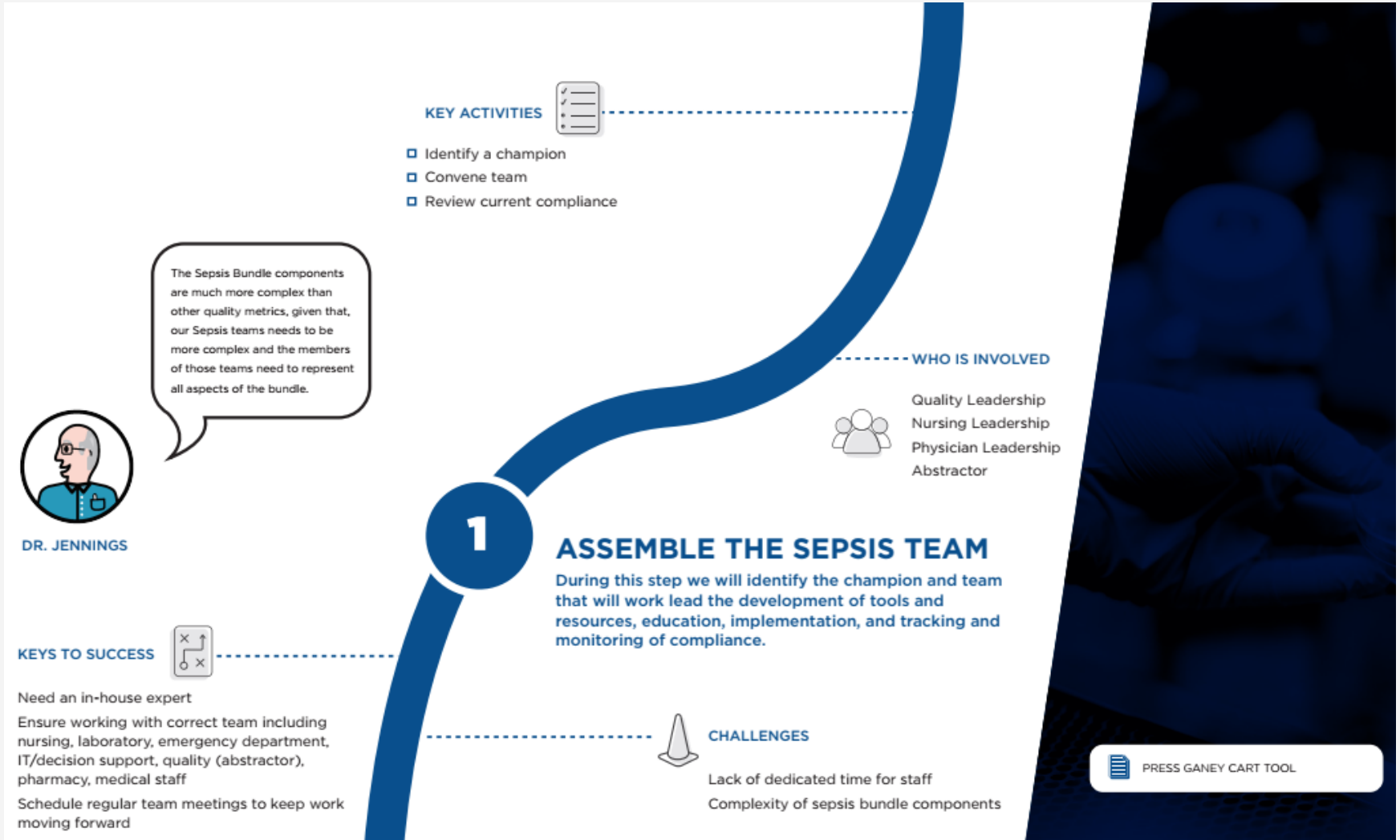
80% BUNDLE-COMPLIANCE ACROSS DIVISION



IHA

HSHS St. Anthony's Memorial Hospital

Journey to Sepsis Improvement



Journey to Sepsis Improvement

2 BUILD AND DEVELOP TOOLS AND RESOURCES

During this step we will develop tools and resources that will support staff with sepsis bundle compliance. This includes screening tools, a treatment algorithm, order sets, and tracking tools.

KEY ACTIVITIES

- Develop an implementation timeline including time for resource develop, build into EHR, and staff education
- Develop screening tool
- Tick sheet (paper form that staff could use to track and hand off)
- Algorithm – staff resource
- Develop order sets
- Develop tracking tool
- Identify a process for providing feedback
- Self-auditing

CHALLENGES

Timeline for making additions or changes in current EHR system

Developing tools and resources for screening and treatment in the pediatric population

ED and hospital use different EHR systems

KEYS TO SUCCESS

Work with IT/decision support to build screening tools and order sets into EHR system

Buy-in from everyone - providers, nursing, IT and Quality

WHO IS INVOLVED

Sepsis Team

IT/Decision Support

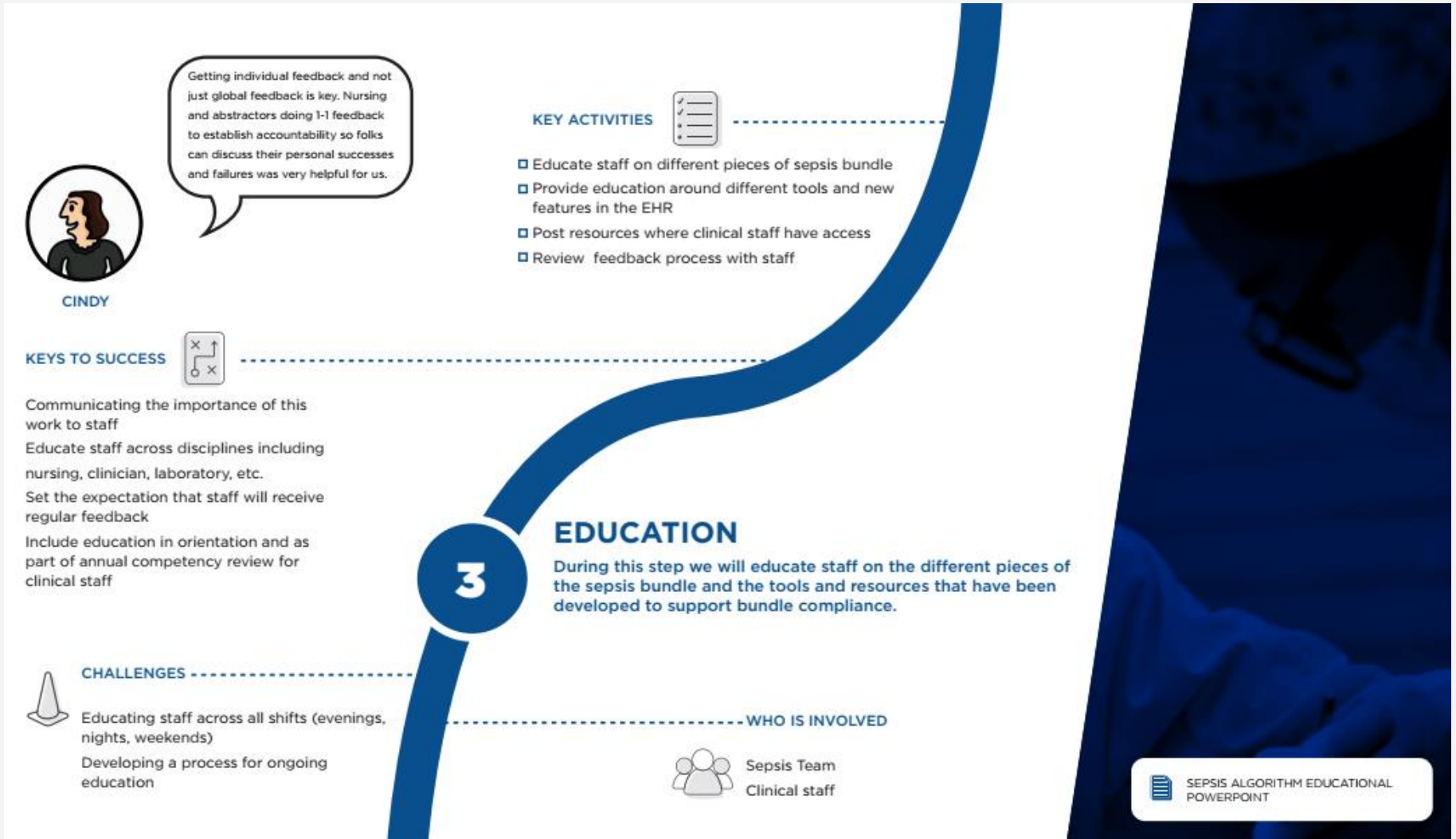
#1 It is so critical to have IT/Decision Support for the build of the order sets, this functionality is what streamlines the process into care delivery

DR. JENNINGS

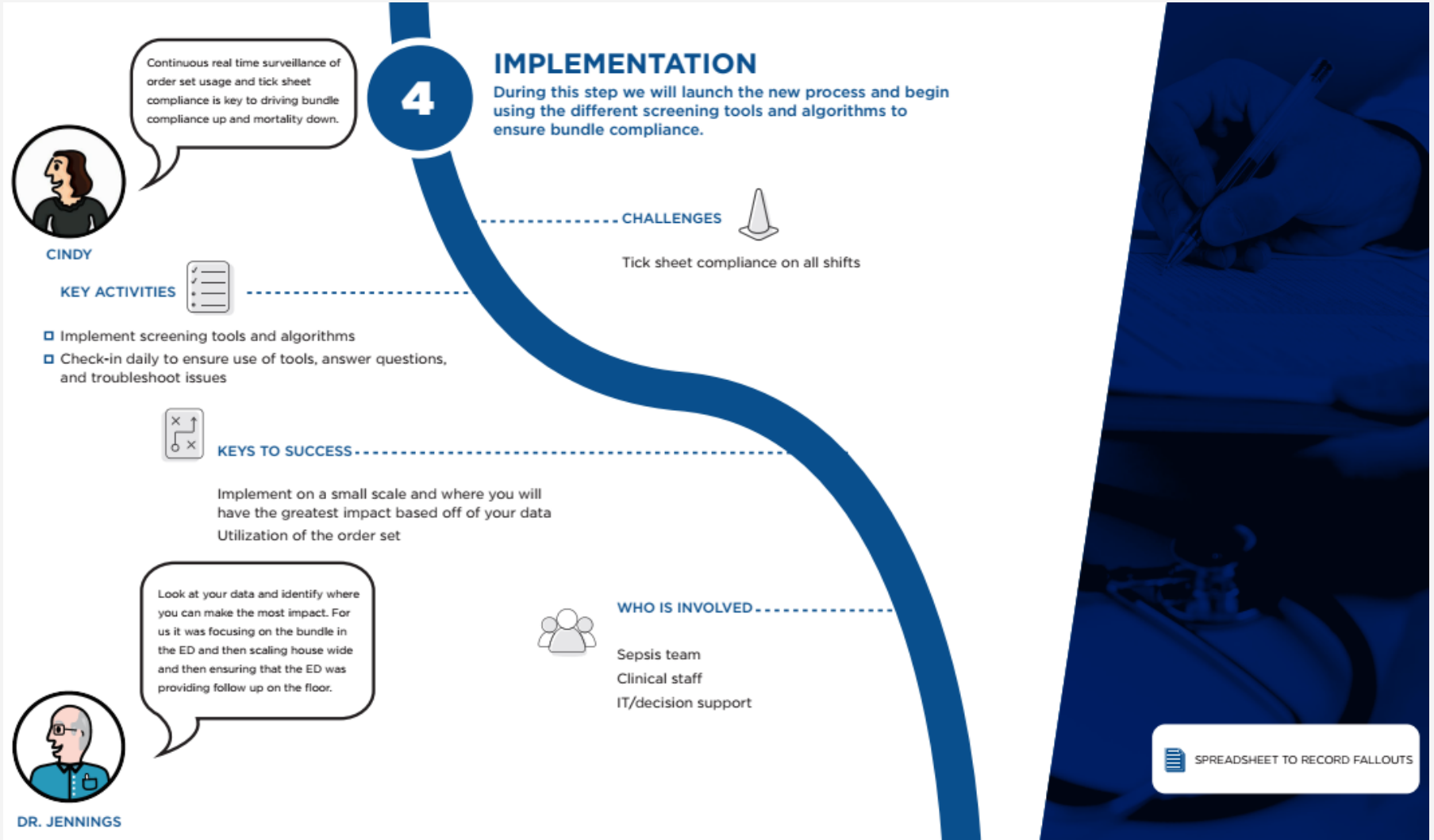
The handoff from ED to inpatient is critical and presents a communication challenge. Ensure that the clinical handoff conversation between ED and inpatient is taking place every time.

- HSHS SEPSIS SCREENINGS
- SEPSIS TICK SHEET
- HSHS SEPSIS TREATMENT ALGORITHM
- SEPSIS ASSESSMENT AND SEPSIS ED NOTE
- HSHS SEPSIS ORDER SETS

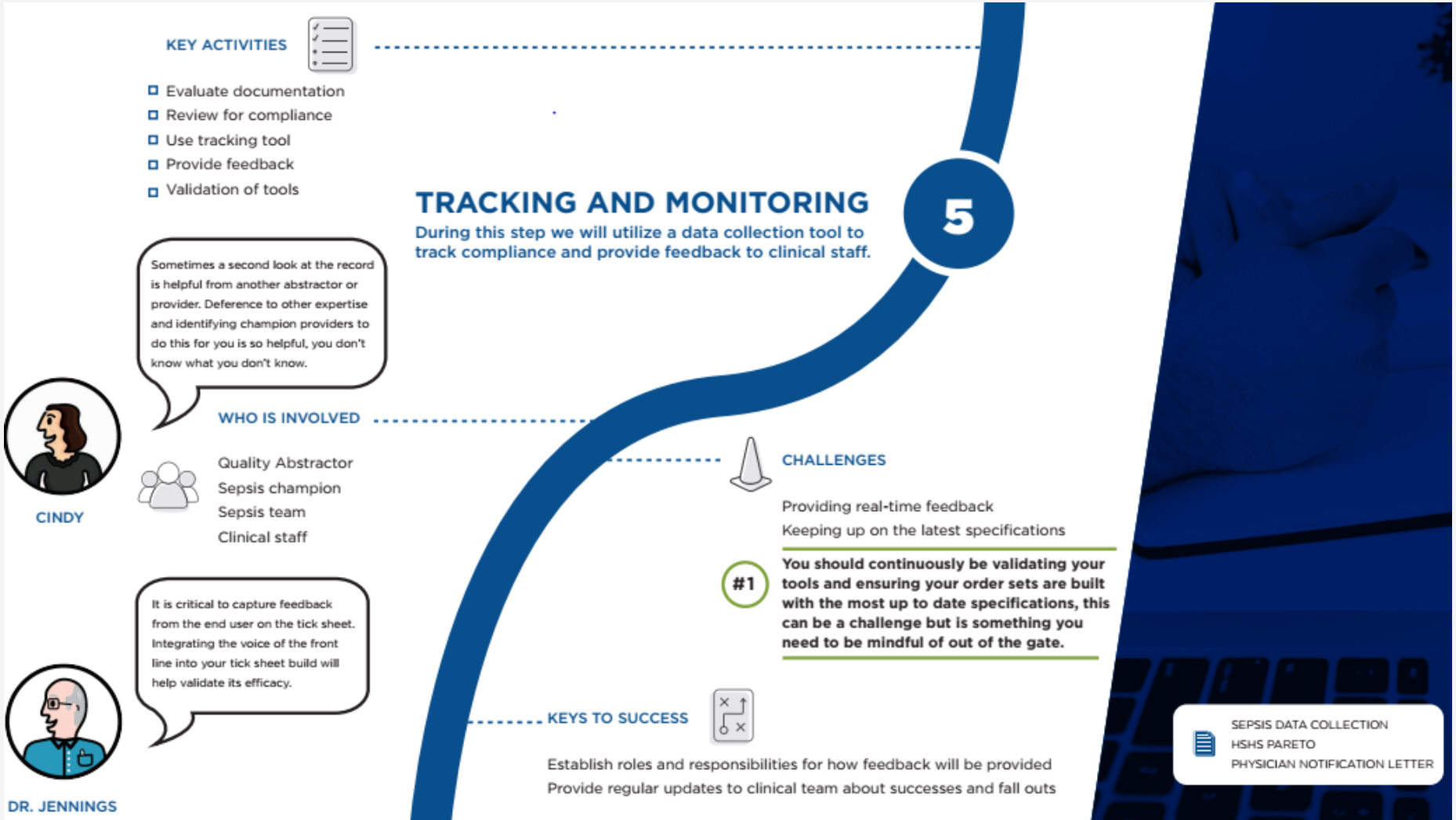
Journey to Sepsis Improvement



Journey to Sepsis Improvement



Journey to Sepsis Improvement



Journey to Sepsis Improvement

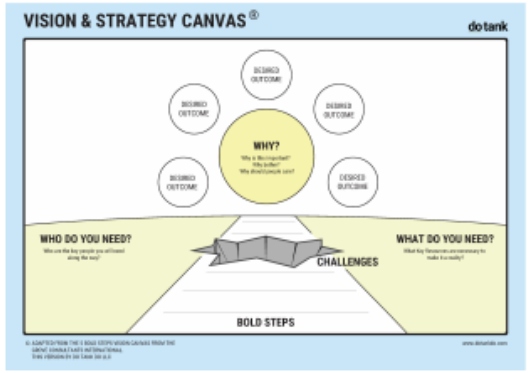
60 MINUTES TO START YOUR JOURNEY

1. Get Ready

Hover over the canvas to download it. Then print a large version of the canvas, find a quiet room, gather stickies and sharpies and as a team of 4-6 people. If you follow these steps, in 60 minutes you should have a clear picture of your implementation vision and strategy as it pertains to implementing this best practice.

2. The Why

Spend yout first 10 minutes as a team discussing the WHY and the DESIRED OUTCOMES. Why is this important to us? Why do we care? You should naturally bounce between the why and the outcomes. Make it concrete. Make it real. Be aspirational, but make sure you align as a team!



3. What Do You Need To Make It Happen?

Allocate 20 minutes to initially react to both of the questions that flank the road. "What do you need?" and "Who do you need?". The "what" is written within the context of critical resources, e.g. infrastructure, budget, data, systems, permission, time etc. The "who" is most likely the human resource necessary to make it happen and the stakeholders who will enable & support it.

4. Obstacles

Spend 10 minutes to discuss what can and will get in the way of making this a reality. Avoid turning this into a list of complaints, moans, groans etc and make it more of an honest list of challenges you will face that will have to be overcome.

5. Bold Steps

What will make it happen? Spend 10 minutes to discuss what bold steps, actions, activities will be critical in helping to realize the desired outcomes?

6. Sense Check

Spend your last 10 minutes sense checking the "storytelling version" of this canvas. Does it make sense? Can you describe it easily in 60 seconds? What is missing? Does everyone agree? Have you agreed a critical next step as a team so this wasn't just a nice thinking exercise? Go do?

INFORMATION

The Vision and Strategy canvas will help your team get off to an aligned and focused start.

BEFORE YOU START

Convene your group in a relaxed environment – an offsite location is preferable - it's critical that you get the right people in the room. A group size greater than 6 people can be a challenge to facilitate.

CHECKLIST

- A fine tip marker and 3"x3" sticky notes foreach person
- Print or draw the Vision & Strategy Canvas on a large sheet of paper
- Tape to a wall or place at the center of a table that all people can access
- Allow 60 minutes of focused time

RULES AND ROLES

- Make these explicit with all attendees at the beginning of your design session
- Everyone has the 'power of the pen' and can contribute ideas
- Facilitate each other and avoid meandering digressions
- Move with pace
- Try to build something that will inspire others One clear idea per sticky note
- Have fun

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Final questions for our presenters?

Minnesota: Jenny Schoenecker

Wisconsin: Anne Allen, MSN, RN, CPHQ

Michigan: Joshua Suire, BSN, RN

Illinois: Adam Kohlrus MS, CPHQ, CPPS

Upcoming GLPP & MN HIIN Sustainability Webinars

- July 16: Hospital-acquired Infections
- Aug. 12: MHA Workplace Safety Safe Patient Handling and Mobility Call
- Aug. 20: Readmissions
- Sept. 17: Pressure Ulcers