

Sepsis Quality Assurance Project Improvement

Kearney Regional Medical Center, Kearney, Nebraska



Background

- Full-service acute care physician guided, people centered 98-bed hospital located in Kearney, NE
- 2019 Sep-1 Compliance 49%
- Will increased compliance produce better patient outcomes reduce morbidity and mortality?

CY 2019=48.89%

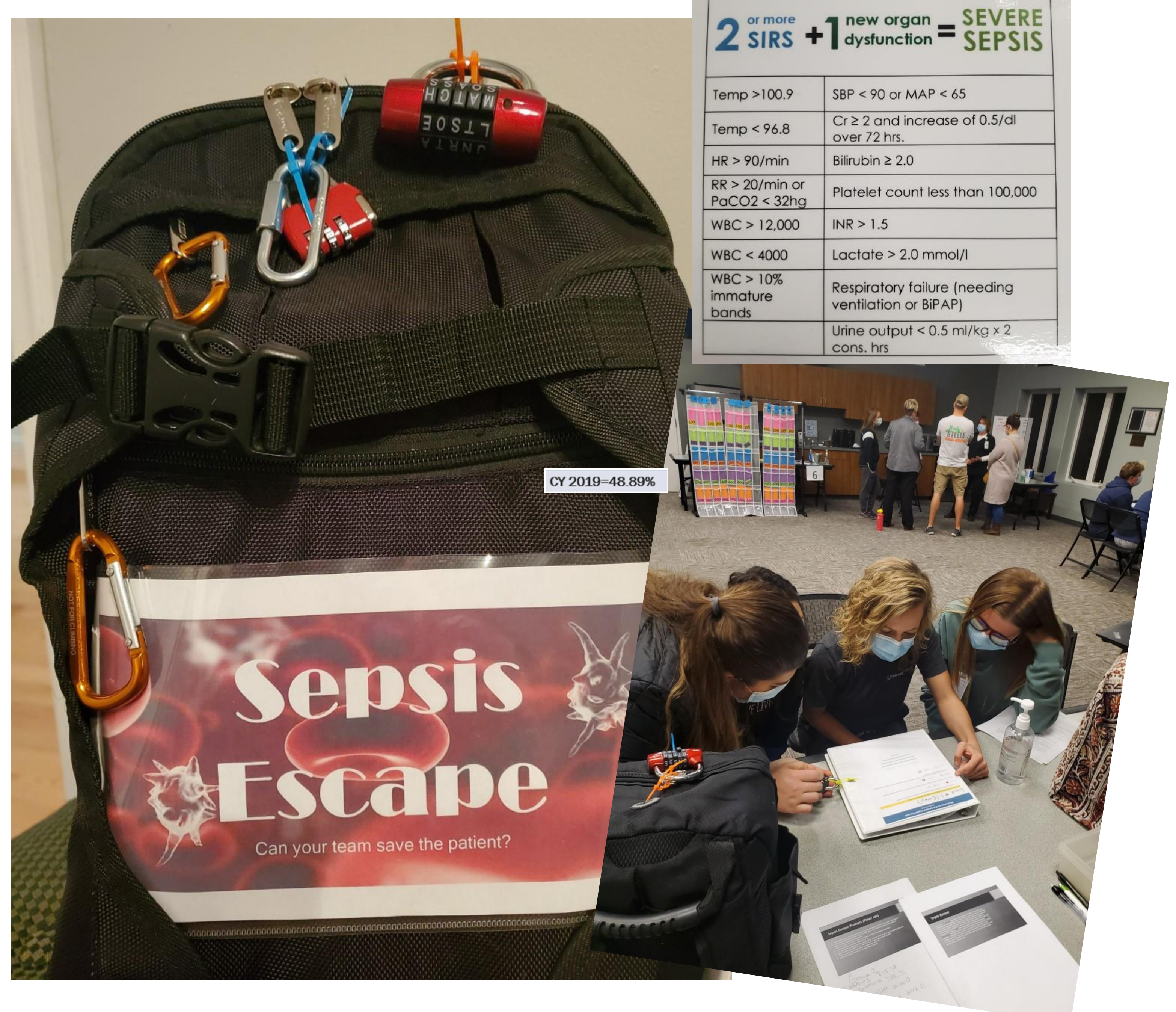
KRMC Sepsis Tool			Patient Sticker
(2 SIRS + Source of infection + plus organ dysfunction within 6 hours of each-other)			
SIRS (any 2 of the following) *Temp >100.9 or <96.8 F *Respiration >20/min or PaCO2 <32 *WBC >12,000 or <4,000 or bands >10% *Heart rate >90/min	Infection (Suspected, NEW or WORSENING) *Pneumonia (sputum production, cough, dyspnea) *Urinary Tract Infection (dysuria, hematuria) *Intra-abdominal infection (abdominal pain, distention) *Skin and soft tissue (redness, pain, swelling) *Joints (arthralgia) *Recent procedure *Current antibiotic treatment *Endocarditis *Meningitis *Chronic catheter or implanted device	Organ Dysfunction (NEW or WORSENING) *SBP <90 or MAP <65 (Circulatory) *Lactate >2 mmol/L (Metabolic) *Creatinine >2 or UOP <0.5 ml/kg/hr for >2 hrs (Renal) *Need for Bipap/CPAP or mechanical ventilation (Respiratory) *Platelets <100,000 *INR >1.5 or PTT >60 (Hematologic) *Bilirubin >2 mg/dL (Hepatic) *New/unexplained mental status change (Neurologic) (Is the organ dysfunction related to a chronic condition or medication?)	Watch for Tissue Hypoperfusion/Septic Shock *Lactate >4 mmol/L *Initial hypotension (as defined by 2 SBP <90 or MAP <65) *Persistent hypotension (as defined by 2 SBP <90 or MAP <65) after the 1 hr period following fluid bolus administration. *Need for vasopressor support MUST fluid resuscitate if Lactate ≥ 4 and/or 2 hypotensive bps as defined by SBP <90 or MAP <65
2 SIRS + Infection + 1 New Organ Dysfunction=Severe Sepsis Start Time			
To Be Completed ASAP-call provider for orders		To Be Completed within 6 hours	
• Draw lactate <input type="checkbox"/> -will auto repeat if initial >2, unless using POC meter -if ≥ 4 mmol/L MUST FLUID RESUSCITATE • Blood Cultures <input type="checkbox"/> -complete prior to giving antibiotics • Antibiotics <input type="checkbox"/> • Fluid Resuscitation <input type="checkbox"/> *If hypotensive and/or lactate ≥4 Options: a) Actual body weight _____ (kg) x 30= _____ ml b) Ideal body weight _____ (kg) x 30= _____ ml (may use if BMI >30) c) Or New Target fluid goal= _____ ml (provider must document reason for using less than 30ml/kg) *After fluid complete MUST check blood pressures for additional hypotension*		• Repeat Lactate <input type="checkbox"/> if initial >2 -if ≥ 4 mmol/L MUST FLUID RESUSCITATE *If hypotension persists after fluid bolus* • Start Vasopressor <input type="checkbox"/> • Repeat Volume Status and Tissue Perfusion assessment <input type="checkbox"/> -Needs completed if Lactate >4 and/or hypotension after fluid bolus (provider)	
Signature _____		Initials _____	
Not a permanent part of record. **DO NOT SCAN** Give to unit educator.			

Aims

- Increase KRMC organizational Sep-1 Bundle Compliance to 70% for overall patient safety in sepsis care (2022)

Plan

- Manual abstraction
- Monthly sepsis QAPI meetings
- EHR optimization
- Provider and staff education

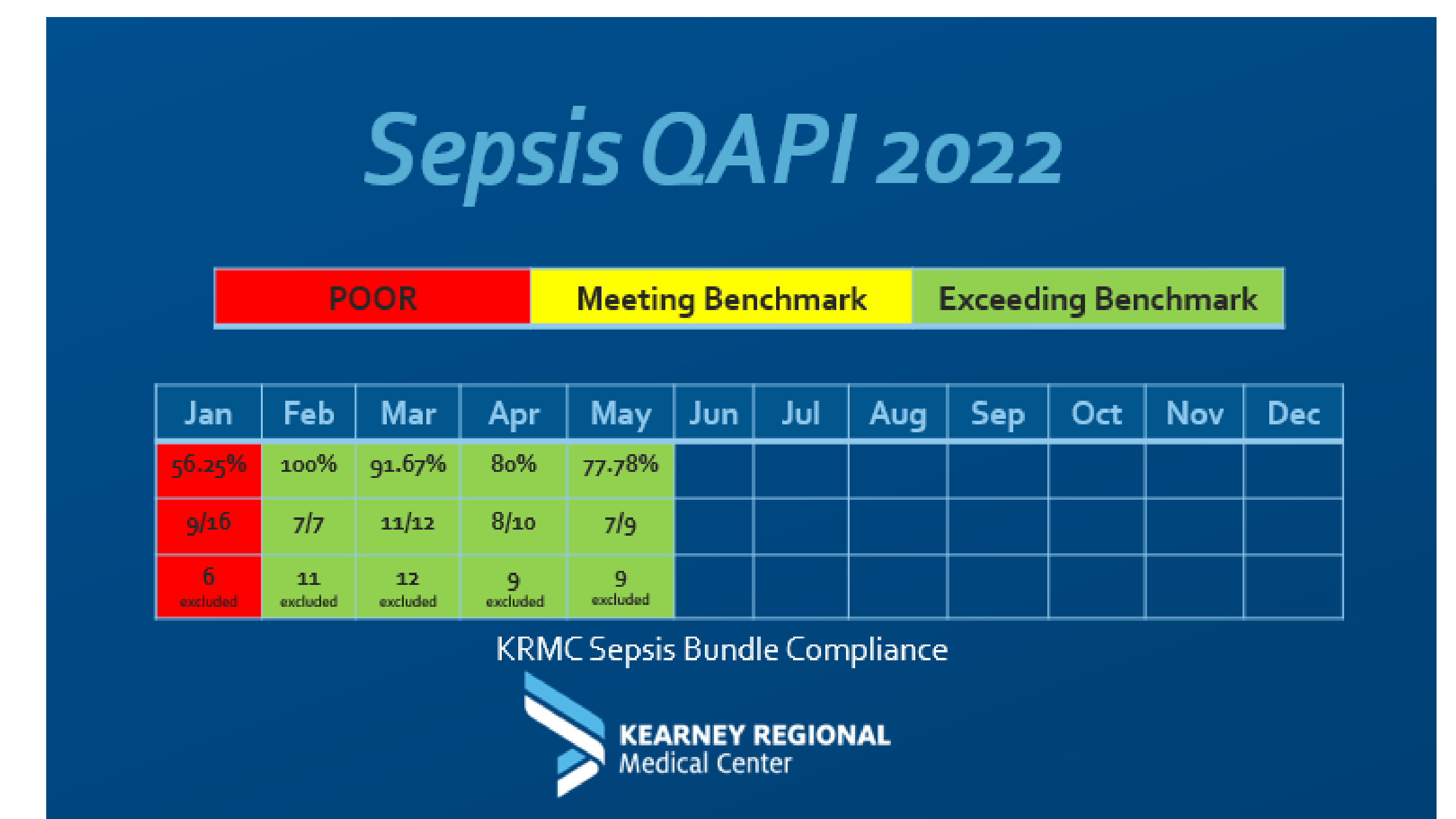


Measure

- (Sep-1) Early Management Bundle, Severe Sepsis/Septic Shock

Results

- Multi-disciplinary collaboration
- Sepsis surveillance and screening
- Tracking meaningful data
- Outlier feedback to staff
- Innovative sepsis education
- Increased compliance ~30%
- Decreased LOS with compliance



Next Steps

- Readmission rates
- Antimicrobial stewardship
- CDI documentation
- Update sepsis policy to include maternal population (new v5.12)

Team

Quality Improvement	Executive Committee	Emergency Medicine
Risk Management	Nursing	Hospitalist Group
Informatics	Laboratory	Infection Prevention
Education	Pharmacy	Clinical Documentation
Care Management	Readmissions team	Finance