

Using Performance Measure Results for Data-Driven Quality Improvement

Sepsis Recognition and Care



Advocate Condell Medical Center

Objectives

- This presentation will provide:
 - Historical perspective of the development of a systematic evidence based performance improvement process (Severe Sepsis)
 - Discuss the role of multidisciplinary teams in quality improvement
 - Identify the significance of support vertically as well as horizontally through the organization
 - A description of how data drove the improvement processes for the components of a comprehensive severe sepsis response
 - Discuss utilization and impact of electronic medical record solution
 - Screening
 - Documentation
 - Power Plans vs. Sepsis Advisor
 - Conversion from outcome measurements based on SCCM Surviving Sepsis Campaign to the CMS Sep-1 Core Measure
 - Describe the process of spreading success and opportunities for improvement in quality improvement projects

Components to Success

- Leadership
- Tools
 - Process
 - Data Collection
- Communication
- Education
- Participation in “collaboratives”/outside opportunities
- Flexibility to scope (build from local to system)

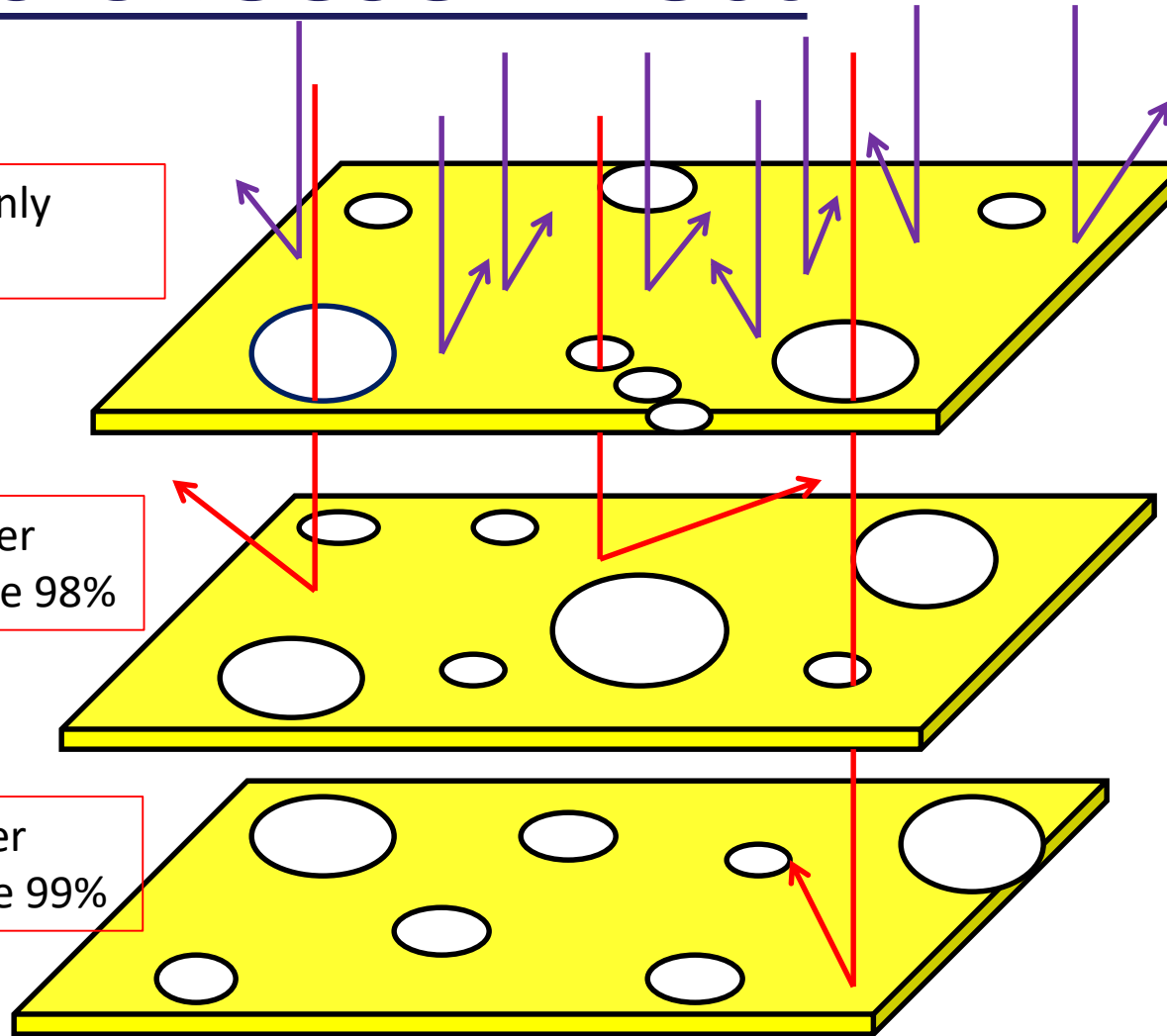


Swiss Cheese Effect

One person can only
achieve 80%

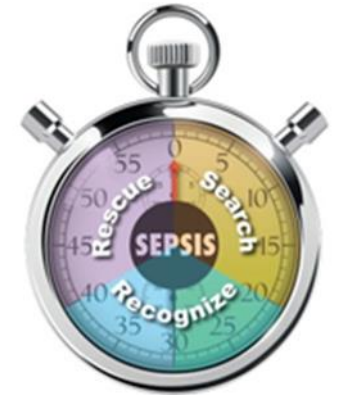
Add one more layer
People can achieve 98%

Add one more layer
People can achieve 99%



Starting Point

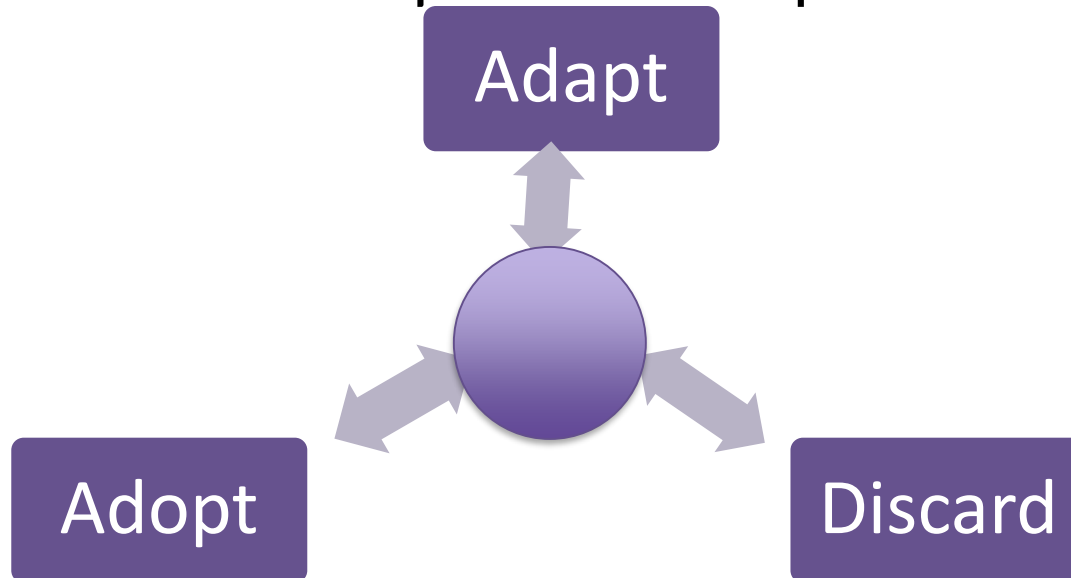
- Systematic approach to define and measure understood by the entire organization
 - Define – Measure – Analyze – Improve – Control (DMAIC)
 - Plan – Do – Act – Study (PDSA)
- Building the Team
 - Start with “Champions” who can demonstrate expert knowledge
 - ICU Intensivist
 - ICU Nurse Manager
 - System Resources – Clinical Effectiveness
 - Local senior organizational leaders to support process for success and reduction of barriers
 - Vice President of Medical Management
 - Vice President of Patient Care Services
 - Director of Quality Improvement



PDSA Cycle

- ***Start Small***
- ***Build knowledge through sequential testing***
- The sequence
 - Test → Implement → Spread

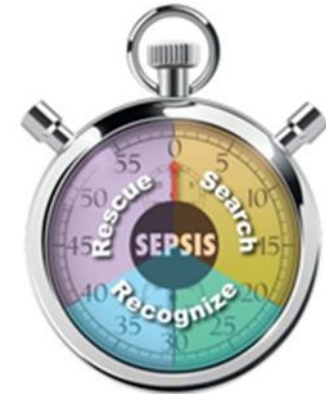
Fine tuning the change based on
What you learned!



Multidisciplinary Sepsis Taskforce

Organizational Placement (Sub-committee of ICU Committee)

- Raeann Fuller, ICU Nurse Manager
- Elizabeth Wade, Performance Improvement Coordinator
- Director Medical Care Management
- ICU Intensivist
- Emergency Department Physician
- Hospitalist/Attending Physicians
- Director(s) of Nursing
- Medical Surgical Inpatient Nurse Manager (s)
- Director of Pharmacy
- Pharmacist
- Director/Manager of Laboratory Services
- Emergency Department Nurse(s) (Clinical Informatics Liaison)
- Critical Care Nurse (s)
- Medical Surgical Nurses
- Director/Manager Clinical Informatics



Move from Local to System

September – November, 2014

- Feedback from all ten Advocate hospitals
- Focused questions related to current sepsis processes and data collection
- Participation from:
 - Physicians
 - APNs
 - Nursing Directors and Managers
 - Staff RNs from ED, Critical Care, Med-Surg
 - Pharmacists
 - Quality specialists
 - Informatics Analysts



What did we find?

- Sepsis awareness high, but variation in sepsis infrastructure at each site
- Nurses were very well versed in care interventions at many sites
- Nurses verbalized frustration with knowing the guidelines but unable to engage physicians to implement in timely manner
- Significant variation in screening processes in ED and in-house units
- Significant variation in Sepsis Alert process
- Physician practice varies greatly
- Fear of appropriate fluid resuscitation
- Documentation & coding issues continue
- Accountability & feedback are key
- Minimal data collection due to substantial resource intensity

Bottom line: We fail to treat sepsis with the same urgency and consistency in practice that we employ with STEMI and stroke, yet all three are time sensitive conditions

The site visit feedback supports our hypothesis that significant variation and lack of urgency needs to be addressed in order to improve care of our sepsis population within our system.

Site Sepsis Programs

Hospital	Site Sepsis Team	Sepsis Screen in ED	Sepsis Protocol	Every patient, every shift, every day	Time Zero	Care Connection	Handoff ED to ICU	Sepsis Alert
1	X	X	X	X	X		Verbal over phone *RN takes pt to floor	RRT only
2	X		X			X	Verbal	RRT only
3	X	X	X	X	X	X	Verbal	Sepsis Response Team
4	X	ED screens every pt as of 10/1	X	X	X	X	SBAR	RRT only
5	X	X				X	Face to Face	RRT only
6	X	ED screens on paper				X	Verbal	RRT only
7	X	X	X			X	Telephone report *ICU RN comes to ED if patient is complex	RRT only
8	X		X				ICU RN comes to ED Verbal report to floor	RRT only
9	X		Archived			X	Verbal *ED RN brings ICU patient to unit	RRT Only *Had Sepsis Response Team few years ago, but no longer is implemented.
10	X		X			X	Verbal *ED RN brings ICU patient to unit	X *have Sepsis Response Team, but Staff usually call RRT

“Tools” Process

- Bedside Tools
- EMR Integration
- Institutional Response – Sepsis Alert
- ALERT Nurse



“Tools” – Screening

ORDER SET - **SEPSIS ALERT: EARLY SEPSIS RECOGNITION TOOL** CMC 2022 F/C 12/11

A SEPSIS ALERT is to be called when any non-ICU patient has (1) an identified or suspected infection and (2) screens positive for SIRS and (3) has one or more organ dysfunctions. The Sepsis Alert is initiated by calling the ICU Charge Nurse (ext. 27-2360).

In the Emergency Department, the RN is to notify the ED Physician with the results of this Recognition Tool and the initiation of the Sepsis Alert.

After assessment, if the patient does not meet the criteria for severe sepsis or septic shock and is to remain outside the ICU a re-assessment is to be completed in 2 hours and a follow-notification to the ICU Charge Nurse.

The ICU Charge Nurse and/or the Intensivist will contact the Attending Physician for inpatients transferred to the ICU.

SEPSIS = Two or more of the following (SIRS) in a patient with an identified or suspect infection

- ☐ Temperature greater than 38° C (100.4° F) or less than 36° C (96.8° F)
- ☐ Heart Rate greater than 100 (may have normal heart rate if patient is taking beta-blocker or other medications affecting heart rate)
- ☐ Tachypnea (Respiratory Rate greater than 20 or PaCO₂ less than 32 mmHg)
- ☐ WBC less than 4000/mm³ or greater than 12,000/mm³ or 10% Bands
- ☐ Serum Lactate greater than 2.0mmol/L

AND

Organ failure exhibited by one of the following:

- ☐ Altered Mental Status from baseline
- ☐ Arterial Hypoxemia (ratio of PaO₂: FiO₂ less than or equal to 250)
- ☐ Systolic BP less than 90 mmHg or Mean Arterial Pressure less than 65 mmHg SBP decrease > 40 mm Hg from baseline
- ☐ Ileus and/or Bilirubin greater than 2 mg/dl (34.2 µmol/L)
- ☐ Acute oliguria (urine output less than 0.5 mL/kg/hour for 2 hours)
- ☐ Creatinine greater than 2.0 mg/dl or Creatinine increase of 0.5 mg/dl (if available)
- ☐ Thrombocytopenia (Platelets less than 100,000/mm³)
- ☐ Coagulopathy (INR greater than 1.5 or a PTT greater than 60 secs)

Severe Sepsis is sepsis and at least one organ dysfunction/failure.

Septic Shock is severe sepsis resistant to fluid resuscitation and requiring vasopressors.

If patient meets the criteria for severe sepsis or septic shock and is admitted or transferred to the ICU, initiate the Severe Sepsis order.

THIS IS A PERMANENT PART OF THE MEDICAL RECORD

☐ This patient IS a candidate for the Severe Sepsis Order Set

☐ This patient is NOT a candidate for the Severe Sepsis Order Set

RN's Signature: _____ Date: _____ Time: _____

Advocate Condell Medical Center
Empowering Medicine. Changing Lives.

Advocate Condell Medical Center
Sepsis Core Measure Worksheet

Patient Label: _____

Date: _____ TIME ZERO SEVERE SEPSIS: _____

*TIME ZERO = POSITIVE SCREEN FOR SEVERE SEPSIS (suspicion of infection + 2 or more SIRS + organ dysfunction)

SEVERE SEPSIS

To Be Completed within
3-hours of SEVERE SEPSIS Time Zero

	Order Time	Completion Time	RN Signature
1. <input type="checkbox"/> Sepsis Alert Called/ICU Charge Nurse Notified			
2. <input type="checkbox"/> Lactate			
3. <input type="checkbox"/> Blood Cultures			
4. <input type="checkbox"/> IV Antibiotic			

To Be Completed within
6-hours of SEVERE SEPSIS Time Zero

	Order Time	Completion Time	RN Signature
5. <input type="checkbox"/> Repeat Lactate if initial Lactate > 2.0 **Please enter order to be completed 4-hours after Time Zero**			

SEPTIC SHOCK

Complete all of the items above (#1-#4) in addition to those below

Date: _____ TIME ZERO Septic Shock: _____

*TIME ZERO = POSITIVE SCREEN FOR SEVERE SEPSIS + Lactate > 4.0 OR SBP < 90 or MAP < 65 after 30ml/kg fluid bolus

To Be Completed within
3-hours of SEPTIC SHOCK Time Zero

	Completion Time	RN Signature
6. <input type="checkbox"/> Fluid Bolus 30 ml/kg		

To Be Completed within
6-hours of SEPTIC SHOCK Time Zero

	Completion Time	RN Signature
7. <input type="checkbox"/> Vasopressors Started (Only if patient remains hypotensive after 30 ml/kg fluid bolus)		
8. <input type="checkbox"/> Focused Reassessment Completed by MD/PA/NP to include: <ul style="list-style-type: none"> ✓ Vital Signs ✓ Cardiopulmonary Exam ✓ Capillary Refill Evaluation ✓ Peripheral Pulse Evaluation ✓ Skin Exam 		

-OR-
Complete 2 of the Following:
 CVP
 Central Venous Oxygen Measurement
 Bedside Cardiovascular Ultrasound
 Passive Leg Raise or Fluid Challenge

Please return to the ICU/This is a PI Tool and is not part of the medical record.

Sepsis Checklist Form - ZAVALA, RICARDO

Performed on: 12/07/2015 0501 By: Puller, Racann

Sepsis Checklist

Time Date Time
Performed on: 12/04/2015 16:42

Relevant Vitals and Lab Results
 Heart Rate: 80 at 12/07/15 02:00
 Respiration Rate: 9 at 12/07/15 02:00
 Temperature: VS: 36.4 at 12/07/15 00:00
 NIBP Systolic: 170 at 12/07/15 02:00
 NIBP MAP: 140 at 12/07/15 02:00
 SPO2: 100 at 12/07/15 02:00
 WBC: 4.9 at 12/06/15 13:30
 Lactate Acid: 0.3 at 12/04/15 22:53
 Bilirubin: 0.2 at 12/04/15 22:00
 Creatinine: 0.48 at 12/06/15 05:50
 Platelet: 163 at 12/06/15 13:30
 INR: 1.1 at 12/04/15 16:50

Last SIRS/Sepsis Alert
 There has been no SIRS or Sepsis Alert during this encounter.

Based on assessment, does the patient meet any of the following infection indicators?
☐ Yes ☐ No

If Yes, Continue through Form
 If Not Met, Stop Form

- o Altered mental status from baseline (especially for elderly)
- o Productive cough or new infiltrate on CXR
- o Presence of urinary catheter, cloudy urine, dysuria
- o Open wound, drainage from any wound, acute redness/tenderness
- o Acute abdominal pain or tenderness
- o Documented infection and/or currently receiving antibiotics
- o Recent invasive procedure
- o Redness, pain, swelling, oozing at IV insertion site
- o WBC >12,000 or <4,000 or >10% bands

SIRS Criteria
☐ None
☐ Heart Rate > 90 bpm
☐ Respiration Rate > 20 bpm
☐ Temp > 38° C or < 36° C
☐ White Blood Cells > 12,000 or < 4,000 or > 10% bands

Organ Dysfunction Criteria NOT Related to Chronic Condition
☐ None
☐ Respiratory: Increased O2 Requirement
☐ Cardiovascular: SBP < 90 or > 40 Drop From Baseline or MAP < 65
☐ CNS: Altered Mental Status Unrelated to Primary Neuro Pathology
☐ Renal: Urine Output < 0.5 L/kg/Hour or Creatinine > 2.0 or increase > 0.5 from Baseline
☐ Hematologic: Platelets < 100,000 or INR > 1.5
☐ Hepatic: Serum Total Bilirubin > 2
☐ Metabolic: Lactate > 2

If 2 SIRS + 1 Organ Dysfunction Criteria Met, Continue Through Form and Activate Sepsis Treatment
 If Not Met, Stop Form

In Progress
 PKZ11-PULLER, RACANN 12/07/2015 0501

“Tools” Documentation

The image shows two overlapping windows from a medical software application. The left window, titled 'Discern Notification Message', displays a notification for a 'Possible Sepsis Risk'. It includes fields for Subject, Priority Status (High), Priority Value (100), Event Date/Time (07/13/2013 21:18:41), and Message class/subclass (APPLICATION/DISCERN). Below these fields is a 'DISCERN ALERT' section with patient information: NAME: sepsis, test; DATE: July 13, 2013 21:18:41 CDT; MRN: CND-000301232; BIRTH DATE: March 12, 1970; AGE: 43; LOCATION: CND; CND ICU;. A red text block follows, stating: 'The following clinical events suggest that your patient may have severe sepsis. Please notify the Nurse or Physician immediately. Management PowerPlan that has been suggested for this patient. Early goal directed therapy is essential for the treatment of sepsis. Time dependant intervention may impact patient outcome.' A link 'Click here to document the Sepsis Results Notification.' is provided. Below this is the 'SIRS Criteria' section with three items: '07/13/13 2116 Heart/Pulse Rate = 105 bpm (H) [greater than 100]', '07/13/13 2118 Temperature - VS = 39 C (H) [greater than 38]', and '07/13/13 2116 Signs/Symptoms of Infection = Yes'. The 'Organ Dysfunction' section shows '07/13/13 2116 Mental Status Decline From Baseline = Yes'. The right window, titled 'Sepsis Documentation', shows a form for documenting sepsis. It has a 'Sepsis Documentation' section with checkboxes for 'Continue Monitoring', 'Notify provider', 'Activate Sepsis and/or BRT Alert', 'Sepsis Treatment Initiated', 'Sepsis Treatment Not Indicated', and 'Other'. There is also a 'Reason Sepsis Treatment Not Indicated' section with radio buttons for 'Considering Alternate Diagnosis', 'Patient/Family Request', and 'Confront care only'. A 'Provider Notified' section has a text field and a button. A 'Date & Time of Notification' section has a date and time picker. The bottom of the right window shows a navigation pane with various medical categories like 'Lines, Tubes, and Drains (3)', 'Diagnostics (0)', 'Pathology (0)', 'Outcomes', 'Home Medications (0)', 'Quality Measures (0)', 'Allergies (1)', and 'Outstanding Orders (21)'. The status bar at the bottom indicates 'P421 FULLER, RAEANN 07 December 2015 05:00'.

Discern Notification Message

Subject: Possible Sepsis Risk
Priority Status: High Priority Value: 100
Event Date/Time: 07/13/2013 21:18:41
Message class/subclass: APPLICATION/DISCERN

DISCERN ALERT

NAME: sepsis, test
DATE: July 13, 2013 21:18:41 CDT
MRN: CND-000301232
BIRTH DATE: March 12, 1970
AGE: 43
LOCATION: CND; CND ICU;

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Early goal directed therapy is essential for the treatment of sepsis. Time dependant intervention may impact patient outcome.

[Click here](#) to document the Sepsis Results Notification.

SIRS Criteria

07/13/13 2116 Heart/Pulse Rate = 105 bpm (H) [greater than 100]
07/13/13 2118 Temperature - VS = 39 C (H) [greater than 38]
07/13/13 2116 Signs/Symptoms of Infection = Yes

Organ Dysfunction

07/13/13 2116 Mental Status Decline From Baseline = Yes

Sepsis Documentation

Sepsis Documentation

☒ Continue Monitoring
☐ Notify provider
☐ Activate Sepsis and/or BRT Alert
☐ Sepsis Treatment Initiated
☐ Sepsis Treatment Not Indicated
☐ Other:

Reason Sepsis Treatment Not Indicated

☐ Considering Alternate Diagnosis
☐ Patient/Family Request
☐ Confront care only

Provider Notified

Date & Time of Notification

Lines, Tubes, and Drains (3)
Diagnostics (0)
Pathology (0)
Outcomes
Home Medications (0)
Quality Measures (0)
Allergies (1)
Outstanding Orders (21)

...Sepsis physician note

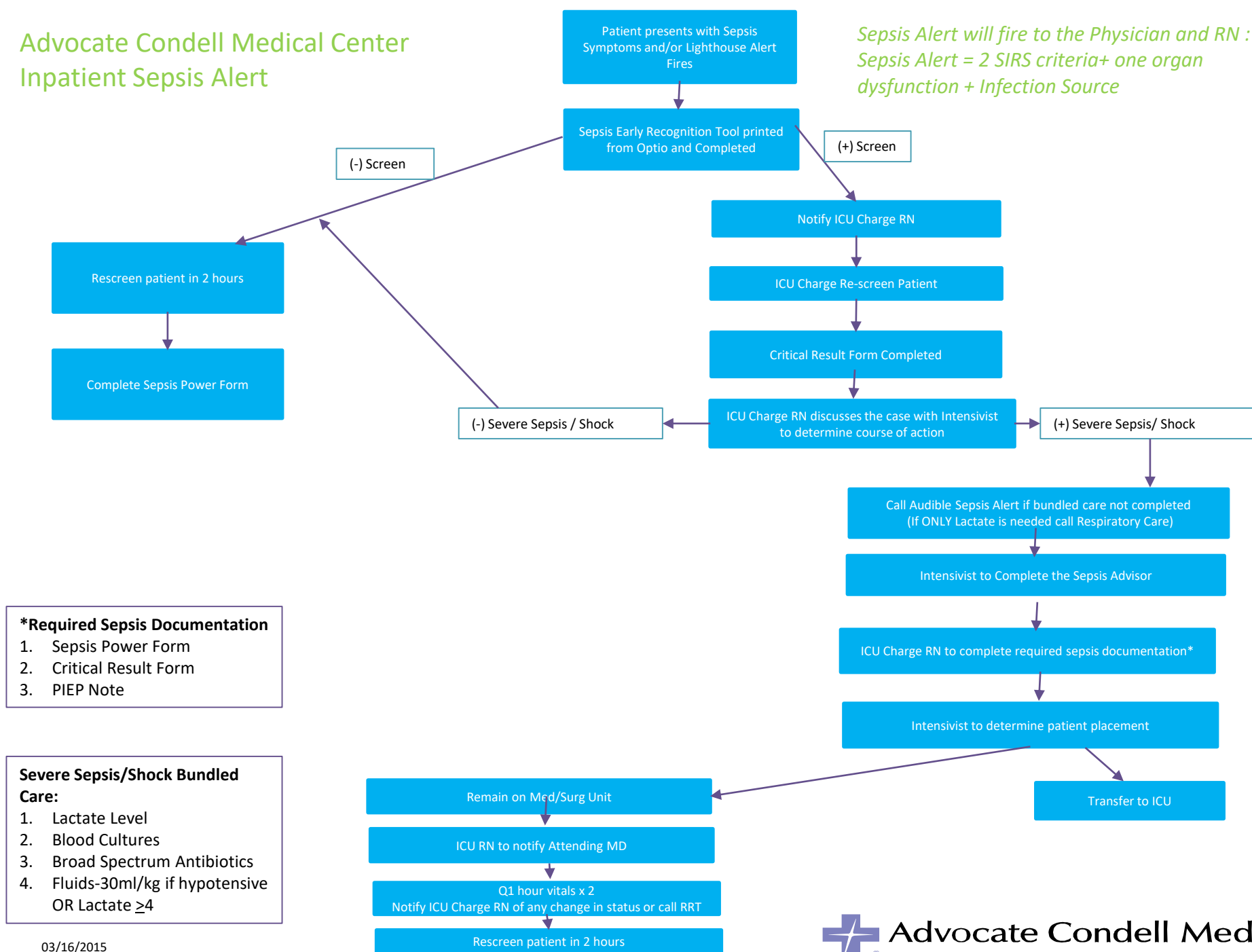
Sepsis Alert Process

- Disease Specific RRT
 - House wide response (ED, Outpatient and Inpatient)
 - Call to the ICU Charge Nurse 27-2777)
 - Patient Assessment by ICU Charge Nurse
 - ICU Charge Nurse Collaboration with Intensivist
 - Orders if appropriate
 - Collaboration with appropriate physician based on patient location
 - Audible ALERT for Medical Surgical patients **IF** they need CCP and base labs
 - Laboratory
 - Pharmacy
 - Respiratory Therapy

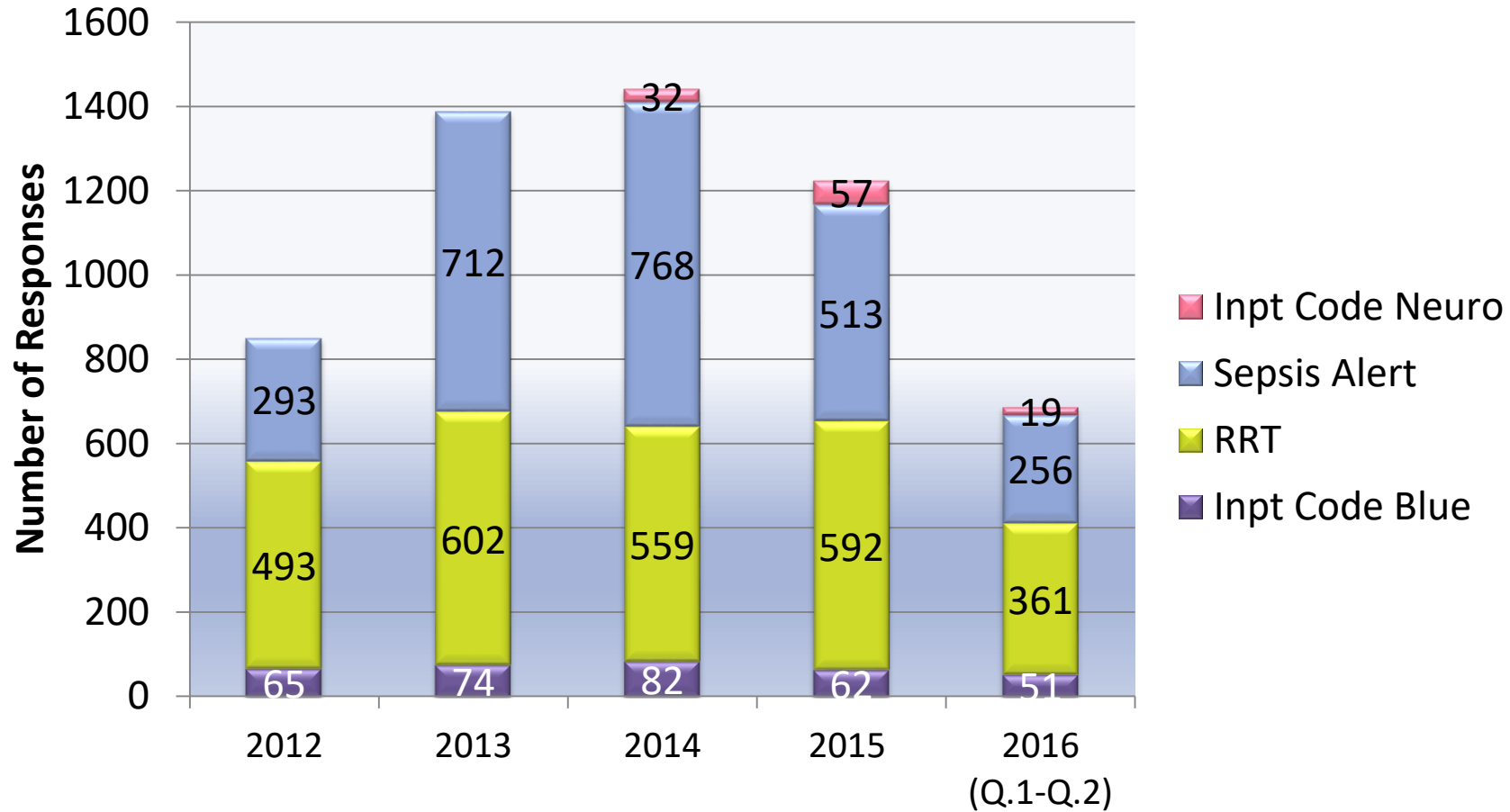


Advocate Condell Medical Center Inpatient Sepsis Alert

*Sepsis Alert will fire to the Physician and RN :
Sepsis Alert = 2 SIRS criteria+ one organ
dysfunction + Infection Source*



ICU Emergency Response 2012-2016



ALERT Nurse for Condell

- **A**lways
- **L**aunch
- **E**arly
- **R**apid
- **T**reatment

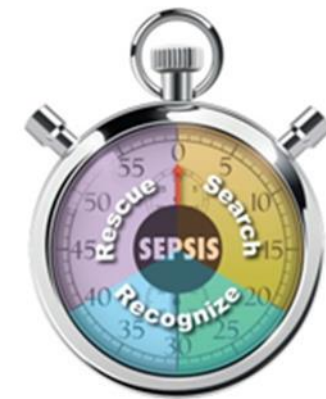


Coming in 2017

Goal: Development of Sepsis Coordinators for each Advocate Hospital Site

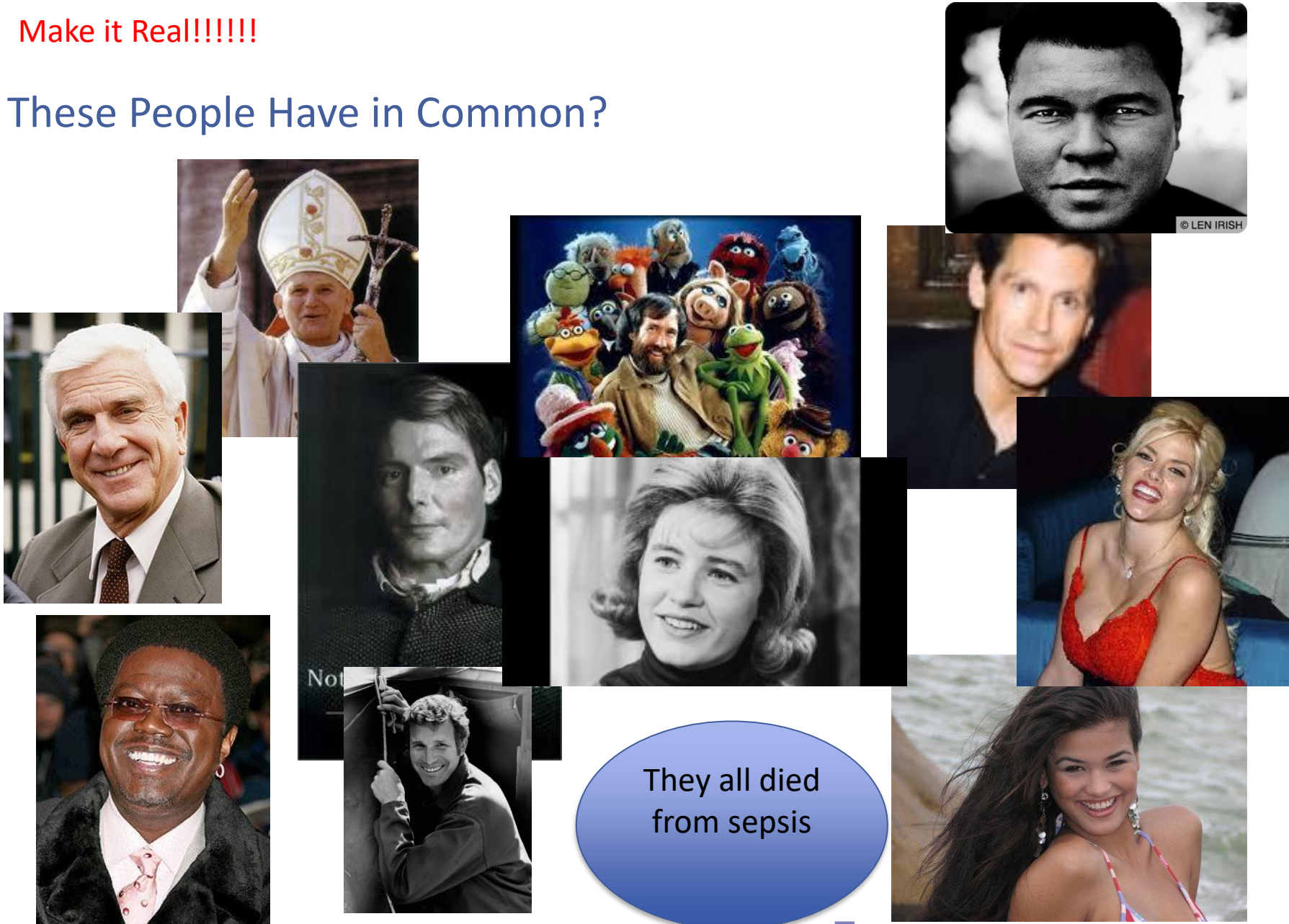
Communication and Education

- Overall Multidisciplinary Teams
- Ad hoc for special situations i.e. Lactate process
- Results Every Where and Often
 - ICU Committee (nursing and medicine)
 - Emergency Department (nursing and medicine)
 - Quality Medical Oversight Council
 - System level
 - Sepsis collaborative
 - Critical Care
 - Key Result Area



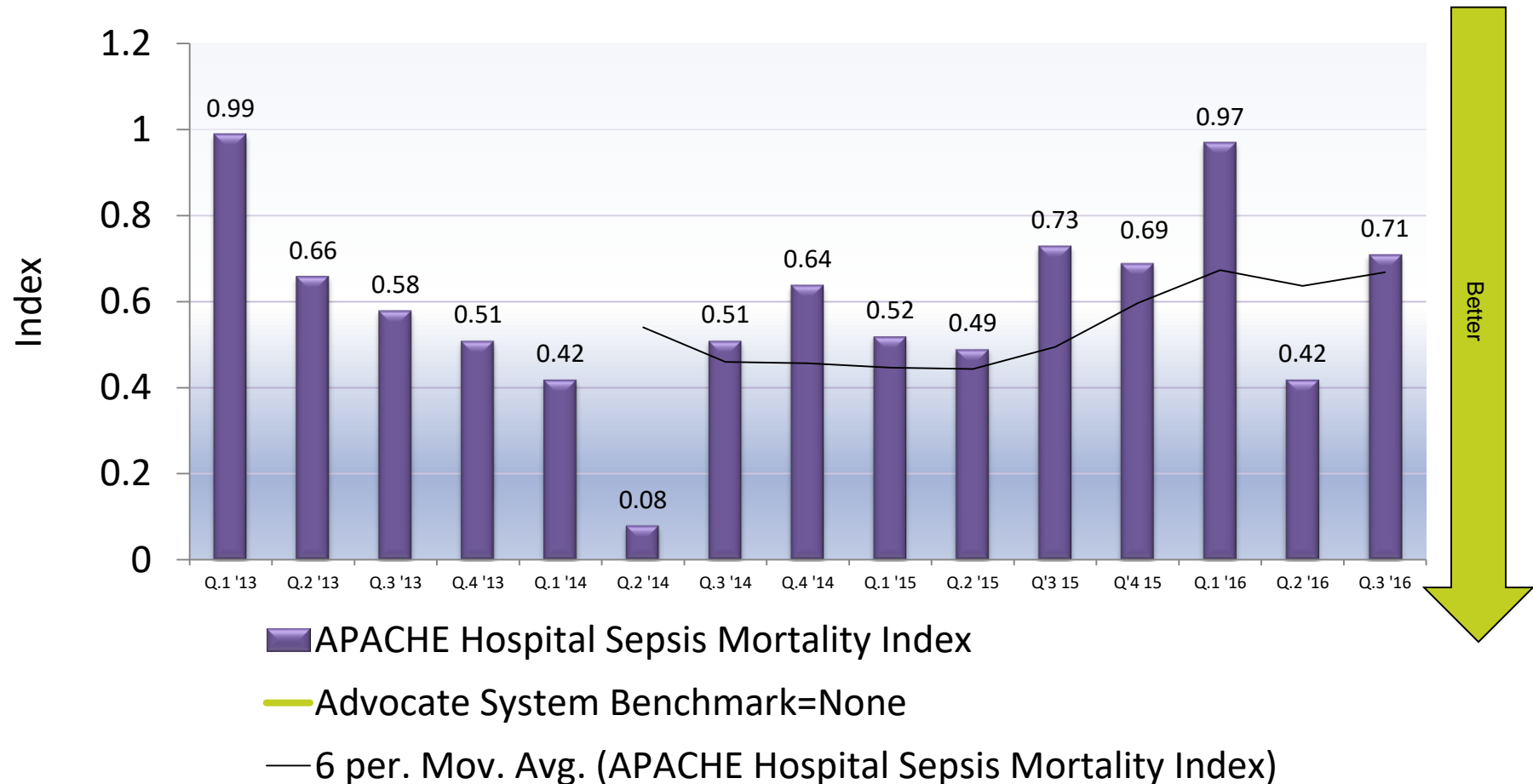
Make it Real!!!!!!

What do These People Have in Common?



They all died
from sepsis

Hospital Sepsis Mortality Index-APACHE



Source: APACHE Data eICU

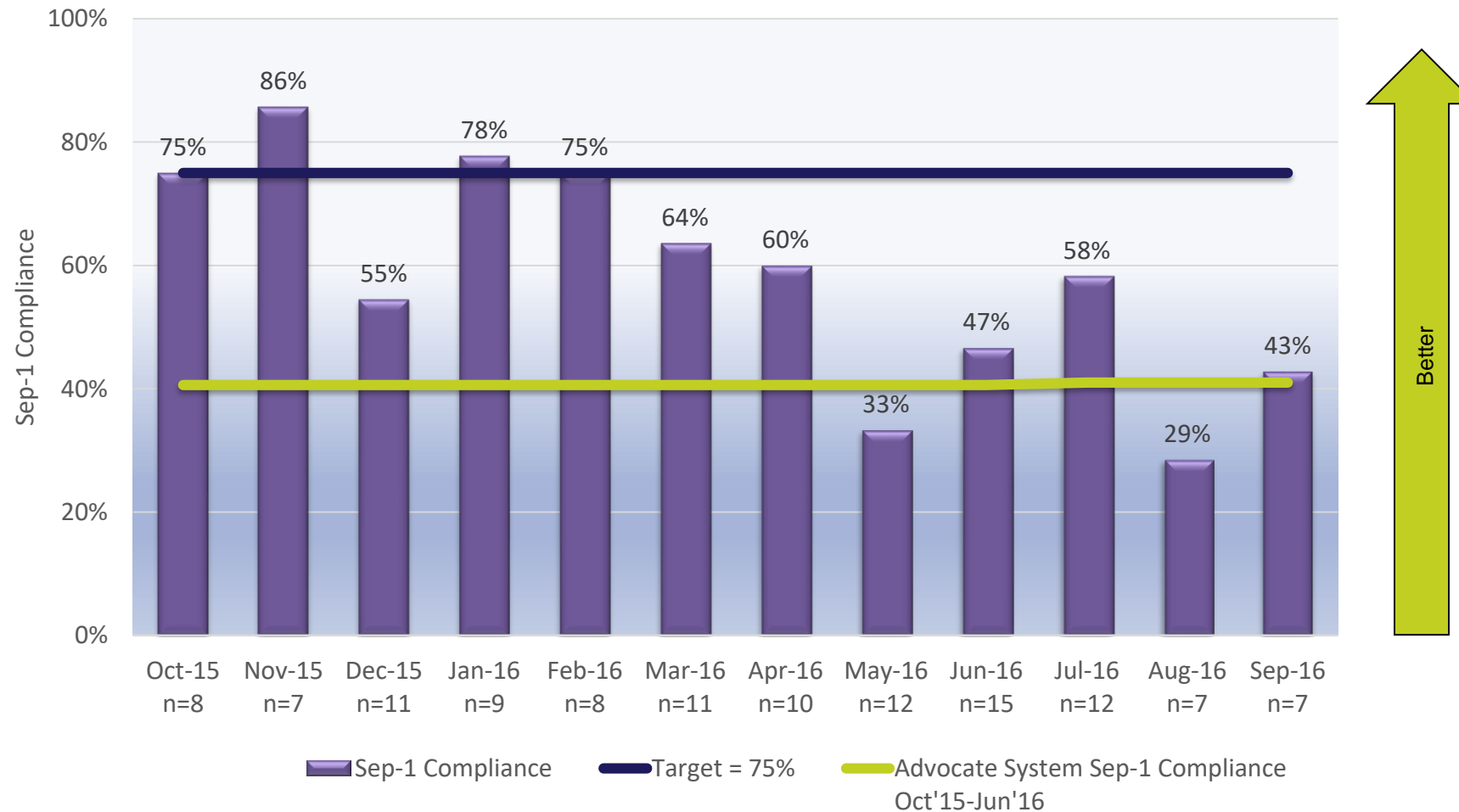
System Sepsis Dashboard

Condell

ALL SEPSIS														
		Baseline												
	Target	2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Comparing YTD Timeframes				Desired Direction
										2014	2015	2016	% Δ (2015-2016)	
COND														
Cases		949	82	102	125	82	76	95	96	545	634	658	3.8%	↘
Percentage of Septic Shock		24.6%	18.3%	12.7%	19.2%	13.4%	14.5%	22.1%	16.7%	28.6%	20.3%	16.9%	-17.1%	↘
Bundle Compliance			77.8%	75.0%	63.6%	60.0%	33.3%	46.7%	58.3%					↗
ALOS Index		0.86	0.92	0.93	0.83	0.84	1.00	0.86	0.80	0.86	0.89	0.88	-1.3%	↘
ALOS		7.15	7.57	6.99	6.96	7.04	8.76	7.65	6.38	7.48	7.35	7.27	-1.1%	↘
Mortality Index		0.97	1.11	0.27	1.20	2.12	1.02	1.41	0.88	0.89	1.05	1.12	6.7%	↘
Mortality Rate		17.6%	13.4%	12.7%	13.6%	22.0%	9.2%	16.8%	22.9%	16.7%	15.0%	15.8%	5.5%	↘
Readmission Index		0.71	0.54	0.36	1.05	0.49	0.82	1.27	0.41	0.67	0.90	0.72	-20.3%	↘
Readmission Rate		9.2%	6.6%	4.4%	11.0%	5.9%	8.9%	15.9%	4.7%	8.9%	11.7%	8.4%	-28.2%	↘

Sepsis Core Measure Compliance

Sep-1



Summary of Outliers-All Patients

September-2016

Severe Sepsis Outlier

September 2016: Four Outliers

No Fluids (Clinical Decision/ED)-Two Cases

Both cases ESRD on HD.

One case with lactate=4.2 and no fluids after consulting with nephrology

One case with isolated entry of SBP=89 then WNL

No Initial Lactate (Inpatient/T4)

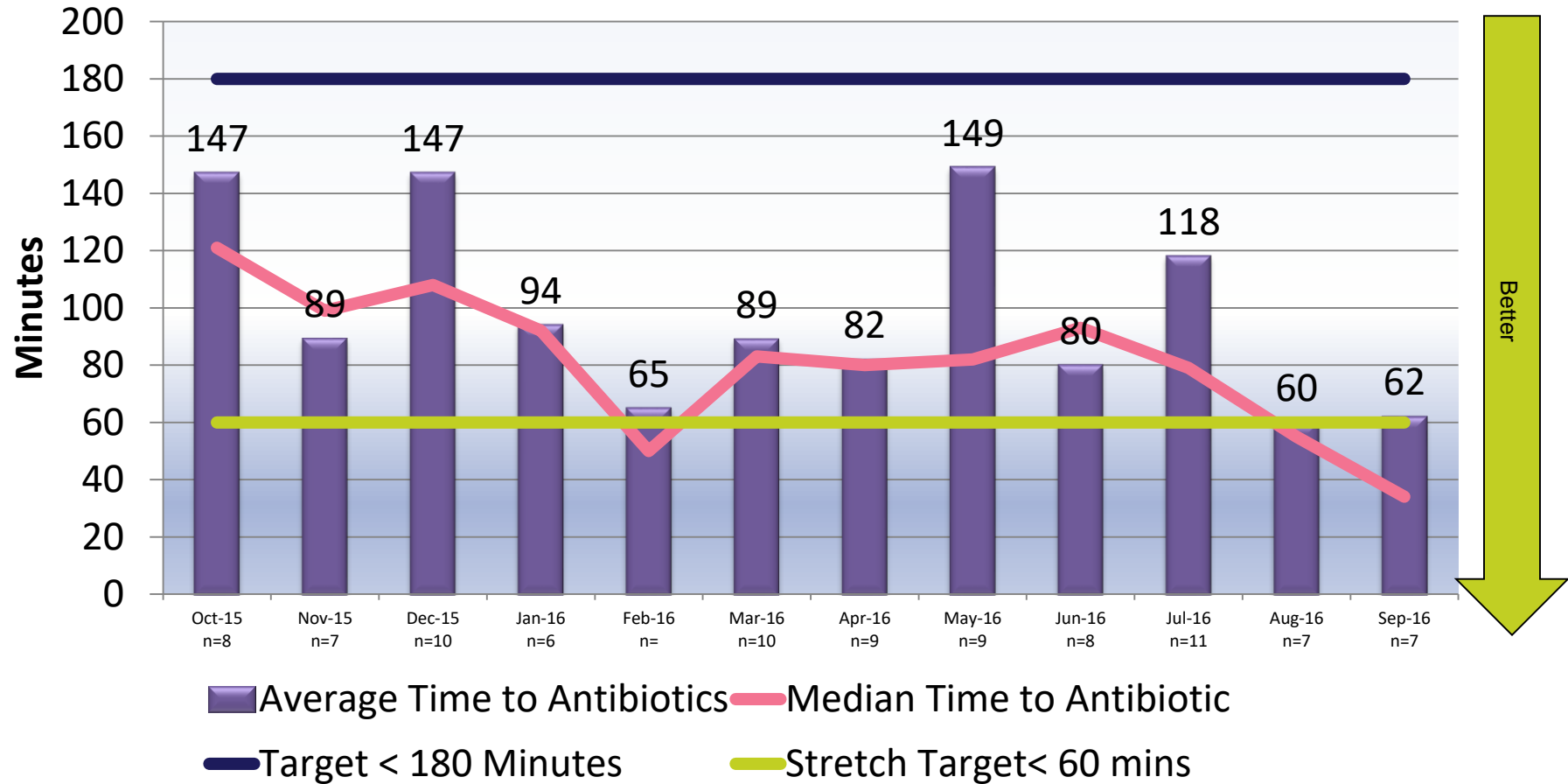
No Repeat Lactate (Shared by ED and ICU)

Septic Shock Outliers

September 2016: No Cases Meeting Criteria

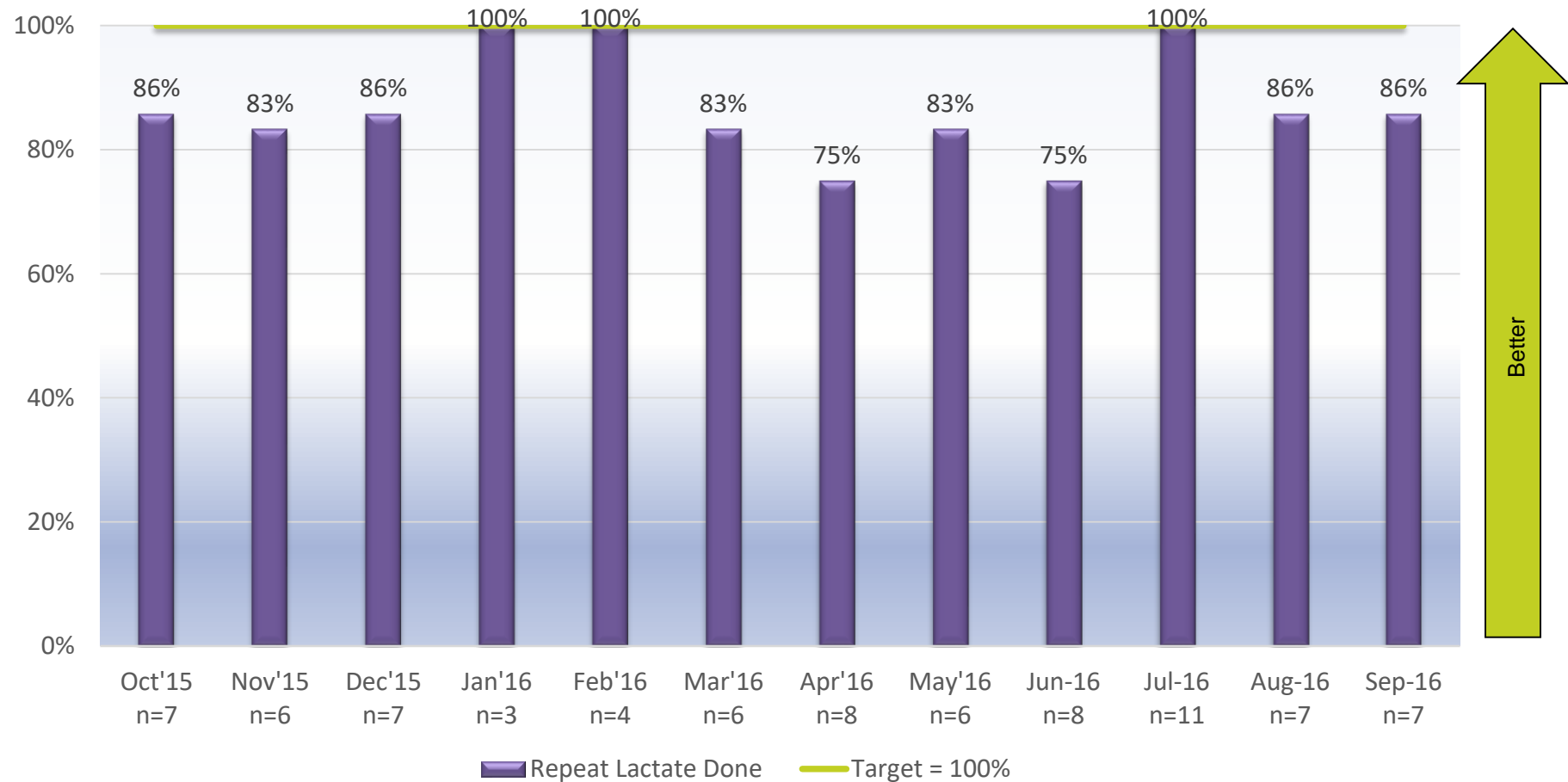
3-Hour Bundle

Average Time From Time Zero to Antibiotic-All Patients

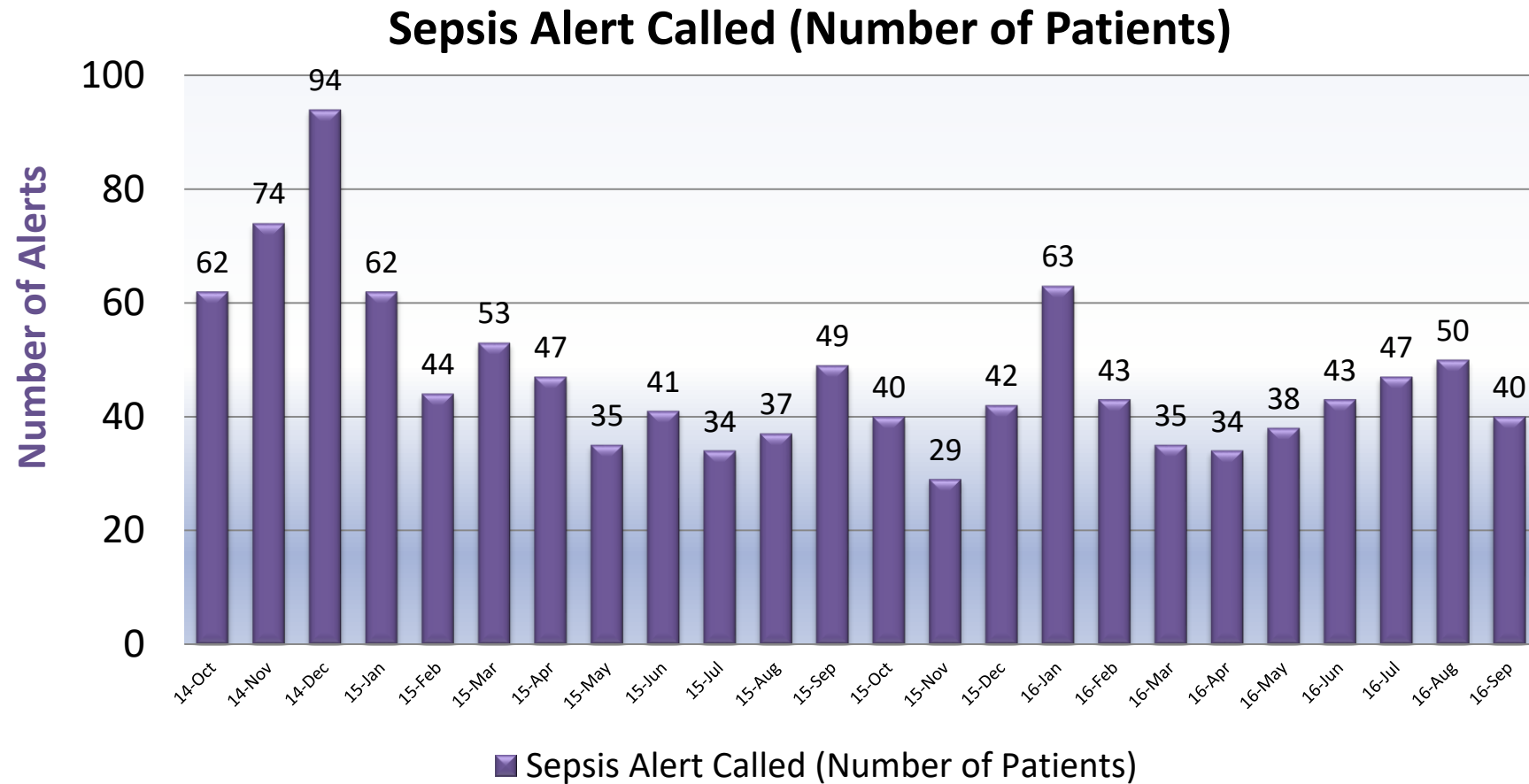


Top 10 Safety Goal

Repeat Lactate Done

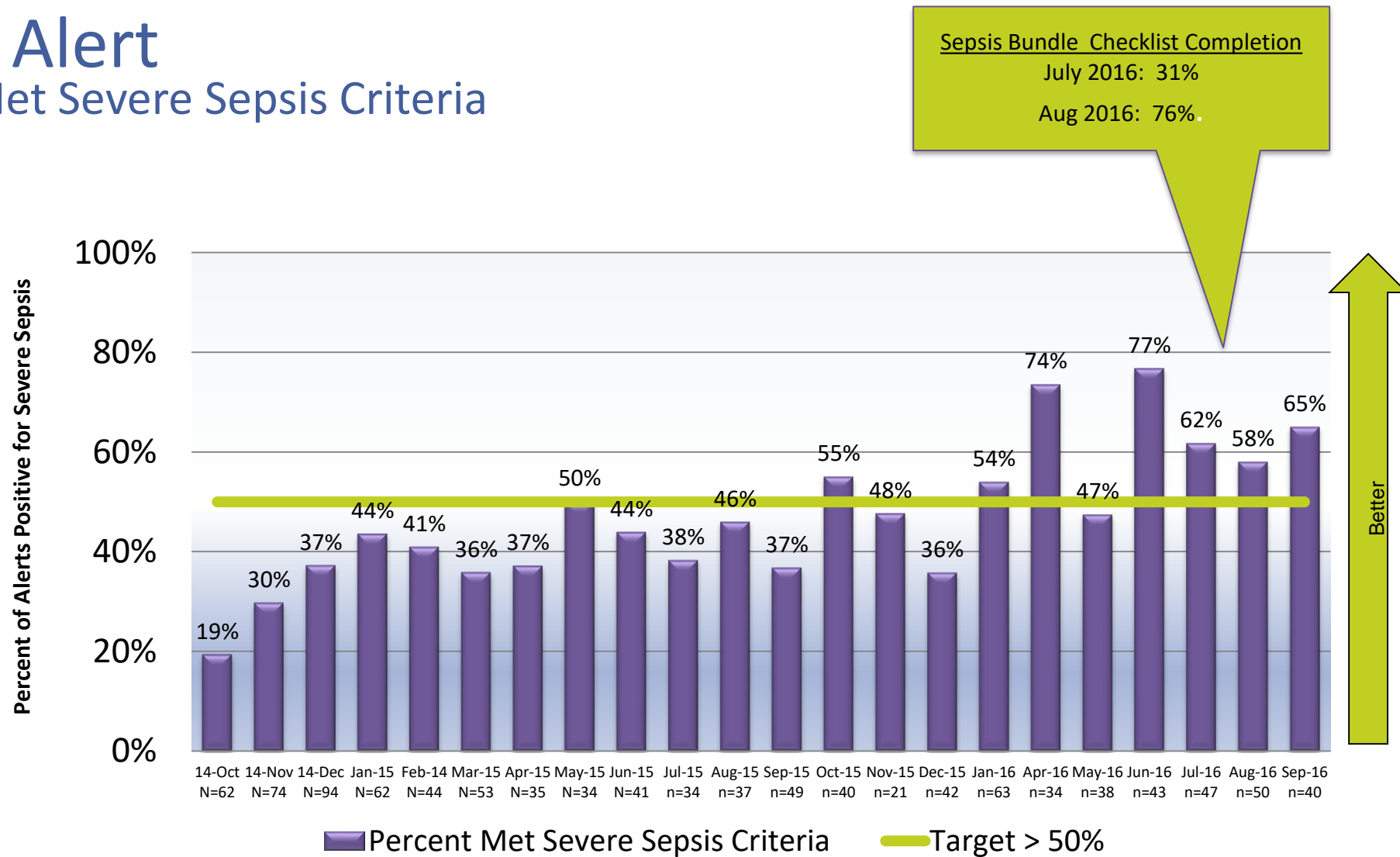


Sepsis Alert



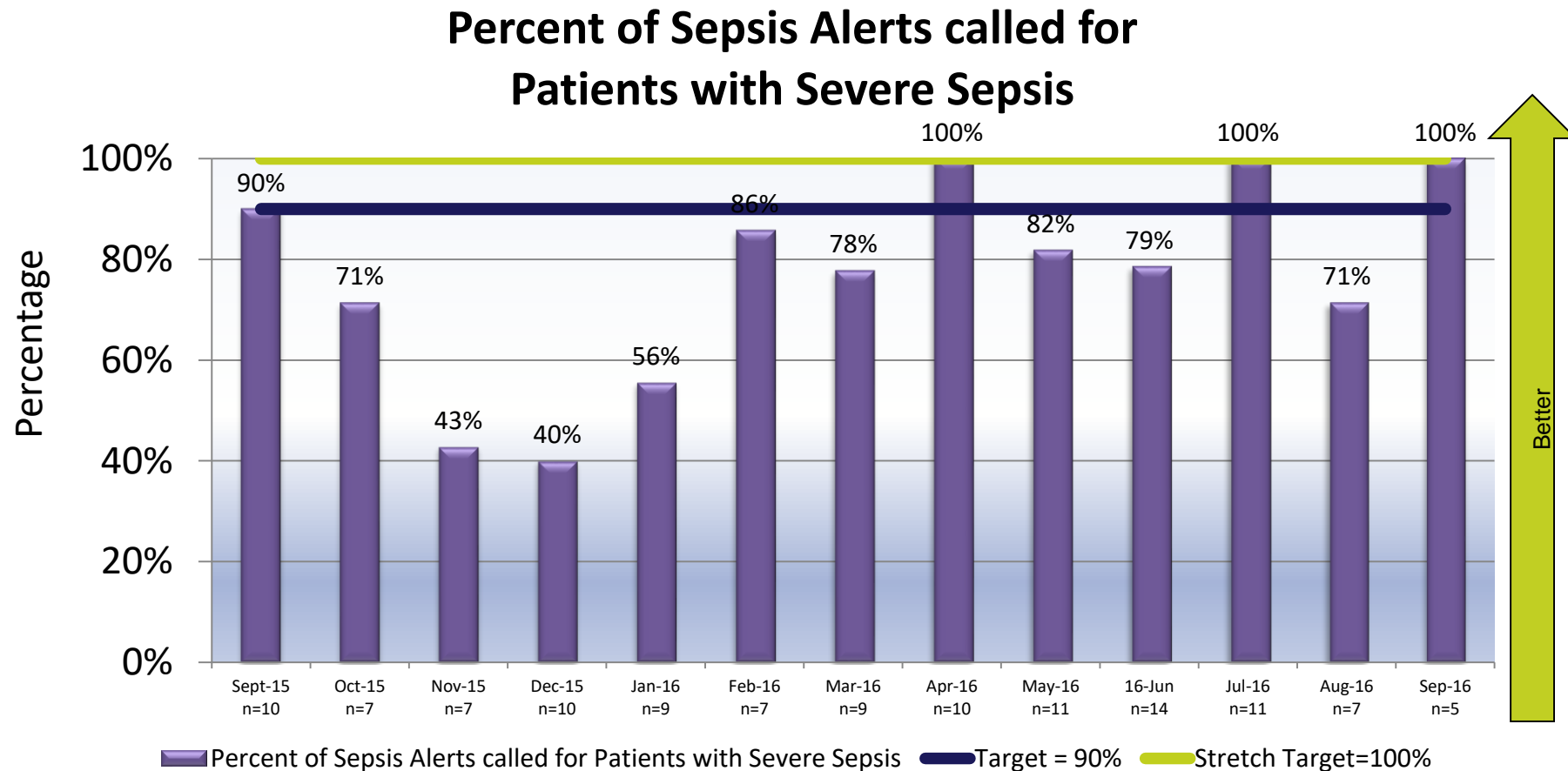
Sepsis Alert

Patient Met Severe Sepsis Criteria



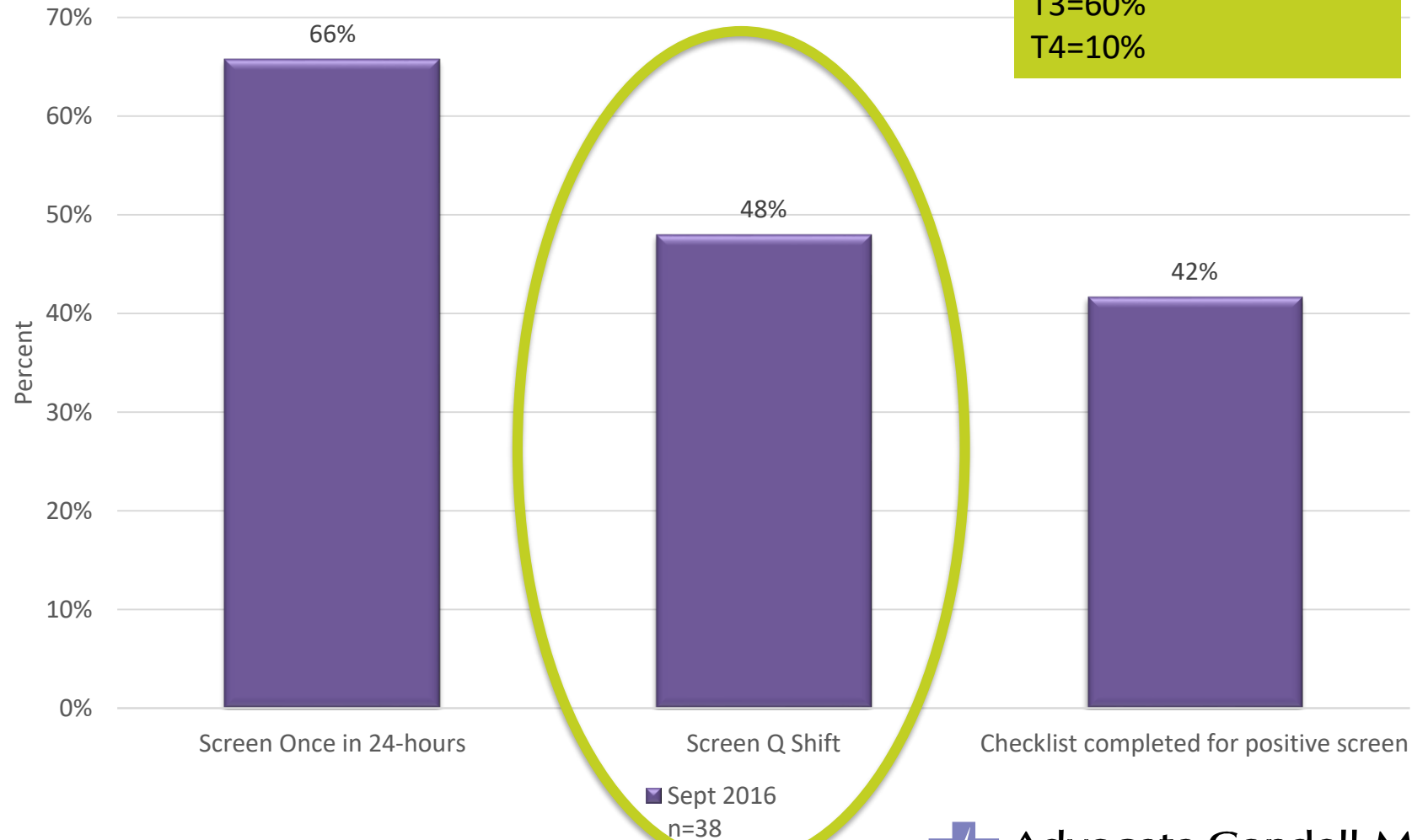
Top 10 Safety Goal

Sepsis Alert Called



Sepsis Screening

Every Nurse...Every Day...Every Shift





Emergency Department Sepsis Powerplan Rollout Project

August 15, 2016

System Kick Off Meeting



Agenda

- Review the reason for action
- Discuss key stakeholders and site teams
 - System versus site roles and responsibilities
 - Getting the word out
- Discuss high-value communication tools and go-live support
- Metrics to understand the impact
- Review timeline / milestones from today to go-live on October 16, 2016

Participation in Collaboratives

- IMPACT Study – International sepsis prevalence
 - SCCM Medical Surgical Sepsis Collaborative
 - Michigan Health and Hospital Association
-
- Provides comparative process analysis
 - Increased exposure to process solutions
 - Pride in your accomplishments

Changes we tested and implemented; barriers we have found

Screening

- EMR screening process is not currently working BUT nurse screening continues on paper each shift.

Developing nursing protocols

- We currently have power sets in the EMR.
- Power plans are not used consistently in med/surg.

SCCM Collaborative

Changes we tested and implemented; barriers we have around

Partnering with physicians for response

- Strong support of medical leadership
- Strong ED support
- Increased ICU support
- Need to improve collaboration with Hospitalists.

Partnering with others like ED, Response Team, Pharmacy

- We have a strong collaboration with Lab, Pharmacy, Respiratory Care and the ED.
- We need to improve the collaboration with the Hospitalist groups.
- Strong collaboration between ED, Med/Surg and the ICU charge RN-the sepsis alert process works.

SCCM Collaborative

We were surprised to learn . . .

- That all 4 cases of sepsis on the floor, the staff nurses recognized the sepsis and triggered the alert.
- Appropriate labs were obtained prior to the sepsis alert.
- In 3 of the 4 cases broad spectrum antibiotics were already on-board.

SCCM Collaborative

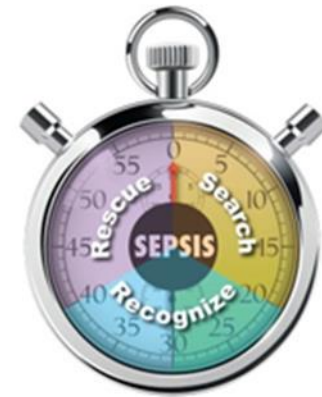
Advocate and Advocate Condell's Efforts

- 2006:
 - Early Sepsis Recognition Tool (paper)
 - Severe Sepsis Order Set
 - Implemented ScVO2 monitoring
 - Nursing and Emergency Physician education
- 2007
 - Sepsis Task Force and Education
 - Nursing and Emergency Physician education
 - **VHA Sepsis Initiative (2007 – 2010)**
- 2010 – 2011
 - Advocate Cerner Lighthouse Build meetings
 - Nursing and Emergency Physician education
 - Right Care Right Now Orientation education
 - Sepsis Alert with the ICU Charge Nurse
 - Disease specific RRT
 - To provide systematic response, evaluation and treatment of severe sepsis and septic shock.
 - House wide (Emergency Department, Outpatient, Inpatient)



Advocate and Advocate Condell's Efforts

- 2013
 - Nursing and Emergency Physician education
 - **IMPACT International Sepsis Study**
 - Updated all materials and standards to the most recent SCCM Guidelines
 - Cerner Sepsis Lighthouse Solution beta testing began
 - Severe Sepsis Power Plan
 - Emergency Department
 - Intensive Care
 - Antibiotic Advisor/Vasopressor Advisor
- 2014
 - **SCCM Medical Surgical Sepsis Collaborative**
 - Nursing and Emergency Physician education
 - Revision of the Early Sepsis Recognition Tool (paper)
 - Reimplementation of Lighthouse
 - New Medical Surgical Power Plan
 - Desensitization of the triggers,
 - Medical Surgical audible sepsis alert,
 - Severe Sepsis report cards (ED, Inpatient, Composite)



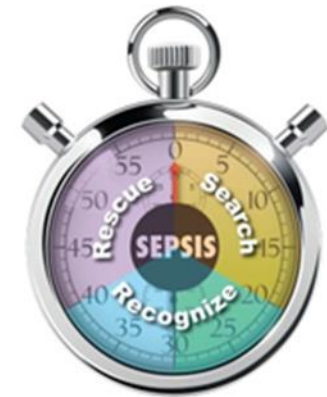
Advocate and Advocate Condell's Efforts

- 2015
 - Advocate System Sepsis Collaborative and dashboard development
 - New Cerner Lighthouse Solution implemented system wide
 - Updated all materials and standards to the most recent SCCM Guidelines
 - SIRS and Severe Sepsis Algorithms
 - Completion of SCCM Medical Surgical Collaborative
 - December Nursing and Emergency Physician education
 - Development of the ALERT Nurse



Advocate and Advocate Condell's Efforts

- 2016
 - **Michigan Health and Hospital Association Sepsis Collaborative**
 - Quarterly Nursing Education and Development of Lunch and Learns
 - Change in data collection to meet Sep – 1 Core Measure
 - Development of "...Sepsis" for ease of physician documentation
 - System and local assessment of lactate measure challenges/auto order
 - Development of Inpatient sepsis nursing ad hoc committee
 - Development of Advocate Pediatric sepsis teams through the Children's Hospitals
- Coming in 2017
 - Conversion of ALERT Nurse to Advanced Practice Nurse coverage
 - Compliance with Gabby's Law



Advocate Condell Medical Center Lives Saved thru Evidenced Based Sepsis Care



Source: APACHE Hospital Sepsis Mortality Index

Thank You and Questions

What do These People Have in Common?



Sepsis truly is...



A search and rescue mission, with a stop watch

Advocate Health Care