

of the Indiana Hospital Association

## Sepsis Awareness Month Back & To the Future: State of the State and Resources

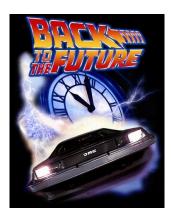


Sept 1, 2022





Describe Indiana's progress on sepsis mortality and sepsis care
 Apply resources for sepsis performance improvement
 Describe hospital journeys in sepsis hardwiring



## The Perfect Sepsis Lap









## Guest Speaker





Columbus Regional Health Columbus, Indiana



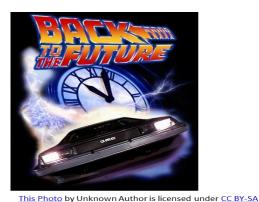
Chris Newkirk, BS, RN Clinical Quality Advisor Columbus Regional Health

## Sepsis: Back and to the Future



IHA 2022 Sepsis Awareness Month Webinars						
1-Sept.	3 p.m. ET	Indiana Sepsis State of the State				
8-Sept.	3 p.m. ET	Sepsis Pathophysiology & Bundle Compliance				
15-Sept.	3 p.m. ET	Sepsis Diagnostic Advances				
22-Sept.	3 p.m. ET	Maternal Sepsis				
29-Sept.	3 p.m. ET	Sepsis Fluid Management Advances				
6-Oct.	3 p.m. ET	Personal Hygiene and Sepsis Prevention				

Click on link to register for each webinar



## Sepsis Webinar Details



2022 IHA Clinical Webinar Series - 3 - 4 p.m. ET

Sepsis: Back & to the Future (Click link to register)

Sept. 1: Indiana Sepsis 2022: Current State of the State and New Resources,

Rebecca Hancock PhD, RN, CNS, Patient Quality & Safety Advisor, IHA

Chris Newkirk, BSN, RN, CCM, Clinical Quality Advisor, Columbus Regional Health

Sept. 8: Sepsis Back to Basics: Pathophysiology and Bundle Compliance,

Tom Ahrens, PhD, RN, FAAN

- Sept. 15: Sepsis Future: Advances in Sepsis Diagnostics,
  - Dr. Sandy Estrada, Pharm.D., Clinical Consultant
- Sept. 22: Sepsis Future: Focus on Maternal Sepsis,

Brittany Waggoner, Patient Safety & Quality Advisor, RN, MSN, CNS, IHA

Sept. 29: Sepsis Future: Fluid Management

Danielle Herr BSN, CCRN, Therapy Development Specialist

Vince Holly, MSN, RN, CCNS, ACNS-BC, CCRN, FCNS, Indiana University Health-Bloomington

Oct. 6: Back to the Basics with Personal Hygiene for Infection Prevention

Rebecca Hancock, Patient Quality & Safety Advisor, IHA

Annette Handy, Clinical Director, Patient Safety Center, IHA

## September is Sepsis Awareness Month—SET YOUR HOSPITAL GOALS!



- Updated 2022 Sepsis Toolkit coming August
  - Updated Social Media messages—connect with your marketing department & share IHA posts
  - Send photos of sepsis/COVID-19 infection prevention activities with caption to
  - Casey Hutchens, <u>chutchens@ihaconnect.org</u>
  - Patient & Caregiver Education QR Codes on table tents, & posters
  - Consider local mayoral proclamation for Sept 13, World Sepsis Day
  - Share "I am a Sepsis Champion" selfies on Sept 13 via social media
  - Updated data-based state sepsis goals

September Webinars, Thursdays 3-4pm Back & to the Future with Sepsis



### www.survivesepsis.com



# Sepsis Patient Discharge Education (Updated)





English



Spanish



Sepsis Patient and Family Education



Indiana Patient Safety Center of the Indiana Hospital Association

www.survivesepsis.com

#### SEE IT. STOP IT. SURVIVE IT.

I am a sepsis survivor, what now?

What can I do to improve my recovery?

#### **Caregiver Instructions for Patients Recovering from Sepsis**





ient-Safety

#### **IHAconnect.org/Quality-Patient-Safety**

Central Southwest

Thank you!

Patient Safety Coalition

Harrison County Hospital

Columbus Regional Health

IS A SEPSIS CHAMPION

IS A SEP









## Sepsis Coaching & Resources 🛎



**IHA-hosted Sepsis Office Hours** 

- Third Tuesday of every odd month
- 11:30 a.m. 12:00 p.m. ET

Next session is Nov 15-Patient Narratives (omitting September)

To Join: <a href="https://us02web.zoom.us/j/87049736644?pwd=NE8vVGtEUEw5cVZjMTF0ZGw3UDZIZz09">https://us02web.zoom.us/j/87049736644?pwd=NE8vVGtEUEw5cVZjMTF0ZGw3UDZIZz09</a>

Meeting ID: 870 4973 6644 Passcode: 559224

IHA Primary Contact for Sepsis: Becky Hancock, rhancock@IHAconnect.org

See also Cynosure Learning & Improvement Connection Sepsis Resources

### IHA 2022 Sepsis Toolkit QI Resources

#### **IHA Sepsis Care Process Inventory**

- <u>Excel</u>
- <u>Word</u>

#### Cynosure Learning & Discovery Tools

- <u>Cynosure Learning & Improvement Connection</u> <u>Educational Platform</u>
- Post Op Sepsis Chart Discovery Tool
- Sepsis Screening & Transfer Tool
- Sepsis Mortality Reduction Overview
- Sepsis Change Package
- Sepsis Mortality Reduction Change Package
- <u>Sepsis Process Improvement Chart Discovery &</u> <u>Tracking Tool</u>
- Sepsis Driver Diagram
- <u>Sepsis Transfer Process Improvement Chart Discovery</u>
   <u>& Tracking Tool</u>



	Check if	Check if needs		Sepsis Care Processes				
Primary Drivers	present	improvement		Secondary Drivers				
			Senior le	adership support				
			Board of	Directors actively support sepsis activities				
Leadership			Staff per	son with dedicated time to coordinate sepsis activities				
ceadership			Sepsis ph	nysician champion				
			Multi-dis	ciplinary Sepsis Team				
			Process of	of Care Gap Assessment Process				
			Utilizing sepsis screening tool or process in all patient care departments					
			Emergency Department screening every adult patient during initial eval					
			Automated EMR sepsis screening with early warning system					
Screening			Pediatric screening process if applicable					
Streening				ening process				
				se for sep-3 criteria & insurers				
				patient screening every shift, likely automated				
				reening process for acute changes in patient condition				
			Electroni	c aids for sepsis timed treatments				
			Rapid Response Team or process for prompt escalation and action from care providers					
			Nurse driven protocol to start treatment					
			Standard	lized sepsis guideline-based initial order set				
				time zero identification				
			sepsis bundle ent success	blood cultures prior to antibiotic administration				
Interventions			2 pr	measure initial lactate				
			osis t su	administer proper antibiotics within 3 hours				
			sep	administer required fluid bolus				
			3 hour sepsis bund element success	septic shock tissue perfusion re-assessment				
				initiate vasopressors				
			288	measure repeat lactate				
	0		Code sep	osis for prompt escalation from care providers				
8				care of end of life planning as specified step in sepsis care				
				g and analyzing sepsis mortality trends				
Metrics				of post-op sepsis cases				
				of sepsis bundle compliance trends				
Documentation & Feedback				audit of MD, DO, APRN sepsis guideline compliance and feedback on deviations				
a contained of a recorded				ocumentation specialist participating in coding and chart documentation improvemen				
				sepsis staff education in daily safety huddles &/or interdisciplinary rounds				
			Routine education for nursing staff on sepsis screening and treatment					
Education			Education for physicians, APRNs, PA's for identifying and treating sepsis					
		I n	Ancillary staff education on identifying and treating sepsis (e.g. dietary, EVS, CNA's)					
				ach and education for sepsis signs and symptoms				

Sepsis Process Improvement Discovery & Tracking Toc

Me	dical Record #					
Scree	ening					
	Patient was screened for sepsis within 30 minutes of arrival to the emergency department.					
	Inpatient sepsis screen completed at least once per shift. (N/A once sepsis identified in ED or inpatient unit)					
3-ho ONE E	ur bundle compliance (Orange colored cells indicate HOUR BUNDLE)					
	Blood cultures drawn within 30 minutes of positive sepsis screen AND prior to antibiotic administration.					
	Serum lactate drawn and resulted within 60 minutes of positive sepsis screen.					-
	Broad spectrum antibiotics initiated within 60 minutes of positive sepsis screen.					-
	If pt is hypotensive SBP< 90 or a lactate is >2mmol/dL, fluid resuscitation of 30ml/kg initiated within 60 minutes of positive sepsis.					
6 Ho	ur Bundle Compliance					
	If patient has a MAP of < 65 mmHG vasopressors administered.					
	If the initial elevated lactate draw was > or = to 2.0, a repeat serum lactate was drawn & resulted within 6 hours.					g/Quality-Patient-Safe

## CMS Sepsis Bundle



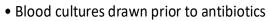
### **Numerator**

#### **Type of Measure: Process**

Improvement Noted As: An increase in the rate

**Numerator Statement:** Patients who received ALL of the following: Within three hours of presentation of severe sepsis:

- Initial lactate level measurement
- Broad spectrum or other antibiotics administered



AND received within six hours of presentation of severe sepsis. ONLY if the initial lactate is elevated:

- Repeat lactate level measurement
- AND within three hours of initial hypotension:

OR within three hours of septic shock:

• Resuscitation with 30 mL/kg crystalloid fluids

AND within six hours of septic shock presentation, ONLY if hypotension persists after fluid administration:

• Vasopressors are administered

AND within six hours of septic shock presentation, if hypotension persists after fluid administration or initial lactate >= 4 mmol/L:

• Repeat volume status and tissue perfusion assessment is performed

### Denominator/Exclusions

**Denominator Statement:** Inpatients age 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis, or Septic Shock and not equal to U07.1 (COVID-19).

Included Populations: Discharges age 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis, or Septic Shock as defined in Appendix A, Table 4.01.

**Excluded Populations:** 

- Patients with an ICD-10-CM Principal or Other Diagnosis Code of U07.1 (COVID-19)
- Directive for Comfort Care or Palliative Care within six hours of presentation of severe sepsis
- Directive for Comfort Care or Palliative Care within six hours of presentation of septic shock
- Administrative contraindication to care within six hours of presentation of severe sepsis
- Administrative contraindication to care within six hours of presentation of septic shock
- Length of Stay >120 days
- Transfer in from another acute care facility
- Patients enrolled in a clinical trial for sepsis, severe sepsis or septic shock treatment or intervention
- Patients with severe sepsis who are discharged within six hours of presentation
- Patients with septic shock who are discharged within six hours of Presentation
- Patients receiving IV antibiotics for more than 24 hours prior to presentation of severe sepsis
   IHAconnect.org/Quality-Patient-Safety

## CMS Fluid Specs 1/1/2022



- 1. Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg or a lesser volume with a reason for the lesser volume specifically documented by the physician/APN/PA are the target ordered volume.
- 2. A physician/APN/PA order for a volume of crystalloid fluids that is within 10% less than 30 mL/kg is acceptable for the target ordered volume. Documentation of a reason for a volume that is within 10% less than 30 mL/kg is not required.
- 3. There is a physician/APN/PA order for the lesser volume of crystalloid fluids as either a specific volume (e.g. 1500 mL) or a weight-based volume (e.g. 25 mL/kg).
- 4. The ordering physician/APN/PA documented within a single note in the medical record all of the following:
  - The volume of fluids to be administered as either a specific volume (e.g. 1500 mL) or a weight-based volume (e.g. 25 mL/kg) AND a reason for ordering a volume less than 30 mL/kg of crystalloid fluids.
  - Reasons include and are not limited to:
    - concern for fluid overload
    - heart failure
    - renal failure

14

- blood pressure responded to lesser volume
- a portion of the crystalloid fluid volume was administered as colloids (if a portion consisted of colloids, there must be an order and documentation that colloids were started or noted as given)

### 2022 Indiana Hospital Sepsis Goals



### Goals

- Goal of ≥ 79% sepsis bundle compliance or 10% increase for Indiana hospitals by Sept 2023.
- Improve hospital mortality rate to at or better than 2019 rates by Sept 2023
- Focused work with low bundle compliance / high sepsis mortality hospitals through June 2023 (over 16 consults completed in 2021-22)
- Focus QI on hospital onset inpatient sepsis care and oral hygiene

### Hospitals' Specific Goals?



Hygiene? Hydration? Patient Education? Maternal sepsis?



of the Indiana Hospital Association

### IHA Sepsis Update

## Sep-1 Bundle Compliance Hospital Compare Oct 2020 to Sep 2021 Retrieved 7/28/2022

Indiana Sep-1 % Compliance Top Hospitals

Oct 2020 – Sept 2021

Hospital Compare

6 hospitals at or above 79% top decile



Facility Name	Sep-1
COLUMBUS REGIONAL HOSPITAL	93
MONROE HOSPITAL	90
HARRISON COUNTY HOSPITAL	84
TERRE HAUTE REGIONAL HOSPITAL	82
SCHNECK MEDICAL CENTER	80
DECATUR COUNTY MEMORIAL HOSPITAL	79
ST JOSEPH HEALTH SYSTEM, LLC	78
FRANCISCAN HEALTH HAMMOND	77
ST MARY MEDICAL CENTER INC	76
FRANCISCAN HEALTH MUNSTER	75
PARKVIEW DEKALB HOSPITAL	73
MEMORIAL HOSPITAL (Logansport)	71
JOHNSON MEMORIAL HOSPITAL	70

## Sep-1 Bundle Compliance Most Improved



Hospital	Sep-1 % 4Q2019 to 3Q2020	Sep-1 % 4Q2020 to 3Q2021	Difference
KING'S DAUGHTERS' HEALTH	50	69	19
SCHNECK MEDICAL CENTER	61	80	19
INDIANA UNIVERSITY HEALTH NORTH HOSPITAL	35	53	18
FRANCISCAN HEALTH CRAWFORDSVILLE	43	60	17
FRANCISCAN HEALTH RENSSELAER, INC	35	48	13
COLUMBUS REGIONAL HOSPITAL	80	93	13
INDIANA UNIVERSITY HEALTH FRANKFORT INC	54	67	13
DUPONT HOSPITAL LLC	38	50	12
ST MARY MEDICAL CENTER INC	65	76	11
FRANCISCAN HEALTH HAMMOND	67	77	10
FRANCISCAN HEALTH MUNSTER	65	75	10
ST JOSEPH HEALTH SYSTEM, LLC	68	78	10

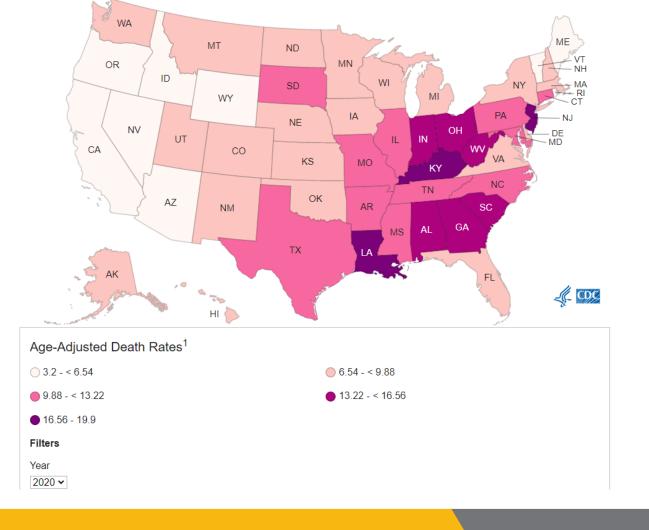
#### Septicemia Mortality by State

*Sepsis is the body's extreme response to an infection. If not identified and treated quickly, sepsis may lead to serious medical consequences and death. <u>For more information on sepsis</u>* 

### CDC Sepsis Mortality 2020

Source: <a href="https://wonder.cdc.gov">https://wonder.cdc.gov</a>

Deaths per 100,000 population





### **Indiana Sepsis** Mortality

#### Sepsis mortality

- Trending up since Q1 2020
- Hospital Onset
  - Trending up since Q2 2020
- Present on Admission •
  - Trending up since 01 2020
- Impacted by COVID-19

#### Source: IHA Datalink, includes palliative & covid, Sep-1 population

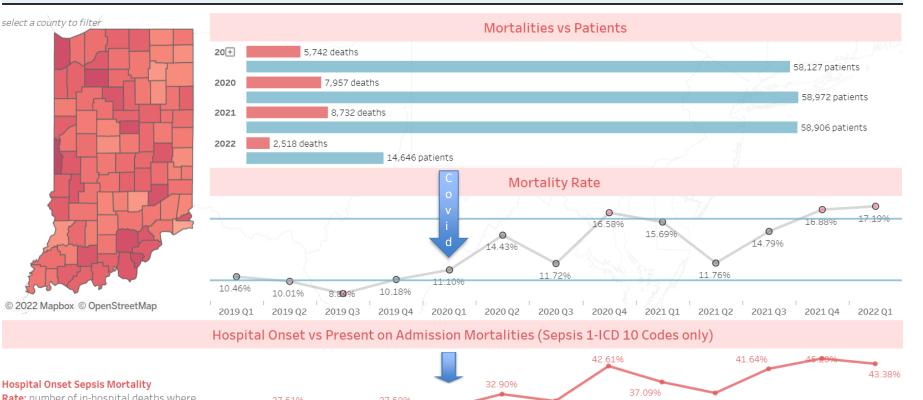


#### Sepsis in Indiana 1/1/2018

Dashboard populated from the IHA Inpatient Discharge Study. Use the filters on the right to change the dashboard. Filters do not affect the data from other data SURVIVE IT. sources at the bottom.

STOP IT

A Indiana Patien Safety Center



Dashboard View

•

Statewide



#### IHAconnect.org/Quality-Patient-Safety

Sepsis Type

3/31/2022 Sepsis-1(ICD-10 Codes)

Palliative Care

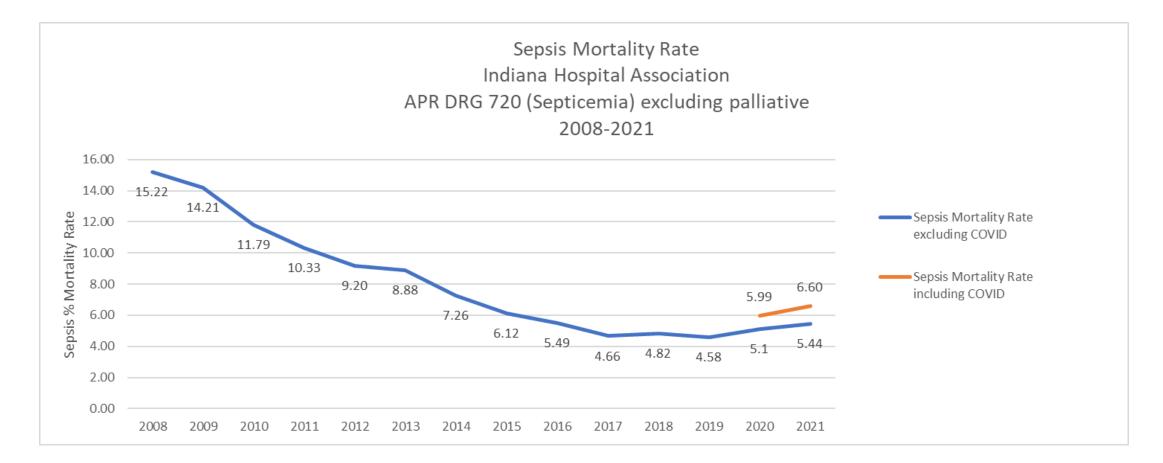
COVID-19 Filter

All Patients

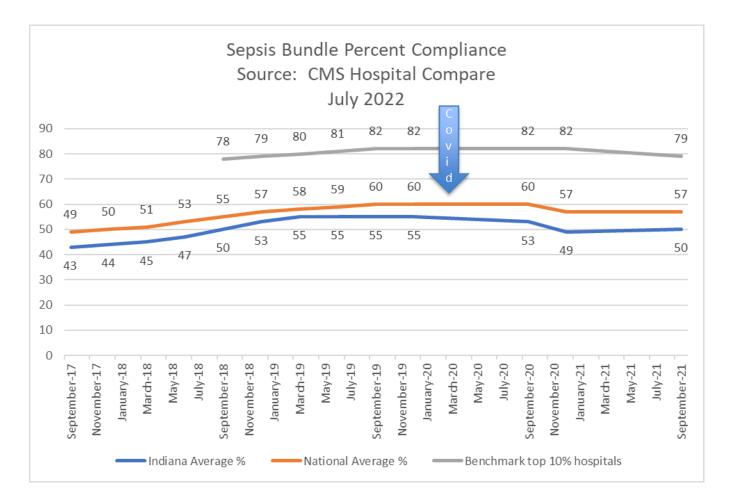
Including Palliative Care 🔻

## Indiana Septicemia Mortality





## Sep-1 Compliance Indiana vs Nation: Oct 20-Sep 21



- Indiana ranked 49/52 states and principalities—ahead of DC, NM, PR
- Range for Indiana hospitals 20-93% Compliance
- Indiana up 1%; Nation down 3%



Indiana Patient Safety Center

of the Indiana Hospital Association



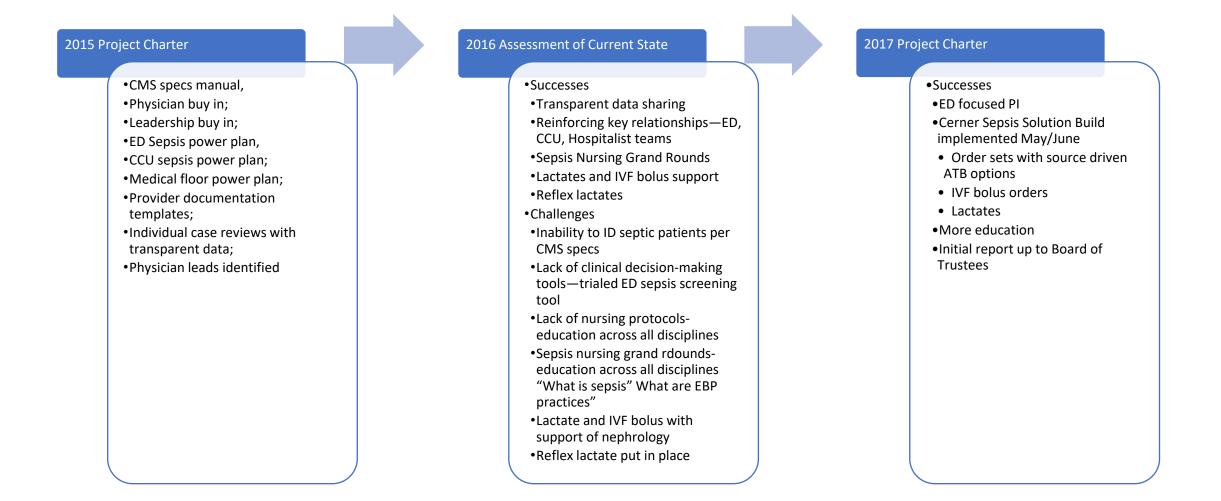
of the Indiana Hospital Association

### Columbus Regional Health

Chris Newkirk, BSN, RN, CCM Clinical Quality Advisor / Bartholomew county FIMR co-lead

September 1, 2022

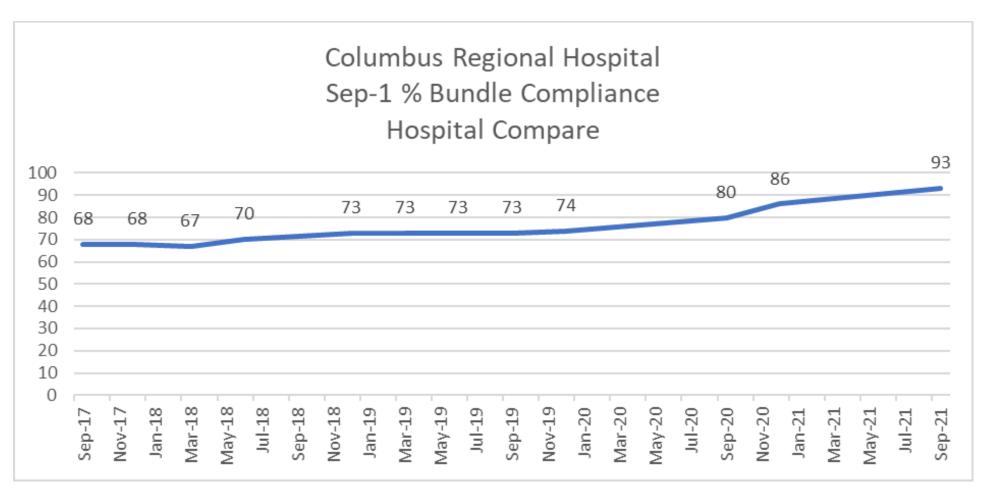
### Columbus Regional Initial Sepsis Timeline



2019- Prep for new EMR- Epic Successes: 2018 More education Revamping of new AI program Successes: Multidisciplinary education Education added to nurse More community work added- building residency program partnerships with ECFs EMS team Community education ECF education 2020- Evolving team Sharing updates regularly with 2018 More Successes: our Board of trustees Nursing education added to annual competencies education and educational fall fair • Continued community work Challenges: Nursing work flows within EMR Repeat Lactates 2019 Prep • IVF bolus for new Covid 19 EMR-Epic 2020- Continue 2021-Continue evolving team evolving team Successes: 2022 and Beyond- Constant journey Strong partnerships with ECFs Leverage Epic Clinical programs to Focused work team continue to improve early Strong Physician leadership identification and treatment Strong organizational leadership Continue to always highlight work with Sepsis September

## Columbus



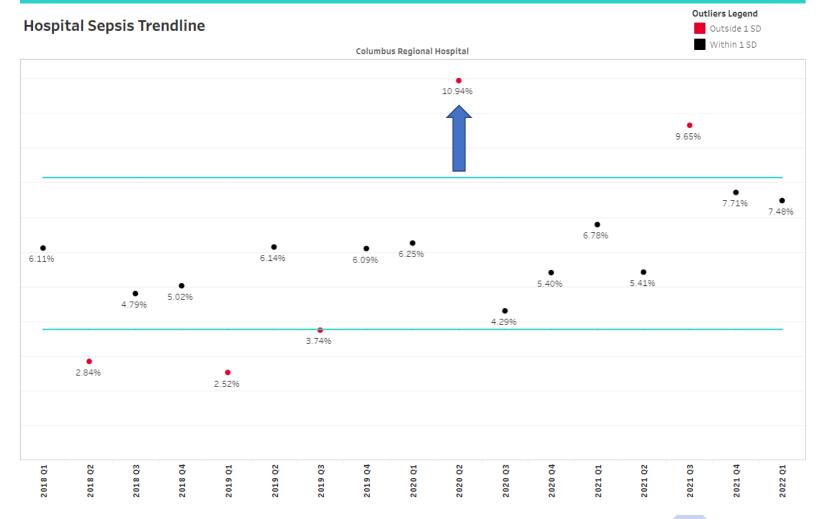


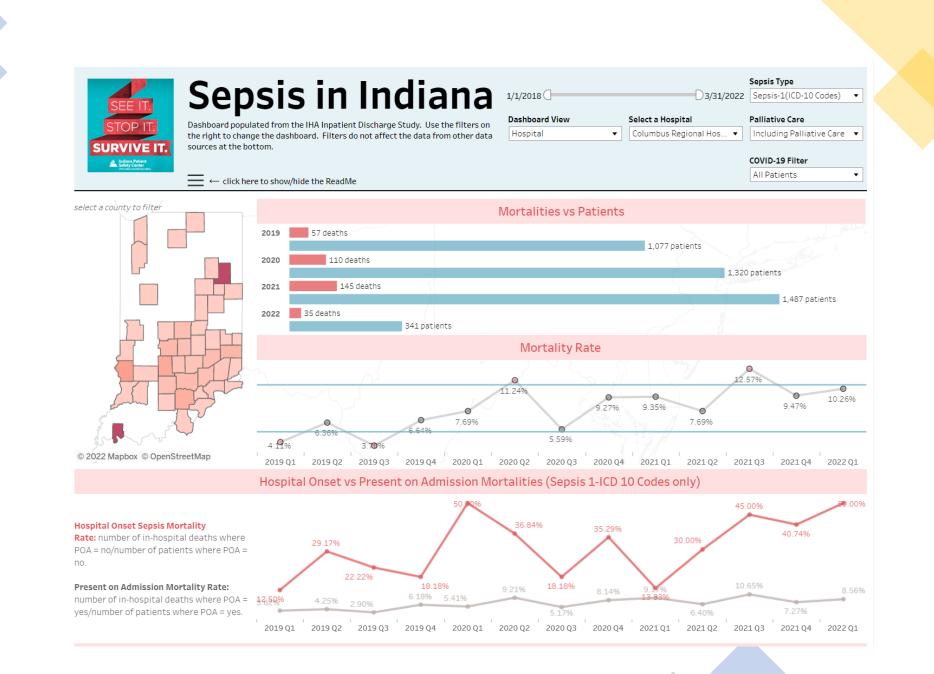


	Select Sepsis Type	Select a Hospital		Indiana Patient
SEE IT.	Sepsis-1(ICD-10 Codes)	<ul> <li>Columbus Regional Hospital</li> </ul>	- 🧏	
SEE IT.				Safety Center
SURVIVE IT.				of the Indiana Hospital Associat

of the Indiana Hospital Association

#### Hospital Control Chart by Sepsis-1(ICD-10 Codes) Excluding Palliative Care







 Select Sepsis Type
 Select a Hospital

 Sepsis-1(ICD-10 Codes)

 Columbus Regional Hospital



Indiana Patient
 Safety Center
 of the Indiana Hospital Association

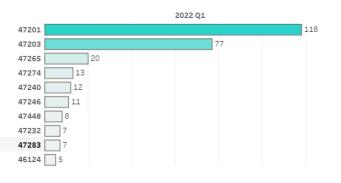
#### Hospital Patient Demographics by Sepsis-1(ICD-10 Codes) Excluding Palliative Care

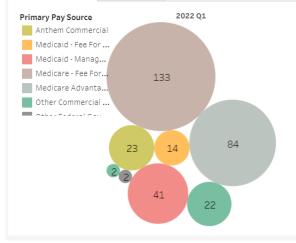
#### Columbus Regional Hospital

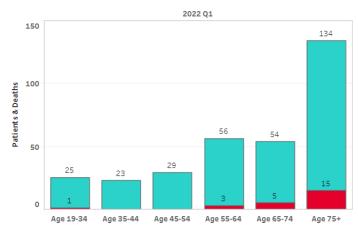
#### Point of Origin Sepsis Patients per Quarter

#### Top 10 Zip Codes of Sepsis Patients

	2021 Q2	2021 Q3	2021 Q4	2022 Q1
Clinic or Physican office	3			
Clinic Referral	1	12	8	5
Court/Law Enforcement			1	
Non-Health Care Facility	217			
Physican Referral	74	277	336	264
Transfer from a hospital (different facility)	36	18	26	22
Transfer from another	1		2	4
Transfer from SNF	18	35	29	26
Unknown	1			







## Celebrations



- Share your celebrations with sepsis!
- Share your September plans!

• E-mail <u>rhancock@ihaconnect.org</u> if you are a new sepsis leader for our outreach.

## Sepsis Program Review



### Strengths

- DataLink trended mortality (filterable), bundle compliance, post-op sepsis, maternal sepsis rates
- Sepsis leader list for information sharing and networking
- Sepsis office hours on requested topics
- Coalition focused mortality and bundle compliance data
- Monthly leader email for information and sharing
- HQIC focus on sepsis with sprints, discovery chart review tools
- Small Rural Hospital Improvement Program (SHIP) sepsis simulations
- Payor focus on inpatient quality improvement
- IHA website and toolkit clinical and community resource, discharge education, and webinar library
- Annual Sepsis Awareness Month focus

### **Opportunities**

- Increase bundle compliance
- Decrease mortality experienced during the pandemic
- Focus on maternal inpatient sepsis mortality
- Provide clinician education for new staff
- Improve patient and caregiver sepsis education use
- Engage physicians more effectively
- Use CMS antibiotic and fluid management specifications manual

### 2022 Indiana Hospital Sepsis Goals



- Goal of ≥ 79% sepsis bundle compliance or 10% increase for Indiana hospitals by Sept 2023.
- Focused work with low bundle compliance / high sepsis mortality hospitals through June 2023 (over 16 consults completed in 2021-22)
- Focus QI on hospital onset inpatient sepsis care and oral hygiene

Hospitals' Specific Goals?



Indiana Patient

Ora

Hygiene?

Safety Center of the Indiana Hospital Association

## Back & to the Future!





Teamwork to identify sepsis time zero!

## 2022 Patient Safety Summit





Tues., Sept. 20, 2022

Embassy Suites, Plainfield

9 a.m. – 3:30 p.m. ET

Event flyer

To register, visit here or use the QR code



\$99 registration fee

## 2022 Patient Safety Summit

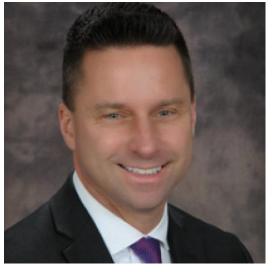




Finding the Silver Linings Craig Deao, MHA



Reimagining (and Revitalizing) Quality, Safety, & High Reliability Leadership *Vikki Choate, MSN, R.N., NEA-BC, CPHQ* 



Achieving a Culture of Zero Violence: Leadership Strategies to Reduce the Risk & Anxiety of Patients, Staff, & Visitors Brian Uridge, MPA, CHPA, CPP



Re-engineering Care to Ensure Patient Safety When a Cyberattack Hits *Member Panel* 



#### Nov 1-2 Nov 1-2

### Nov. 1 – 2 The Westin Indianapolis

### Learn more and register on our website:



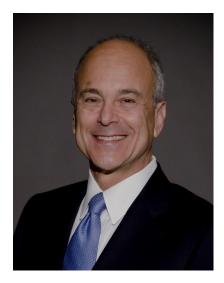
### **Annual Meeting Keynote Speakers**





Sean Astin Actor & Director

Mental Health



### Dr. Mark Chassin

President Emeritus, The Joint Commission

### Quality & Patient Safety



**Steve Cadigan** Former VP of Talent, LinkedIn

### Workforce & Culture

### **Annual Meeting Keynote Speakers**





Donna Brazile

Veteran Democratic

Political Strategist



**Michael Steele** 

Former RNC Chair



### John Riggi

National Advisor for Cybersecurity and Risk, AHA



Alan Beaulieu President ITR Economics

Political Point/Counterpoint

### Cybersecurity

Health Care Economic Forecast

### Quality and Patient Safety Team





Karin Kennedy Vice President, Quality & Patient Safety 317-423-7737 kkennedy@IHAconnect.org



Laurie Gerdt Quality & Patient Safety Advisor 317-423-7728 Igerdt@IHAconnect.org

34



Annette Handy Clinical Director, Quality & Patient Safety 317-423-7795 ahandy@IHAconnect.org



Brittany Waggoner Maternal & Infant Quality Improvement Advisor 317-488-1031 bwaggoner@IHAconnect.org



Becky Hancock Quality & Patient Safety Advisor 317-423-7799 rhancock@IHAconnect.org



Casey Hutchens Patient Safety Project Coordinator 317-974-1457 chutchens@IHAconnect.org



Madeline Wilson Quality & Patient Safety Advisor 317-974-1407 mwilson@IHAconnect.org



Becky Royer Consultant 812-249-2341 broyer@ihaconnect.org