Sustaining Sepsis Performance Improvement

Sepsis CoP Webinar | September 18, 2024

Presenters

"Sustainability v. A Paradigm of Multi-phasic, Cyclic CQI"

Deborah R. Campbell, MSN, RN,CPHQ,

IP, T-CHEST, CCRN alumna

Kentucky Hospital Association

"Sustaining Sepsis Engagement at the Frontline"

Stephanie Lavin, MSN, RN, CPN, CPPS, LSS

Cook Children's Medical Center

Objectives

1. State 2 ways to keep sepsis work sustainable
2. State 2 ways to engage sepsis teams
3. State 2 outcomes that can be associated with a high level of sepsis engagement

Disclosures

Nothing to disclose

Sustainability
v.
A Paradigm of Multi-phasic, Cyclic CQI

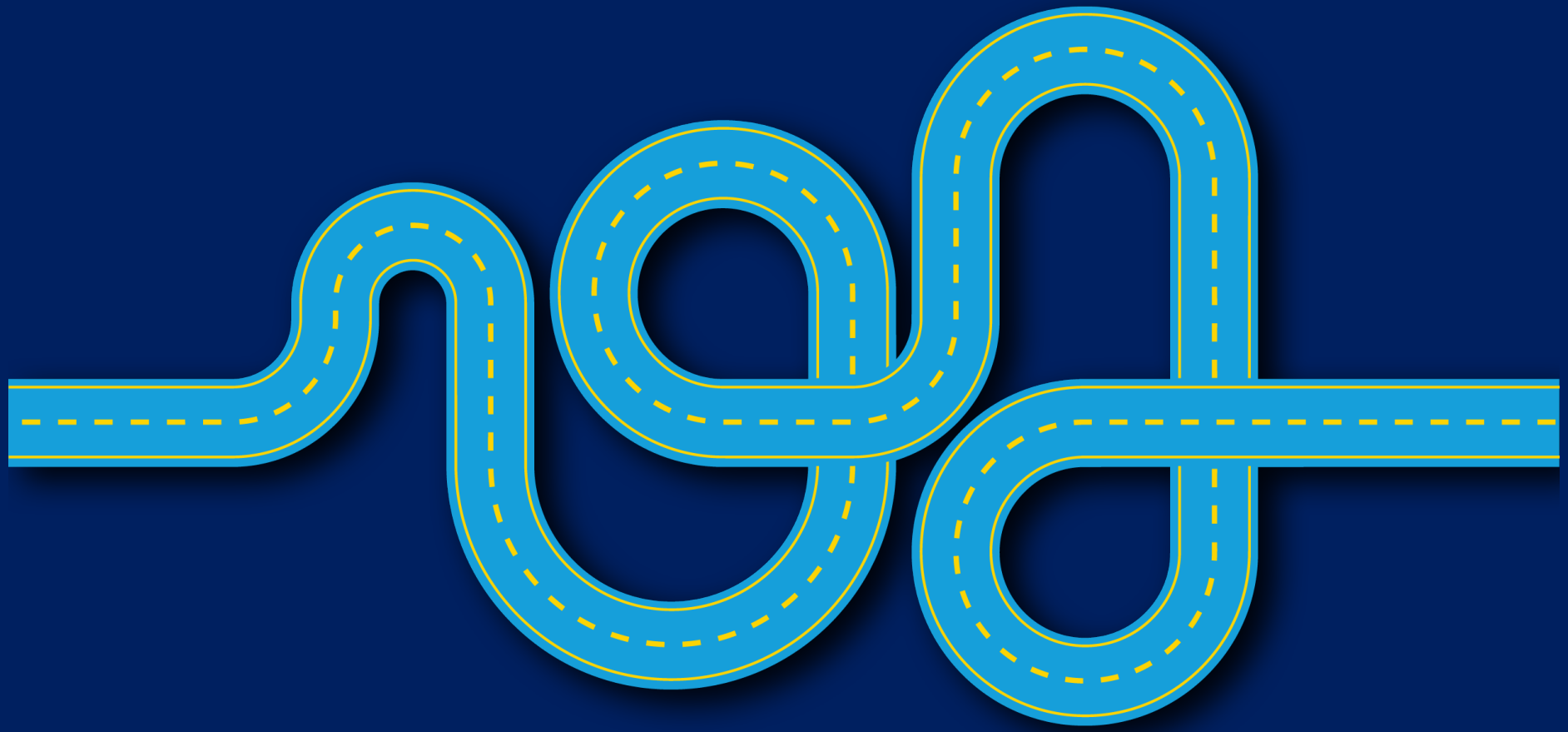
Debbie Campbell, MSN, RN, CPHQ
IP, T-CHEST, CCRN alumna
VP of Clinical Strategy and Transformation
Kentucky Hospital Association

Not a destination!

A Never Ending Path

Job Security?

Not a straight line either! More like this



The Life Cycle of an Initiative or Project

- **Project A**
  - **We have a problem! -** ***Burning platform or***

    - Put together a team
    - Do research on EBP
    - Create an aim statement, short and long term goals
    - Perform PDSAs…….hone your plan
    - Ultimately, you have your intervention
  - **Implementation!**
    - Revise policies
    - Educate, educate, educate
    - Monitor and report compliance
  - **Get results!**
    - Sustain mode → Perfection thereafter ☺ → Project B

Reality- from Linear to Cyclical

- Project A
  - We have a problem!
    - Put together a team
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    - Sustain mode → ~~Perfection thereafter~~

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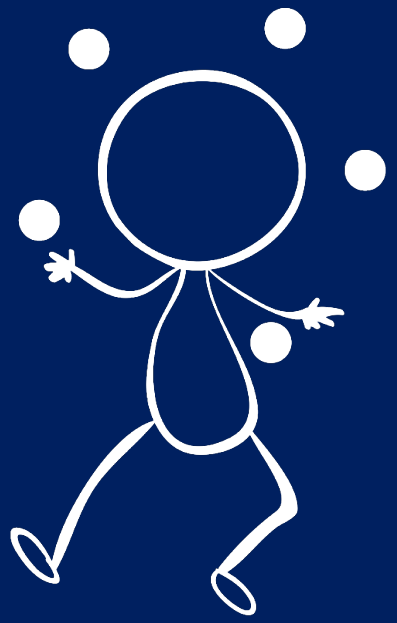
Improvement Evaporation Effect

- The changes just don’t “stick”!
- Bundle compliance goes south!

Innovation sustainability in challenging health-care contexts: embedding clinically led change in routine practice
Graham P Martin*, Simon Weaver†, Graeme Currie‡, Rachael Finn§ and Ruth McDonald**

Reality - how many balls can you handle?



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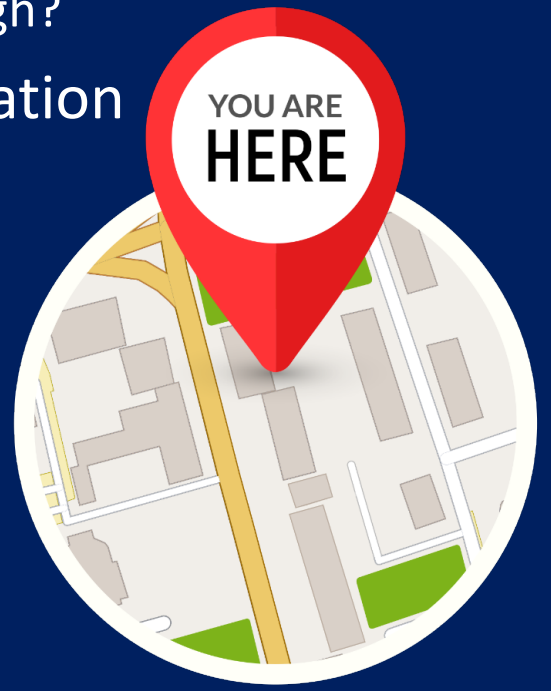
  - Implementation!
    - Revise policies
    - Educate, educate, educate
    - Monitor and report compliance
  - Get results!
    - Sustain mode ->

Where are you?

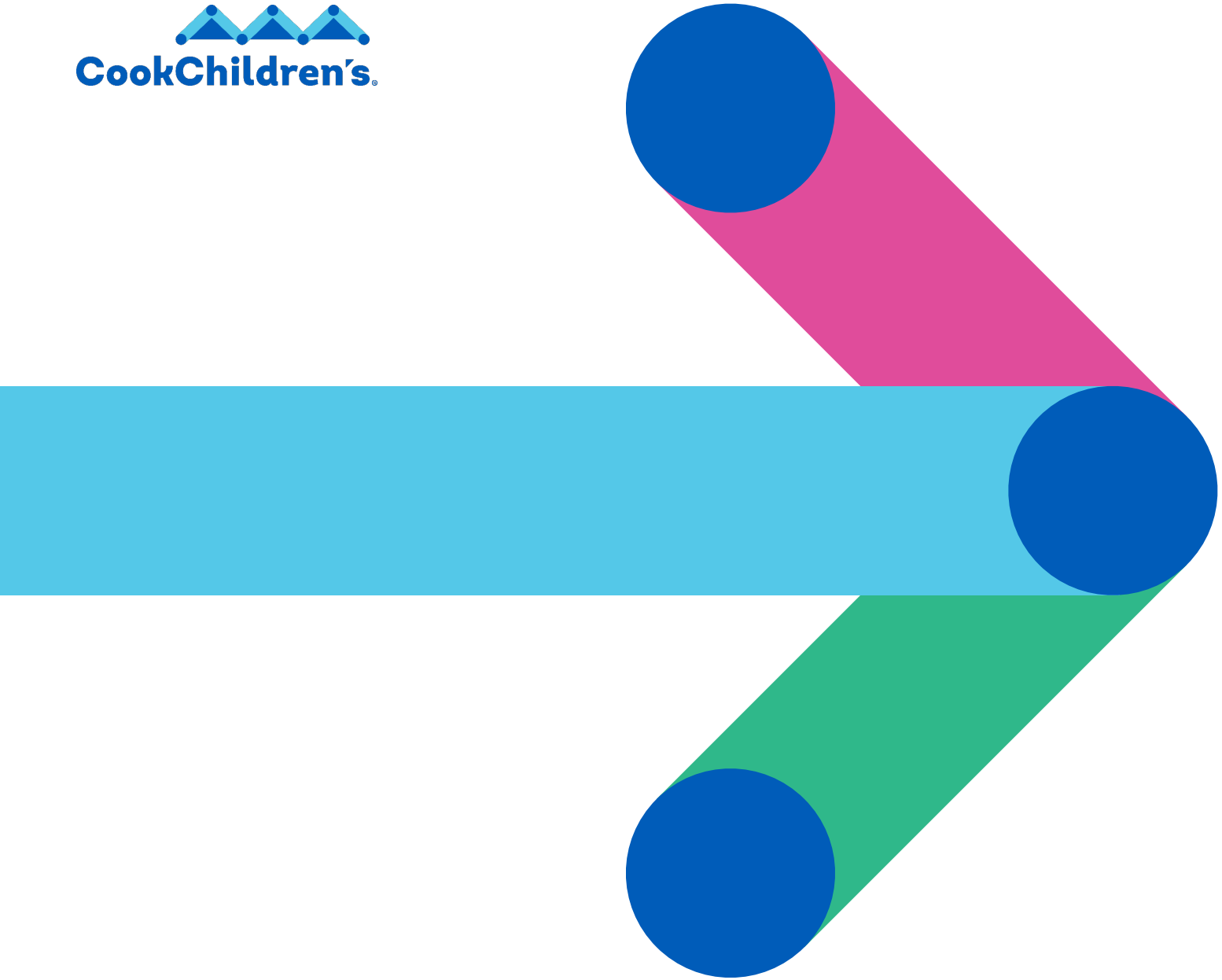
Are you actually ready to move to “sustain mode”?

- No established period of time, e.g., number of months at 0
  - How few is enough?
  - How long without a harm event is long enough?
- Initiative leaders must make a determination
  - Outcome goals
  - Resources available
  - Competing priorities



Practical Steps to Hardwiring Results

- **People**
  - Involve leadership in decision and obtain commitment to continued support for this phase.
  - Communicate widely and clearly to everyone the rationale and plans for changing to the sustainability “mode”.
  - Downsize your team, but…
    - Recruit a Process Owner (aka champion)*- someone to “care about”, review status regularly, observe, be alert to mis-steps, look for further improvement opportunities.
      - Create a specific plan for when and how to communicate.
      - Cannot have a unit manager filling this role for all the harm areas in this sustain ‘phase’.
      - Consider how you might include patients and families.



Sustaining Sepsis Engagement at the Front Line

September 2024

Cook Children's Medical Center – Ft Worth, Texas

CookChildren's

Sepsis Definition

Sepsis is the body's extreme response to an infection

- **May** start in the lungs, urinary tract, skin, abdomen or gastrointestinal tract
- Life threatening **medical emergency**
- **Can** lead to tissue damage, organ failure and in extreme cases death

Sepsis Facts

- Sepsis is a leading cause of death for infants and children world wide
- 75,000 children in the United States are hospitalized annually with sepsis
- Approximately **7,000** children in the United States die each year from sepsis
- For every hour delay in treating sepsis in children the mortality rate increases by 8%
- **38%** of children who survive sepsis sustain lifelong disabilities

Rory Staunton
May 1999 – April 2012

Sepsis Fact Sheet - End Sepsis , Pediatric sepsis - PMC (nih.gov)

Sepsis Journey at Cook Children's

2012
Sepsis screening began in ED
-
Paper

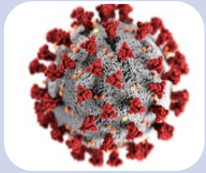
2014
Sepsis screening
re-launch

2016
Sepsis screening house wide
–
Joined IPSO
–
Meditech

2017
Organ dysfunction (OD) sepsis screening for inpatient areas

2018
Epic go live sepsis screening

2019
Epic screening enhancements



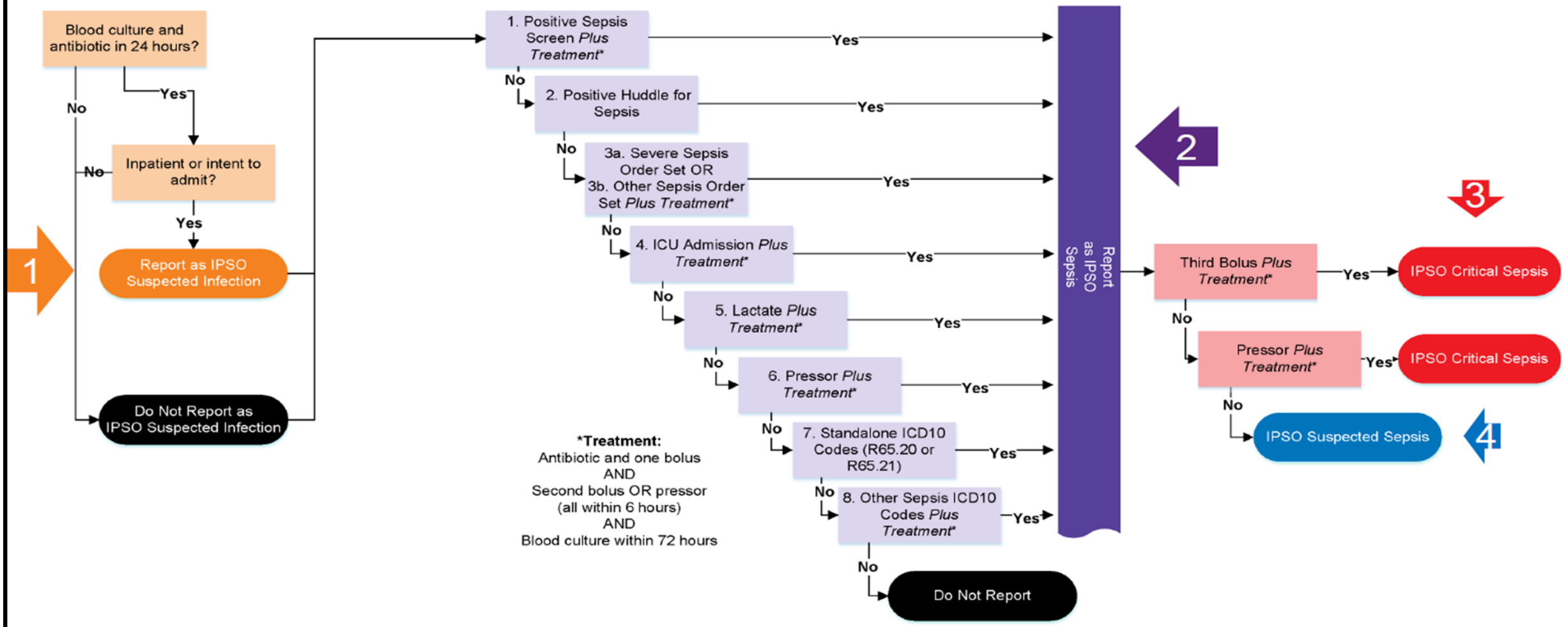
2021
Moved sepsis screen to Epic Storyboard

2022
Enhanced best practice alerts and reports

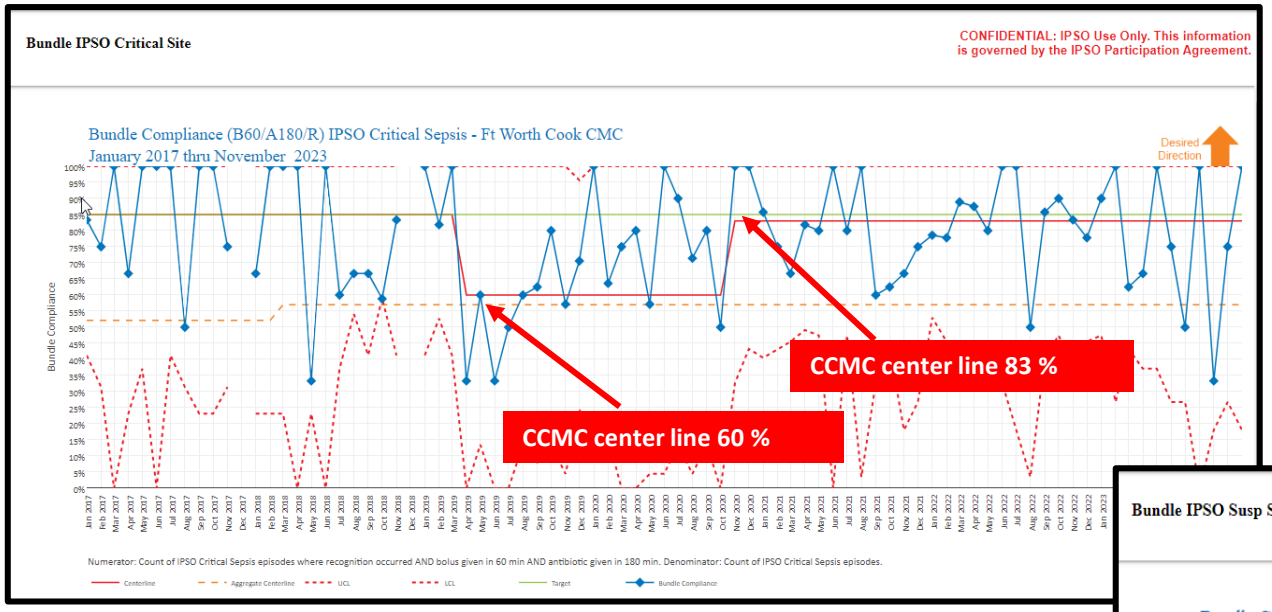
2023
IPSO collaborative
completed

2024
Sepsis data reporting in PHIS

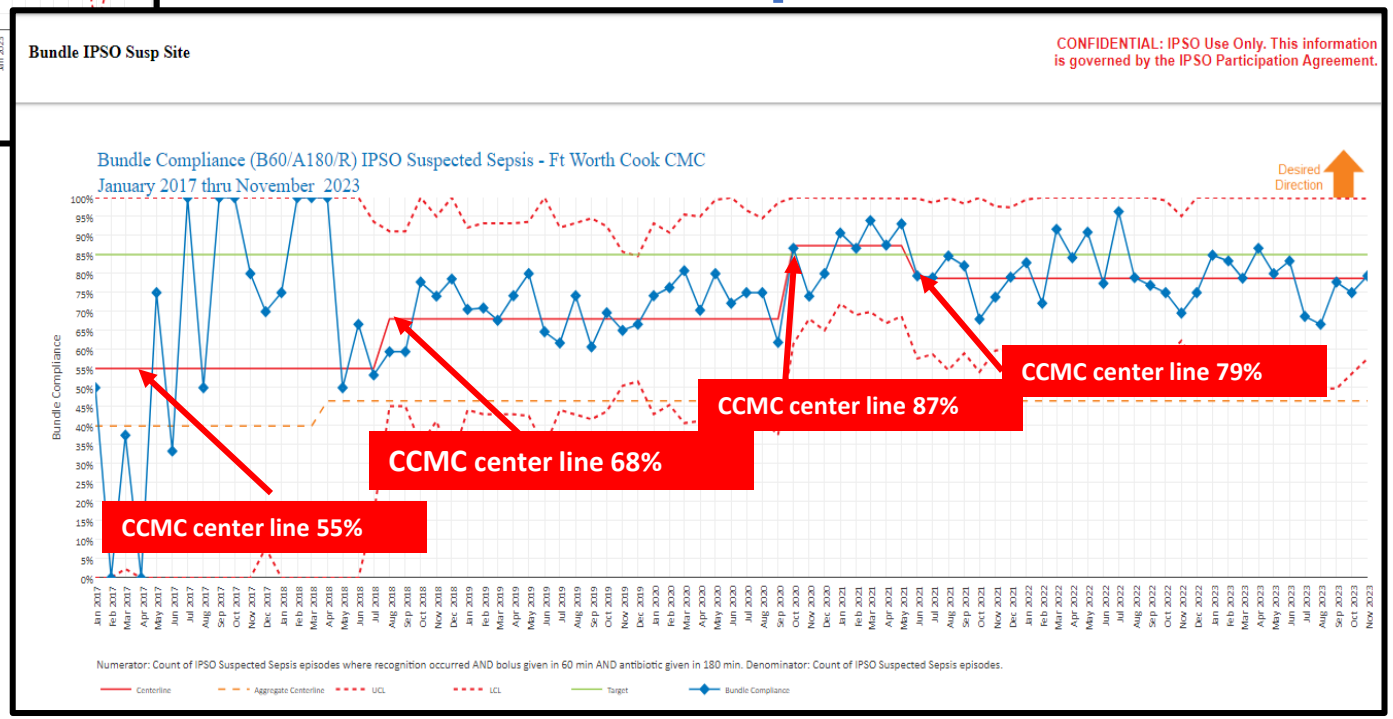
Level setting on IPSO Definitions



Bundle Compliance –IPSO Critical Sepsis



Bundle Compliance –IPSO Suspected Sepsis



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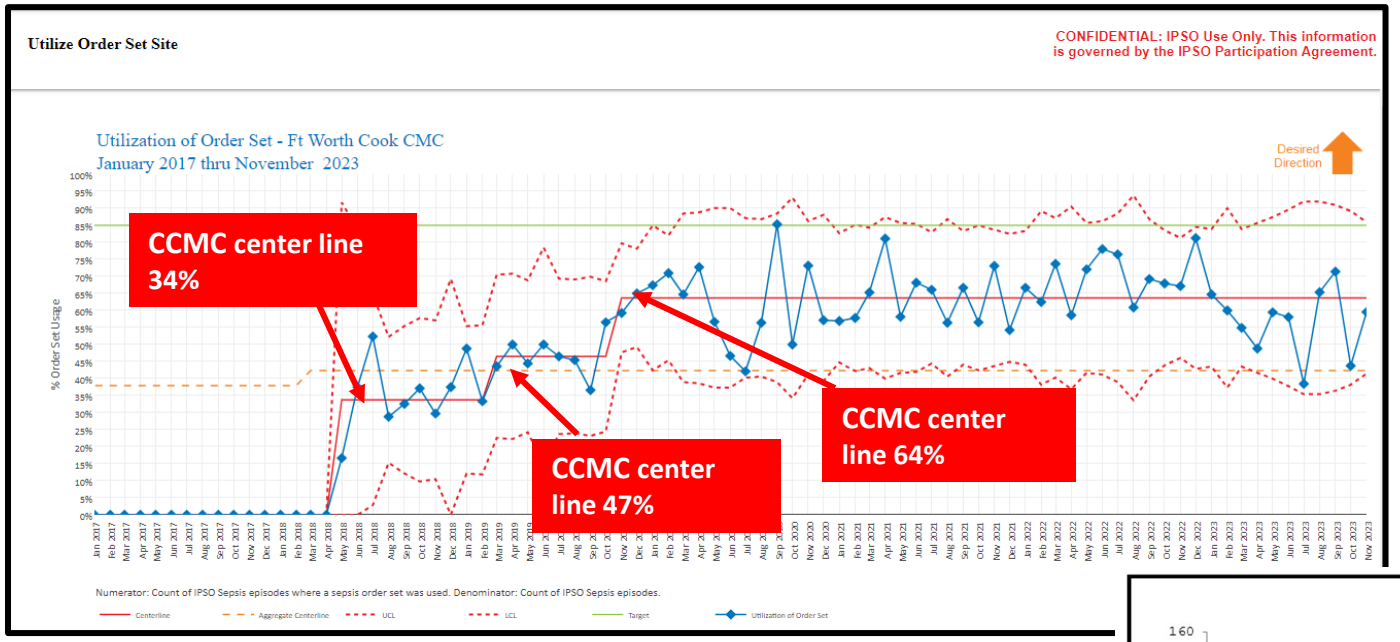
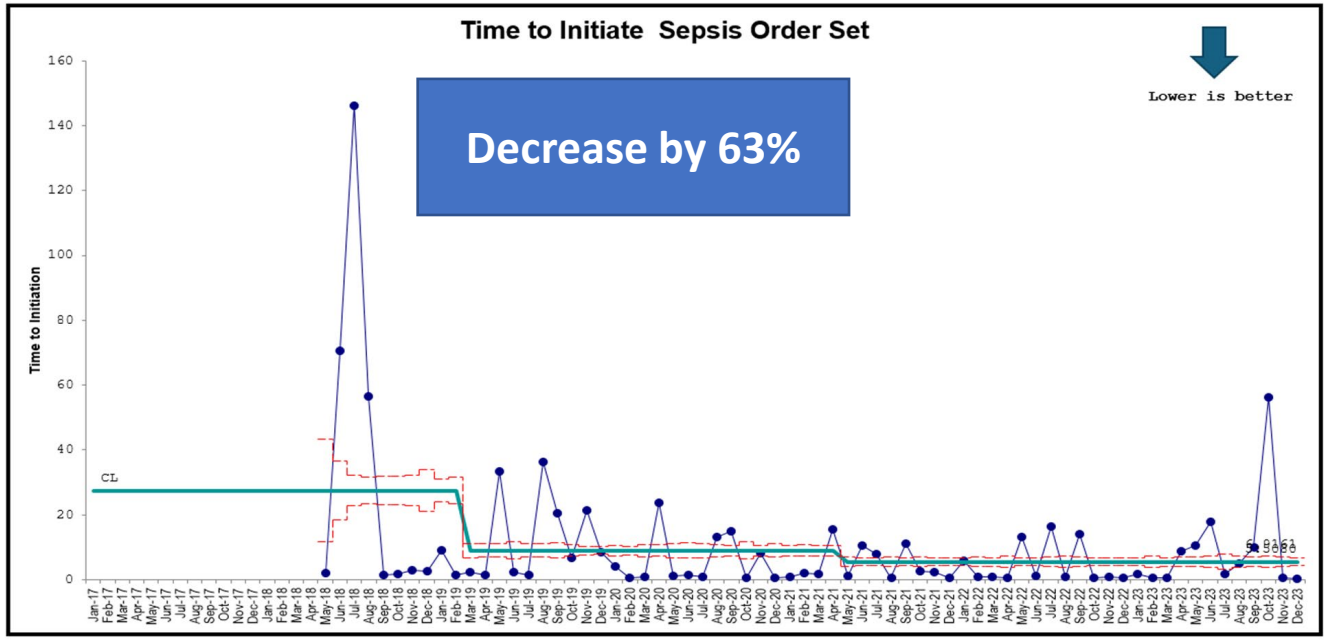
Order set utilization – All IPSO Patients



Time to initiate sepsis order set– All IPSO Patients



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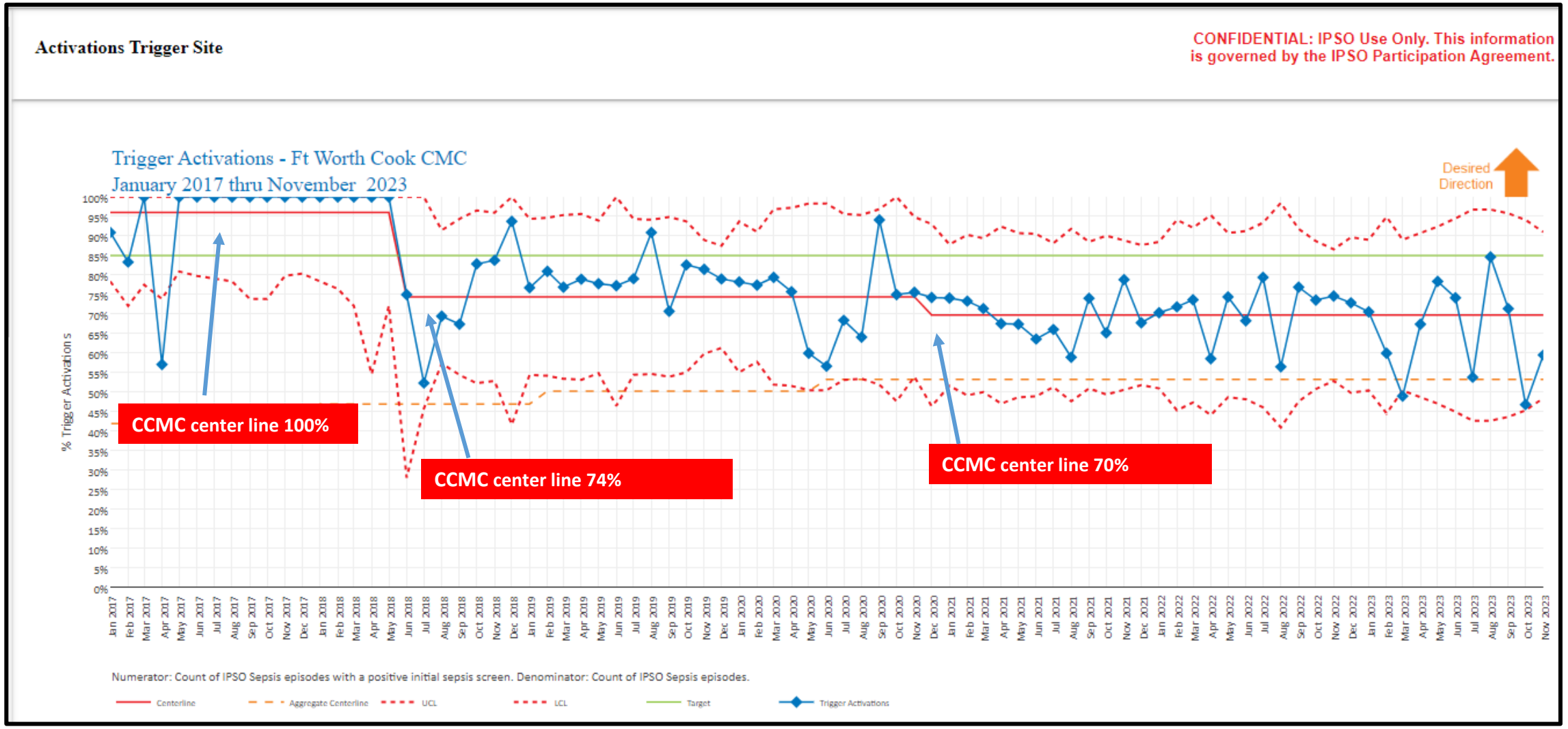
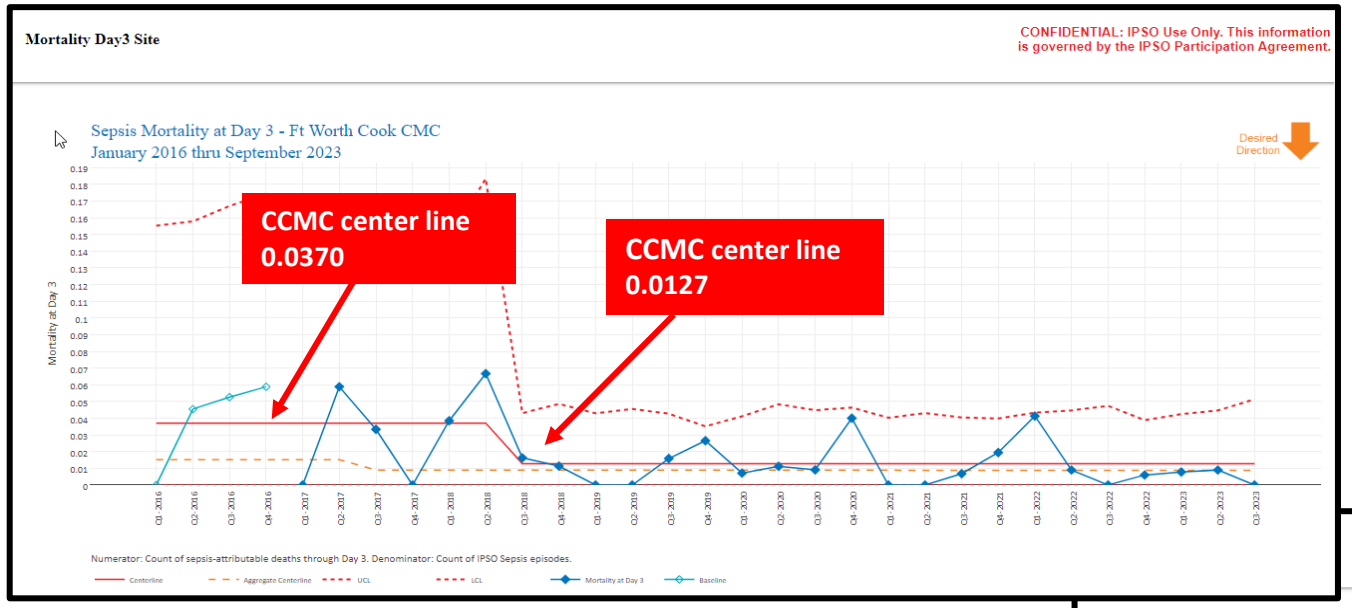
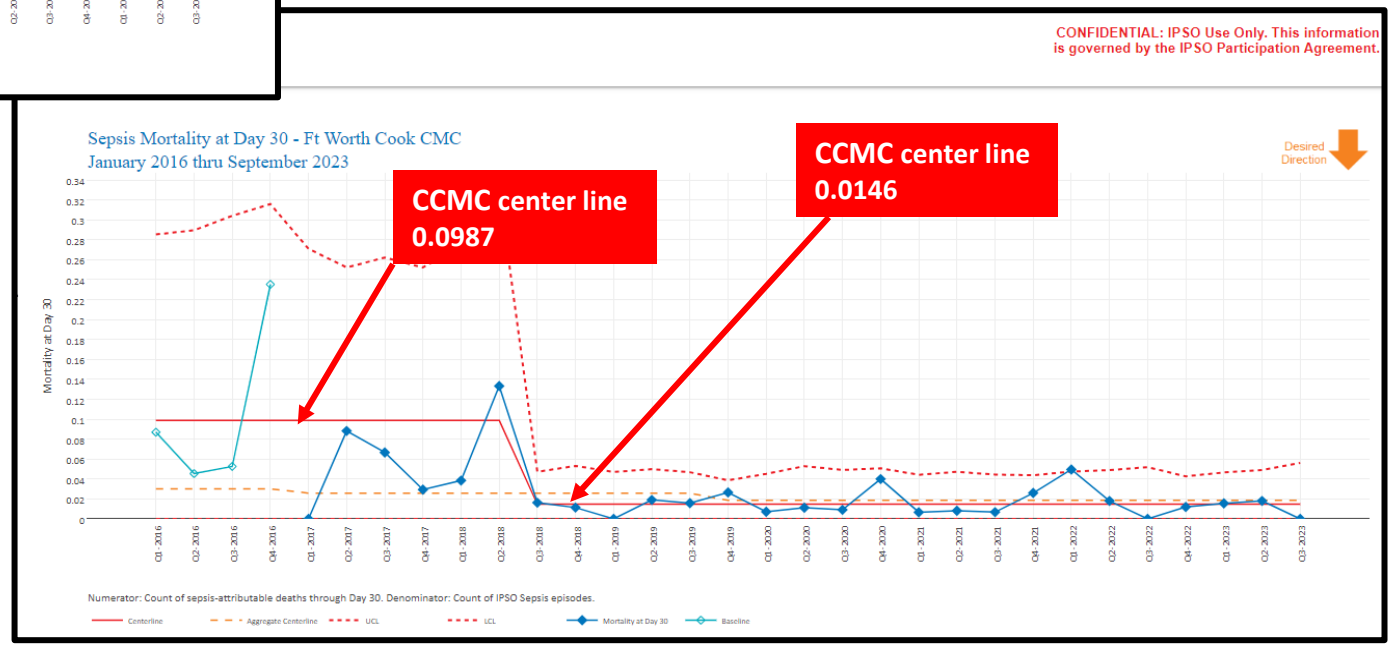
Screen activations – All IPSO Patients



Sepsis Mortality at Day 3 - IPSO All Patients



Sepsis Mortality at day 30 – IPSO All Patients



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Making the change “Standard Work”

- **Process and Structure**
  - Utilize the concept of forcing functions whenever possible
    - Past very successful example: Removed the betadine from trays and even the the unit when CHG became the standard of care
    - Make opt-outs an overt choice; require a note? (e.g., sepsis order sets)
  - Automatic (electronic) prompts/reminders
    - Embed checklists in electronic documentation
  - Continue to make it easy to do the “right thing”
    - Standardization- kits and carts
    - Example: IV bolus kits with fluid, tubing, stopcock, pressure bag
  - Redundant processes- order sets/badge buddies/checklists/transfer forms

Making the change "Standard Work"

- **Process and Structure**
  - Continue to monitor and report outcomes
    - Standing agenda item for unit, board, leadership, quality meetings
    - Maintain measure on dashboard/scorecard
  - Thoughtfully, incrementally reduce frequency of process data monitoring and reporting, but don't be tempted to stop altogether for quite some time, if ever.
    - Daily→2/3 times/week
    - Daily→ Weekly
    - Weekly→ Monthly
    - Monthly→Quarterly*
  - Create a specific plan for at what point and how you will ramp back up if you note slippage in outcomes or bundle compliance.
    - Be clear about this in communication from the start of the reduction.

*"If it's important, never less than quarterly." Haraden, IHI

Be Prepared

- Maintain a toolbox with resources on infection prevention, sepsis bundles and quality improvement science.
- Actively look for new ideas, innovations, processes, and products.
  - Professional meetings, journals
  - Listservs, blogs, message boards
  - Sepsis Alliance

  ** Many are free, others may be worth the cost*
- Continue to perform a gap analysis on a regular scheduled basis (annually and when new guidelines or studies emerge).
  - QI Calendar
- Continue to use PDSAs, RCAs and other QI tools to assist you with this work.
- Keep QI expertise as a must have for Quality laeders but also teach bedside staff and others. Grow your team's understanding and skill level.

Making the change “Standard Work”

- **Embed changes into**
  - Policies
  - Orientation plans – regular staff, travelers, residents, med students, fellows, new attendings, locum tenens
  - Competencies
  - Checklists, huddle forms, rounding forms
  - Documentation forms (paper and/or EMR)
  - Patient/Family** education forms

Avoiding improvement fatigue

- Plan regular recognition activities for sustaining results
  - “Days Since” milestone parties
  - Keep awards and recognitions visible
    - Post banners prominently
    - Send email blasts
    - Announce at meetings
    - T-shirts, buttons, ribbons for name tags

- Stories are powerful, but you may need to change yours!
  - From a tragic tale to success stories, e.g., tell about a long term patient who was discharged without a harm event! Use pictures (with permission)!

Culture of Safety- Context Matters

- Can't define it, but we know it when we see it
  - Non-hierarchical
  - Healthy team dynamics
    - first names
    - safe to question, interrupt*
      - Scripts
  - Patient-Centered
  - No blame- it's all about the process*
    - Refrigerator
  - Personal accountability (1 patient, 1 action at a time)

"The culture of any organization is shaped by the WORST behavior the leader is willing to tolerate."

- Gruenter & Whitaker

Culture of Safety - Context Matters

- **Can we measure it?**
  - HSOPS
  - Safety Climate Survey
  - Safety Attitudes Questionnaire
- **Effective for more than just one specific outcome**
  - Sepsis
  - Infections
  - Unplanned Device Removals
  - Med Errors
  - Wrong site surgeries

Sustainment takes energy!

Collective Mindfulness

- A mental orientation that enables **continuous** learning and evaluation of the environment for the expected and unexpected
- Leaders at all levels **constantly** think of how the organization can become better and avoid error
- **Proactive Harm Reduction** – Anticipation for events that may produce harm combined with **containment*** once an unexpected event has occurred to prevent or minimize harm

“The currency of leadership is attention.”
- Heifetz

“Every system is perfectly designed to achieve the results it gets.”
- Berwick

Thanks for all your great work and good luck with keeping it going!

How Do We Sustain Change

Kotter's 8 Steps for Leading Change

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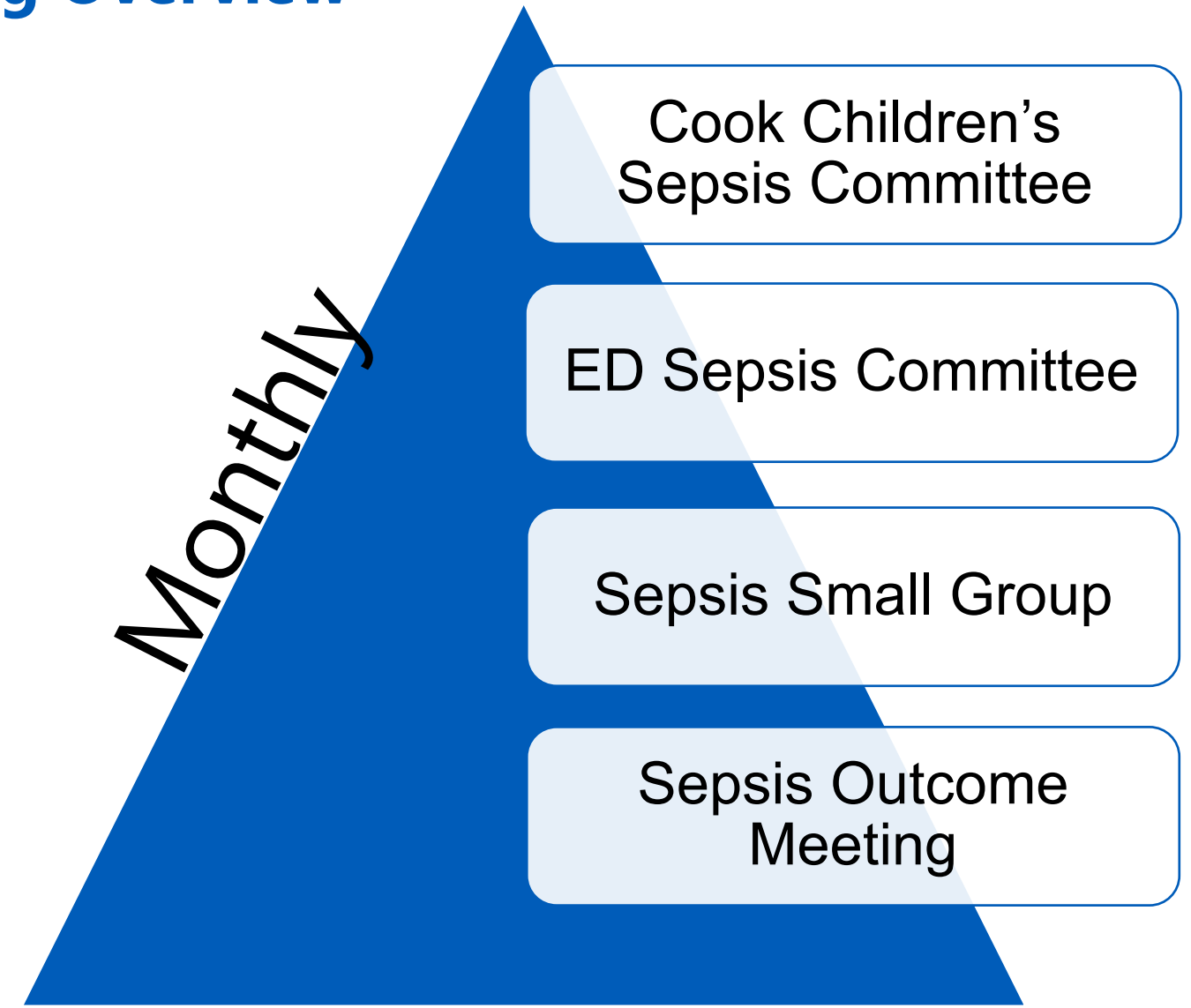
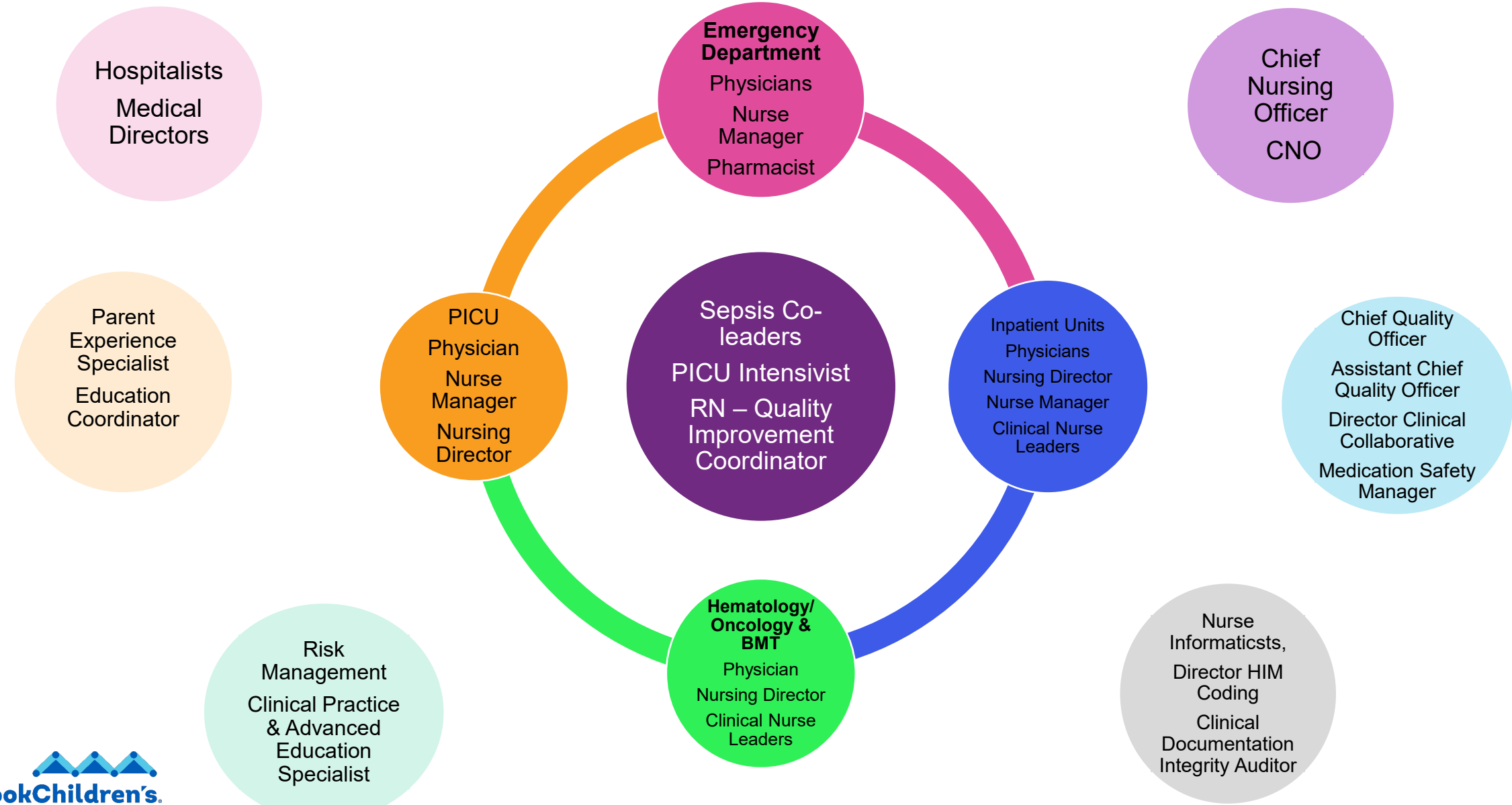
Sepsis Meeting Overview



Cook Children's Sepsis Committee Meetings – Who Attends



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Function of the Cook Children's Sepsis Committee

- Place for knowledge sharing and discussing
  - **Safe place**
  - Review **all positive sepsis** scores and outcome by unit location
    - Inpatient at the patient level
    - ED – overall, neo with fever, Oncology with fever, screen positive – DC – return ED
- Review IPSO/PHIS sepsis data
- **All encompassing** of anything **sepsis** related
  - Sepsis Grand Rounds
  - Sepsis education
  - World Sepsis Day celebration

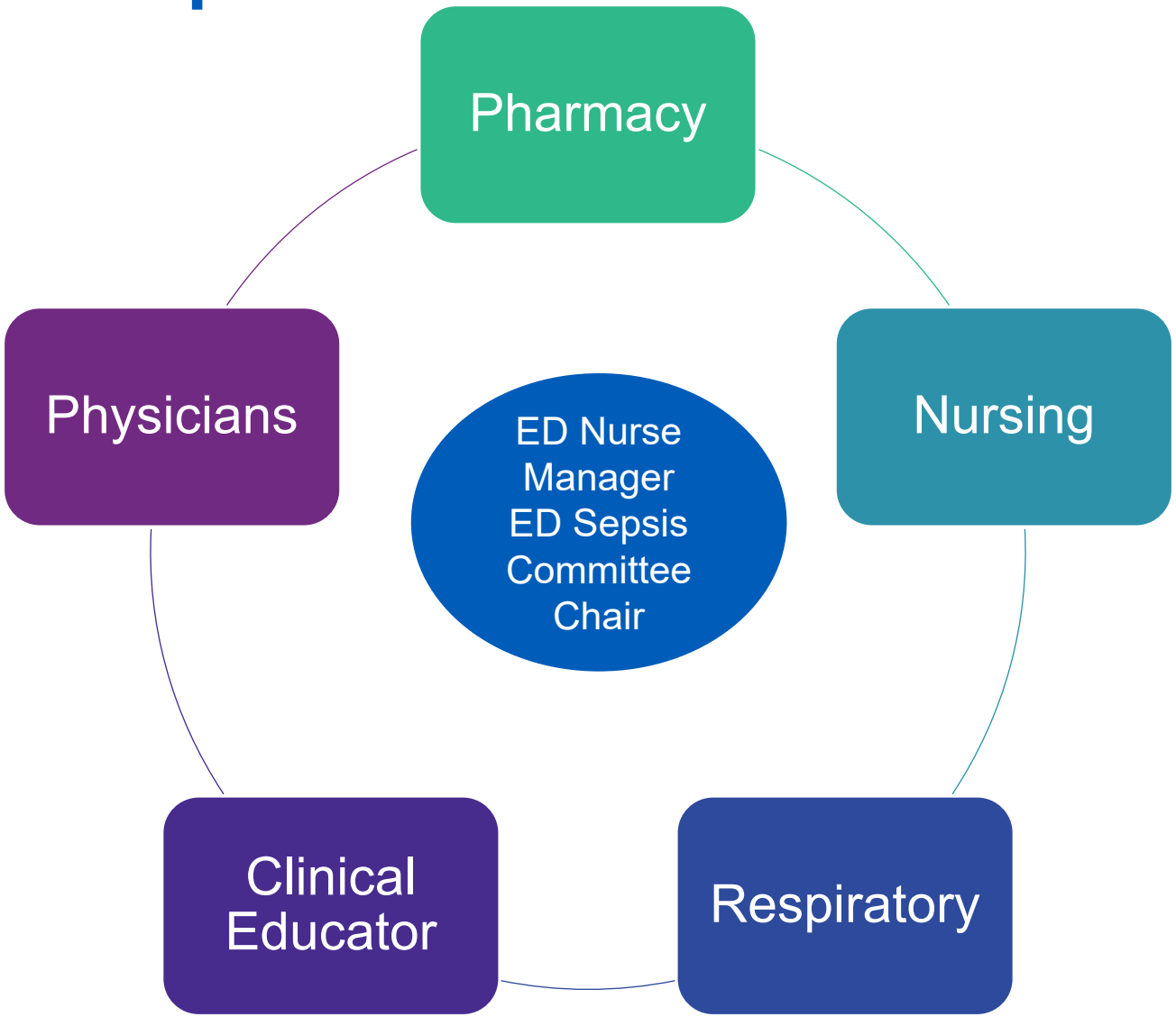
What we have worked on

- **Preparing to change EHR**
- Update wording in sepsis screening tool
- Update sepsis flow chart
- Identified need for various **sepsis reports** to track and trend data
- Review reasons for bundle non-compliance

Challenges identified

- Antibiotic times for oncology patients in the ED
- Bolus and antibiotic times for neonates in the ED
- **Sepsis screening questions not completed** – inpatient and ED
- Feelings of **everyone screening positive** for sepsis
- For inpatient not re-screening with change in status

ED Sepsis Committee – Who Attends



Function of the ED Sepsis Committee

- Promote sepsis awareness within the ED
- Review ED sepsis data
- Address sepsis concerns

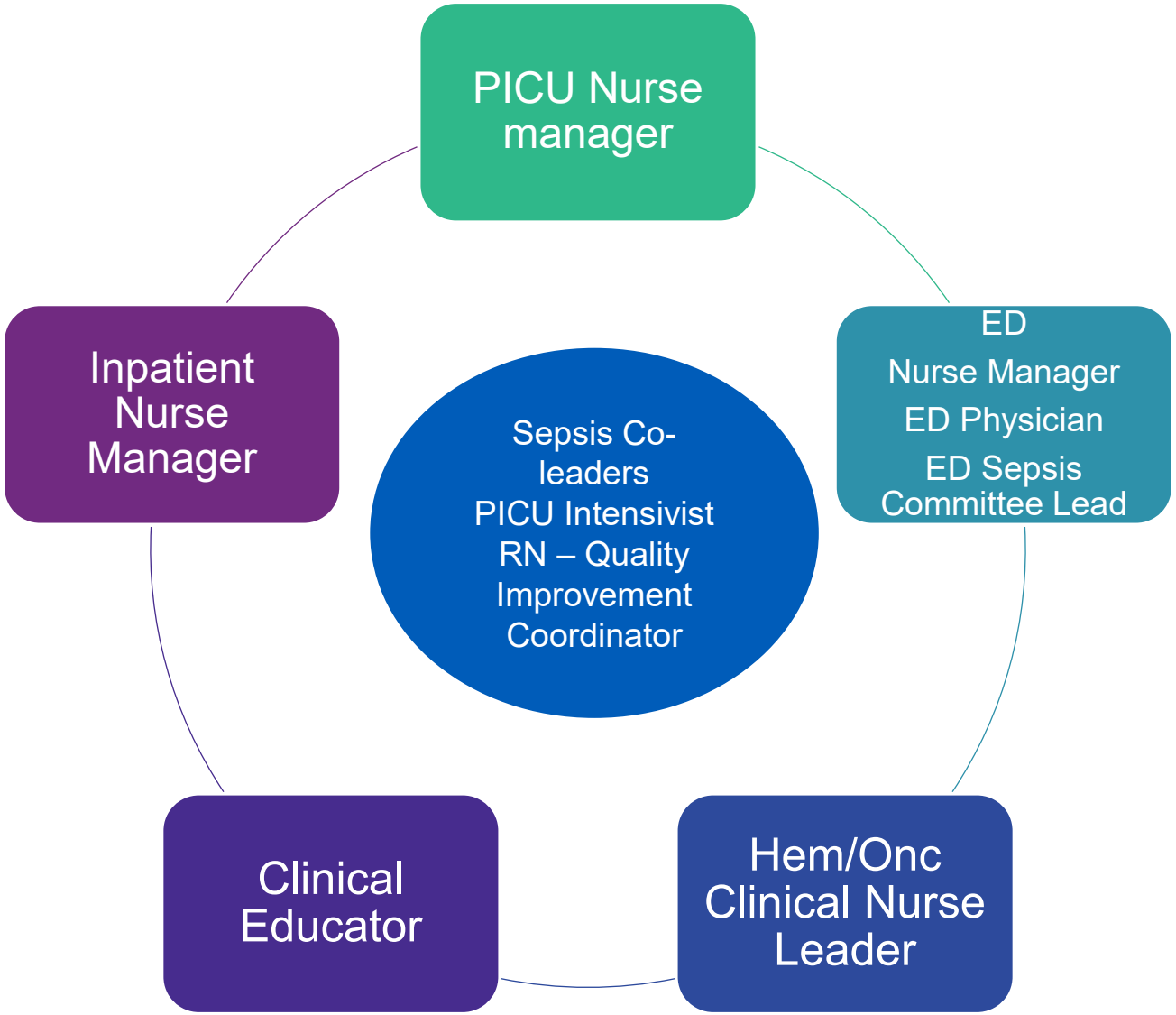
What we have worked on

- Review ED data monthly
- Take a **deeper look** into any **sepsis concerns**
  - Why all elements of sepsis screen are not completed
  - Order of sepsis interventions
  - Antibiotic timeliness
  - Discuss chart reviews
- World Sepsis Awareness events in ED

Challenges identified

- Physician should respond to sepsis alert within 15 minutes, newer staff may not feel comfortable re-paging physician
- Bolus given on the pump
- Order of sepsis interventions
- Obtaining IV access
- Compliance with sepsis order set utilization

Sepsis Small Group Meeting – Who Attends



Function of the Sepsis Small Group

- **Deeper dive** into concerns brought up in Cook Children's Sepsis Meeting
- Provide approval and oversight
  - Review and update sepsis scoring tool and algorithm
  - Monitoring and assessment of sepsis interventions
  - Deep dive on patients who do not screen positive but meet IPSO criteria

What we have worked on

- Review **Phoenix sepsis criteria**
- Reviewed study from Vanderbilt about Oncology patients with central lines and antibiotics
- Improvements to **sepsis algorithm** and **sepsis screen**
- Deeper dive into areas of concern from Cook Children's Sepsis Meeting
  - Sepsis screening for **neonates <21 days** with chief complaint of neonate with fever
  - Completing **all questions within sepsis screen**

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Lessons Learned

- **Education** is critical when changes are made
- New processes take **time** to implement and adapt
- SME with **frontline staff** is crucial when discussing new processes

Sepsis Outcome Meeting – Who Attends

Function of the Sepsis Outcome Committee

- Review sepsis data on a **high level**
- Review areas for improvement
- Obtain **leadership support** for resources and changes
- **Review mortalities** from IPSO/PHIS data

What we have worked on

- What sepsis data tracking would look like after IPSO
- Deep dive into **bundle compliance**
  - Reviewed episodes who were non-compliant and why
- Review **reasons for extended bolus/antibiotic** start times
- How to support new Cook Children's Hospital with all things sepsis

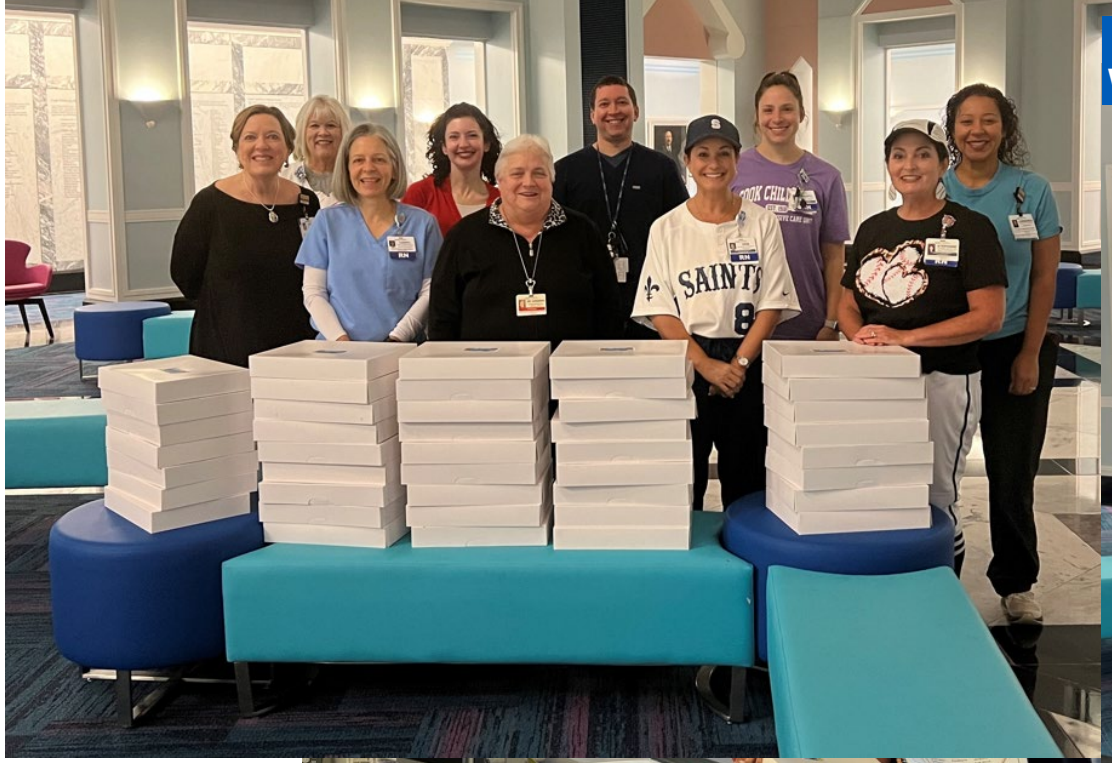
Challenges identified

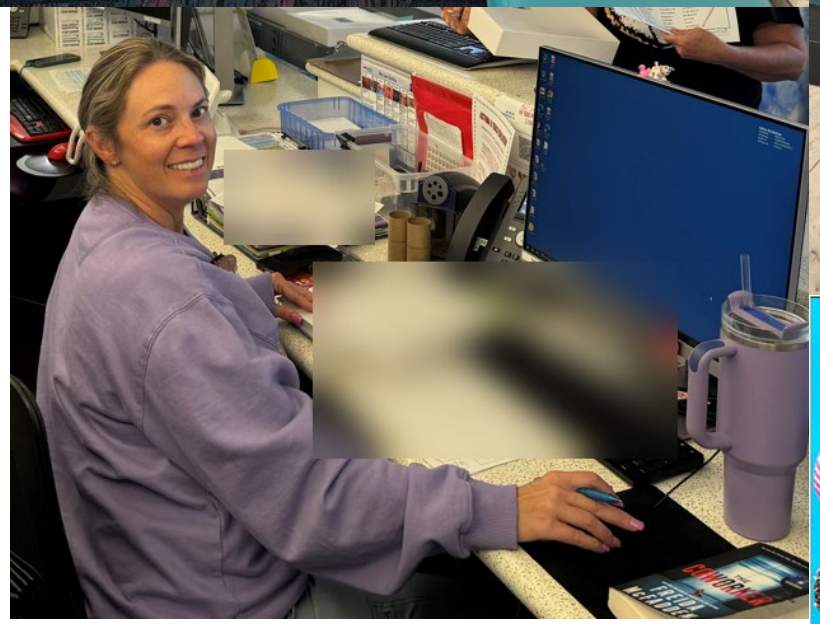
- Process for mortality review
- IV access on sick, chronic kiddos can be difficult
- Antibiotic timeliness

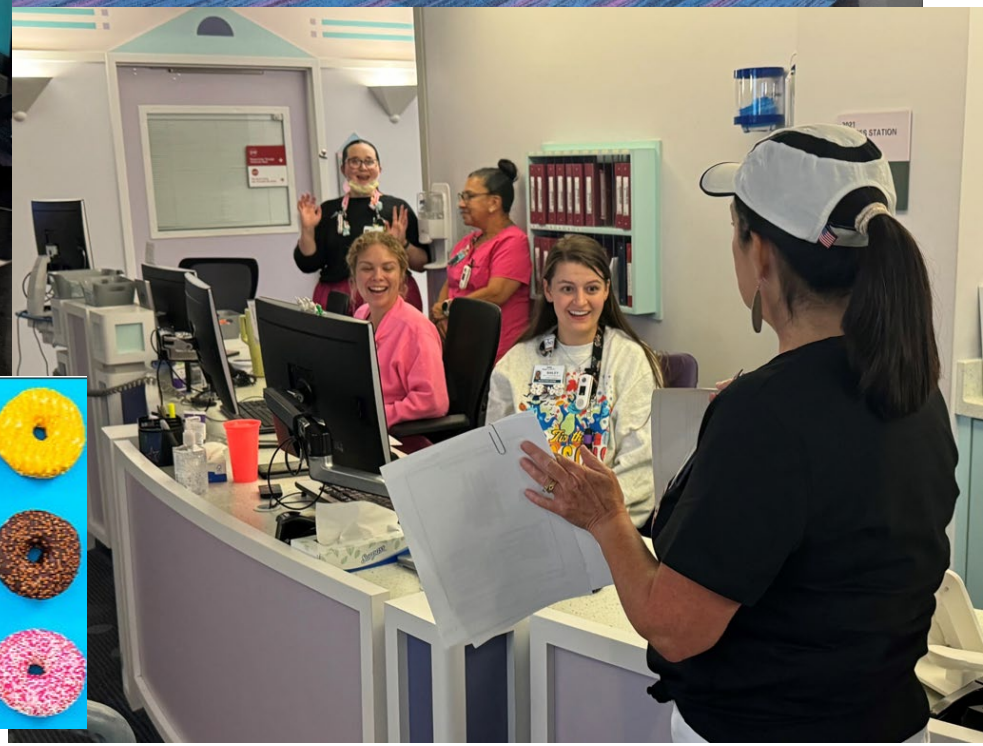
What Makes Us Successful

- Strong culture of safety
- Support from our CEO, CQO, and Quality Leadership Team
- Dedicated person to work on all things related to sepsis
- Celebrate success and learn form our opportunities
- Monthly review of positive sepsis scores by department at the patient level

Strike Out Sepsis
World Sepsis Awareness Day 2024



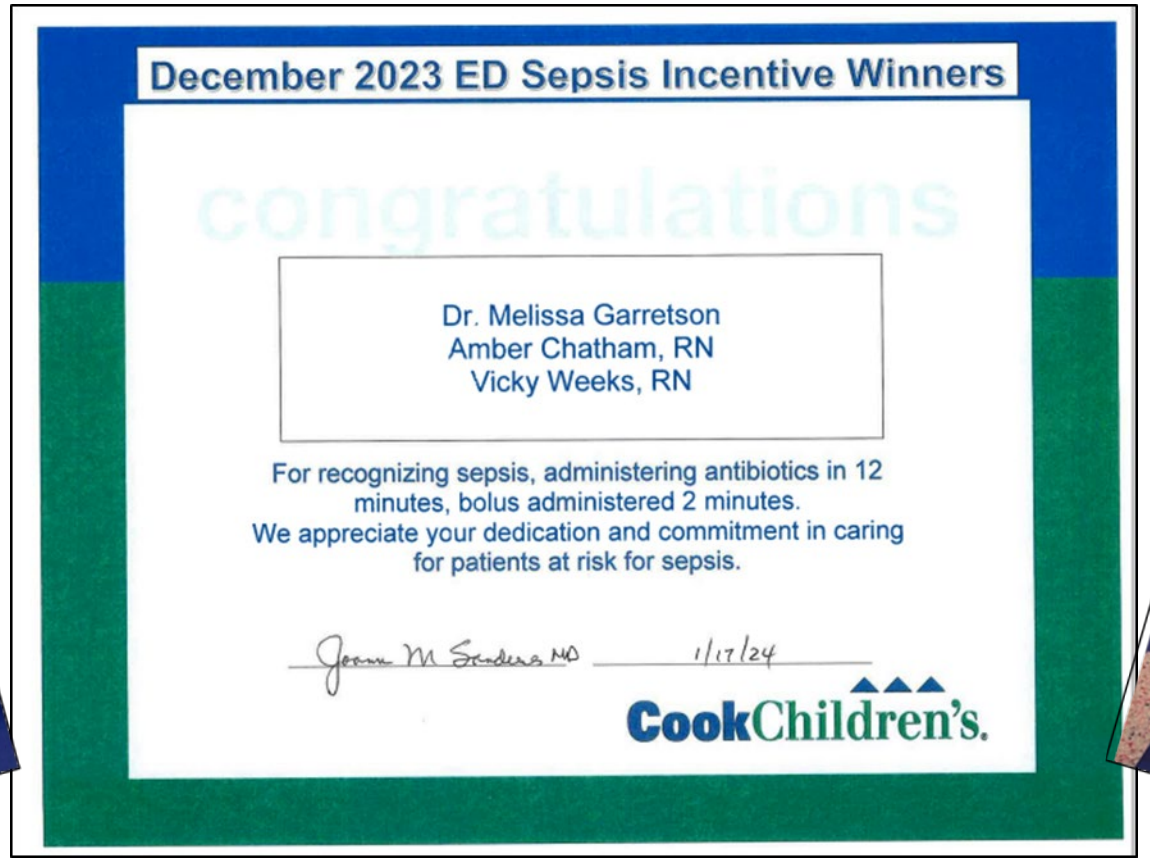




Donut rounds at 0500 and 1000


TACKLING SEPSIS
OUR GAME PLAN
SAINTS
8
SEPSIS TOOL
HIT A HOMERUN
FOR
BLOOD CULTURE
COLLECTIONS
0000
World
Sepsis
Day 2024

ED Sepsis Incentive



CookChildren's.

Thank You

Contact
Stephanie Lavin, MSN, RN, CPN, CPPS, LSS
Stephanie.lavin@cookchildrens.org

Thank you!

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Stephanie.lavin@cookchildrens.org

Deborah R. Campbell, MSN, RN, CPHQ, IP,

T-CHEST, CCRN alumna

dcampbell@kyha.com