



# READY4SURVEY

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## What is PI?



As part of the ongoing effort to prepare staff for the upcoming Joint Commission accreditation survey, upcoming issues of *Ready4Survey* will focus on various departmental improvement projects, also referred to as Process Improvement (PI).

PI is the proactive task of identifying, analyzing and improving upon existing processes within an organization for optimization and to meet new standards of quality. When The Joint

Commission (TJC) surveyors visit McLaren Lapeer Region (MLR) Fall 2017, employees may be asked what PI projects their department and/or hospital are doing.

As previously stated, upcoming issues of *Ready4Survey* will highlight various hospital-wide and department specific PI projects. In this issue, the McLaren Lapeer Region (MLR) Sepsis recognition and treatment process will be the focus.

## Reducing Sepsis Mortality

According to information from The Joint Commission Center for Transforming Healthcare website, Sepsis is the leading cause of death in hospitalized patients, claiming 220,000 American lives annually.

Sepsis is the body's life-threatening inflammatory response to an infection. The leading cause of death

in hospitalized patients, sepsis has a mortality rate estimated between 25-50 percent. Every year, 750,000 Americans are diagnosed with sepsis and of those, 220,000 die.

In addition, sepsis is the most expensive disease to treat in the hospital, costing approximately \$17 billion dollars annually. Early detection

and appropriate treatment of sepsis can decrease mortality, improve patient outcomes and decrease the length of stay in hospitals.

Sepsis mortality can be reduced, even with scarce resources, with early detection and the rapid initiation of appropriate treatment.

## Spotlight on the MLR Sepsis Identification & Treatment Process

At MLR, a sepsis committee, consisting of a multi-disciplinary team, meets every other month to improve facility processes to help diagnose and treat sepsis patients more effectively.

As a result of this collaboration, multiple processes have been identified and improved upon in order to provide better care for our patients. Highlights as a result of these process improvements include:

Traditionally, all newly employed MLR RNs were introduced to sepsis information during their nursing orientation with facility educators. In January 2015, more robust education efforts began to provide additional

# Sepsis Identification & Treatment Process (continued)

education to nurses regarding sepsis recognition and treatment.

- All nursing staff attended sepsis simulations in the Nursing Arts Lab which focused on patient symptoms and clinical cues to help identify and treat sepsis patients more efficiently. Facility specific processes such as the creation of the sepsis Medical Response Form was introduced. This form is located in a red folder near/on the crash carts in all units.
- Systemic Inflammatory Response Syndrome (SIRS) criteria was re-examined with clinical staff including discussion of the upcoming core measure reporting which began in Fall 2015.
- During the Nursing Skills Fair in October 2015, sepsis processes were a focus for all clinical staff. The sepsis bundle checklist was

highlighted and the Medical Response Form was presented for all to view and discuss.

- In early 2016, a lactic acid level was added to MLR's critical result form to improve clinician diagnosis of sepsis, severe sepsis and septic shock. Further review identified weaknesses in clinical recognition which prompted committee members to push for an automatic lab re-draw on patients whose initial lactic acid was elevated.
- In mid-2016, committee members identified a problem with blood culture contamination rates which ranked MLR higher than the corporate average. Team members from emergency and laboratory collaborated to identify existing processes which contributed to the higher than average rates. As a result of this collaboration, a new blood culture process was

designed clearly designating RNs and phlebotomists as the only staff members to obtain blood cultures in the Emergency Room.

- Sepsis core measure cases are reviewed each month and feedback is provided to the appropriate physicians and nurses.

As a result of these combined efforts, MLR has led the health system in sepsis bundle compliance for the last year and is also better than the national average.

The Centers for Medicare and Medicaid Services (CMS), part of the U.S. Department of Health and Human Services, is responsible for the administration of Medicare, Medicaid, the Children's Health Insurance Program and the Health Insurance Marketplace. *(continued page 3)*



# Sepsis Identification & Treatment Process (continued)

CMS is the entity which reimburses hospitals for satisfying core measure targets.

The following guidelines are provided by CMS to guide hospitals in the successful treatment of patients experiencing sepsis. Key points of recognition and treatment that are important to understand and remember:

1. Lactate >2 or organ dysfunction defines severe sepsis. The definition for sepsis is unchanged: two SIRS criteria plus suspected infection. Severe sepsis is defined as sepsis plus one or more variable of organ dysfunction, which includes a lactate >2. See the table below for other "signs" of organ dysfunction. Septic shock is defined by CMS as severe sepsis with hypo perfusion despite adequate fluid resuscitation or a lactate > 4.

2. It's all or nothing. In order to be compliant, you need to meet all the measures. For severe sepsis, this includes:

**Within 3 hours of presentation:**

- Measure serum lactate
- Obtain blood cultures prior to antibiotics
- Administer antibiotics

**Within 6 hours of presentation:**

- Repeat serum lactate if initial lactate is >2

**FOR SEPTIC SHOCK:**

**Within 3 hours of presentation:**

- Measure serum lactate
- Obtain blood cultures prior to antibiotics
- Administer antibiotics
- Resuscitation with 30mL/kg crystalloid fluids

**Within 6 hours of presentation:**

- Repeat volume status and tissue perfusion assessment
- Vasopressor administration
- (If hypotension persists after fluid)

3. A repeat assessment of volume status and tissue perfusion is required for patients with septic shock. This is required when a patient has persistent hypotension after fluid resuscitation. The volume assessment can be done using either a focused physical exam or using some physiologic parameters.

**Focused physical exam must include:**

- Vital signs
- Cardiopulmonary exam
- Capillary refill
- Peripheral pulse evaluation
- Skin exam

**OR any two of the following:**

- Central venous pressure
- Central venous oxygen
- Bedside cardiovascular ultrasound
- Passive leg raise or fluid challenge

SIRS Criteria	Organ Dysfunction Variables
Temp >101	SBP < 90
Temp < 96.8	MAP < 70
HR > 90	SBP decrease > 40 from known baseline
RR > 20	Cr > 2.0
WBC > 12,000	UOP < 0.5 ml/kg/hr for > 2 hours
WBC < 4000	Bilirubin > 2.0
> 10% Bacteremia	Platelets < 100,000
	INR > 1.5 or PTT > 60 secs
	Altered Mental Status
	Lactate > 2

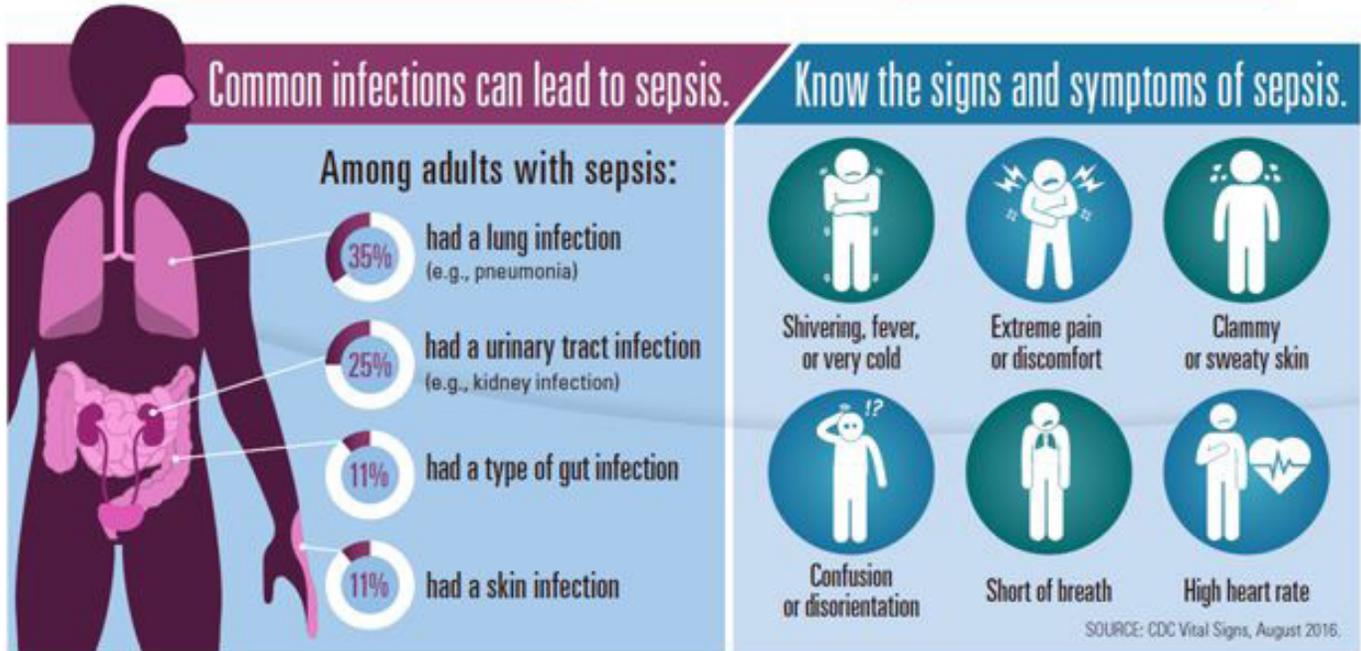
# Know the signs and symptoms of sepsis

Healthcare providers are key to preventing infections and illnesses that can lead to sepsis.

**EDUCATE** patients and their families about the early symptoms of severe infection and sepsis, and when to seek care for an infection, especially those at higher risk.

**REMIND** patients that taking care of chronic illnesses helps prevent infections.

**ENCOURAGE** infection prevention measures, such as hand hygiene and vaccination against infections.



Employees are encouraged to familiarize themselves with various PI projects, both hospital-wide and department specific, so they may speak about them with confidence during our survey. For information on additional PI projects, be on the lookout for future issues of Ready4Survey, a publication designed to reinforce employee knowledge and confidence in preparation for our Joint Commission or CMS survey.

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