

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 department 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 Fall 2017, employees may be asked what PI projects their department and/or hospital are doing.

In this issue of Ready4Survey, the McLaren Lapeer Region (MLR) Venous Thromboembolism (VTE) and Anti-Microbial Stewardship (AMS) collaborative will be highlighted. These collaboratives are a part of the Michigan Hospital Medicine Safety Consortium (HMS) which is a quality improvement collaborative. The data driven collaborative is comprised of hospitals across the state of Michigan including MLR. The goal of the consortium is to improve the quality of care for hospitalized medical patients who are at risk for adverse events. The physician champions for these initiatives are Gary Salem, DO, VPMA and Carlos Ledezma, MD, Interventional Radiologist. Quality Data Specialist, Alicia Cummings, RN, is the data abstractor and project coordinator.

DVT / VTE Risk Assessment - Caprini	Risk Assessment Score - Caprini
<input type="checkbox"/> 1 Medical patient currently at bed rest	<input type="checkbox"/> Low Risk (0-2); No Mech VTE Prophylaxis indicated or needed Encourage early ambulation and ROM
<input type="checkbox"/> 1 Age 41 - 60	<input type="checkbox"/> Moderate Risk (3-4); see physician order
<input type="checkbox"/> 1 Abnormal pulmonary function (COPD)	<input type="checkbox"/> High Risk (5 or more); see physician order
<input type="checkbox"/> 1 Serious lung disease including pneumonia (less than 1 month)	
<input type="checkbox"/> 1 Acute myocardial infarction	
<input type="checkbox"/> 1 Congestive heart failure (less than 1 month)	
<input type="checkbox"/> 1 History of inflammatory bowel disease	
<input type="checkbox"/> 1 Sepsis (less than 1 month)	
<input type="checkbox"/> 1 Swollen legs (current)	
<input type="checkbox"/> 1 Varicose veins	
<input type="checkbox"/> 1 Obesity (BMI greater than 25)	
<input type="checkbox"/> 1 History of unexplained stillborn, recurrent spontaneous abortion (3 or more), premature birth, with toxemia or growth-restricted infant	
<input type="checkbox"/> 1 Pregnancy or postpartum (less than 1 month)	
<input type="checkbox"/> 1 Oral contraceptives or hormone replacement therapy	
<input type="checkbox"/> 1 Minor surgery planned	
<input type="checkbox"/> 1 History of prior major surgery (less than 1 month)	
<input type="checkbox"/> 1 Other risk factors (group note if yes)	
<input type="checkbox"/> 2 Major surgery (greater than 45 minutes)	
<input type="checkbox"/> 2 Patient confined to bed (greater than 72 hours)	
<input type="checkbox"/> 2 Age 61 - 74 years	
<input type="checkbox"/> 2 Laparoscopic surgery (greater than 45 minutes)	
<input type="checkbox"/> 2 Arthroscopic surgery	
<input type="checkbox"/> 2 Central venous access	
<input type="checkbox"/> 2 Malignancy (present or previous)	
<input type="checkbox"/> 2 Immobilizing plaster cast/ brace (less than 1 month)	
<input type="checkbox"/> 3 Age 75 years or older	
<input type="checkbox"/> 3 Heparin-induced thrombocytopenia (HIT)	
<input type="checkbox"/> 3 History of DVT/PE	
<input type="checkbox"/> 3 Family history of thrombosis	
<input type="checkbox"/> 3 Other congenital or acquired thrombophilia, group note if yes	
<input type="checkbox"/> 3 Positive Factor V Leiden	
<input type="checkbox"/> 3 Elevated anticardiolipin antibodies	
<input type="checkbox"/> 3 Elevated serum homocysteine	
<input type="checkbox"/> 3 Positive lupus anticoagulant	
<input type="checkbox"/> 3 Positive prothrombin 20210A	
<input type="checkbox"/> 5 Elective major lower extremity arthroplasty	
<input type="checkbox"/> 5 Multiple trauma (less than 1 month)	
<input type="checkbox"/> 5 Acute spinal cord injury: paralysis (less than 1 month)	
<input type="checkbox"/> 5 Hip, pelvis or leg fracture (less than 1 month)	
<input type="checkbox"/> 5 Stroke (less than 1 month)	
Total Score: 0	

VTE Prevention for High Risk
<input type="checkbox"/> Intermittent Pneumatic Comp Device Applied-Bilateral
<input type="checkbox"/> Intermittent Pneumatic Comp Device Applied-Right
<input type="checkbox"/> Intermittent Pneumatic Comp Device Applied-Left
<input type="checkbox"/> Graduated Knee-High Compress Stock Applied-Bilateral
<input type="checkbox"/> Graduated Knee-High Compress Stock Applied-Right
<input type="checkbox"/> Graduated Knee-High Compress Stock Applied-Left
<input type="checkbox"/> Graduated Thigh-High Compress Stock Applied-Bilateral
<input type="checkbox"/> Graduated Thigh-High Compress Stock Applied-Right
<input type="checkbox"/> Graduated Thigh-High Compress Stock Applied-Left
<input type="checkbox"/> No Mechanical VTE prophylaxis

Document DVT Education in Patient Profile

Venous Thromboembolism Prophylaxis Collaborative

The VTE initiative launched in January 2011 and data on well over 100,000 cases has been collected and analyzed. Through participation, member hospitals have successfully increased rates of VTE risk assessment, pharmacologic prophylaxis in patients at risk of developing a VTE and mechanical prophylaxis (Sequential Compression Devices-SCDs) in patients with contraindications to pharmacological prophylaxis.



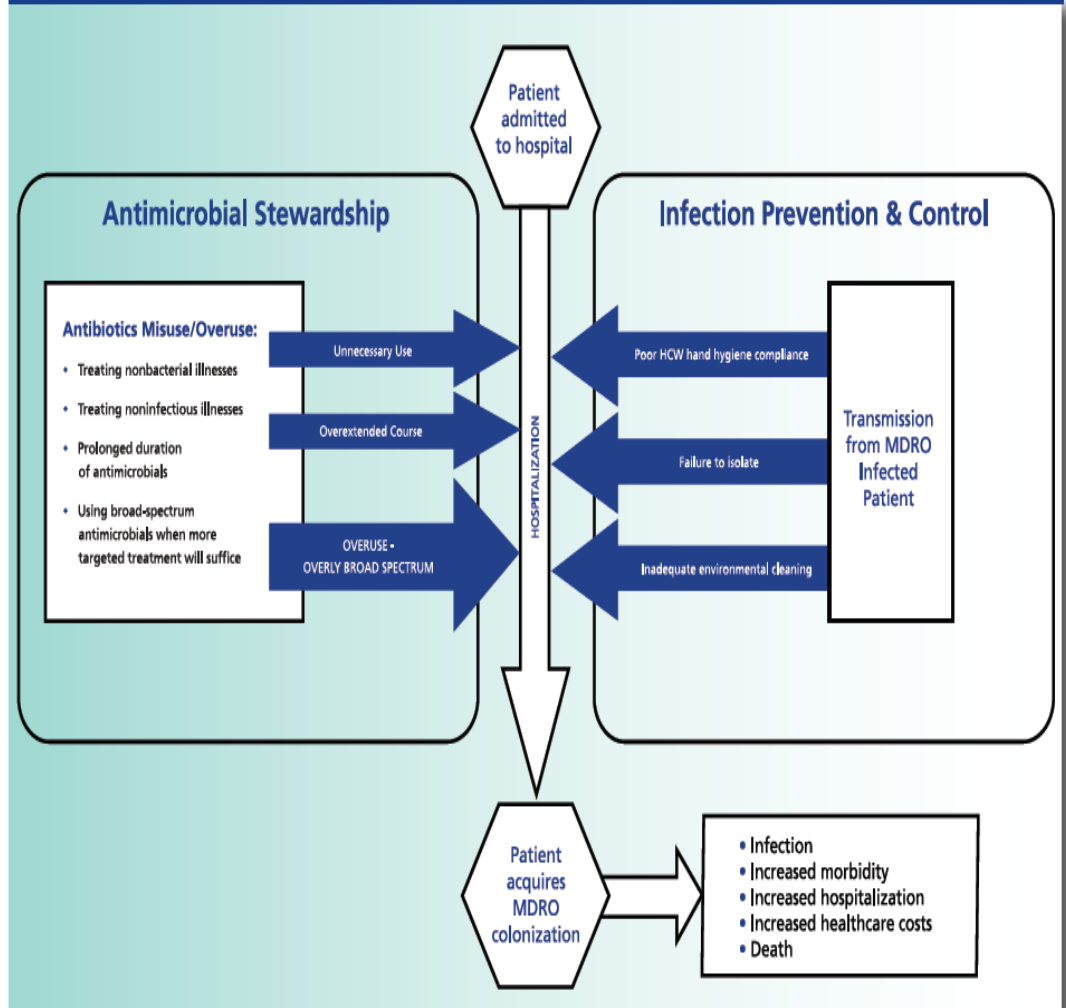
As a partner in this collaborative, MLR has created and met many PI goals-

- All hospitalized medicine patients have a VTE risk assessment completed on admission
- Medicine patients without a contraindication to prophylaxis with a Caprini score of 3 or greater should receive pharmacological treatment (subcutaneous Heparin)
- Medicine patients with a contraindication to prophylaxis who are at most risk of developing a VTE should receive mechanical prophylaxis (SCDs)

At MLR, all ED physicians use a full Caprini risk assessment tool to perform a VTE risk assessment and have an electronic physician order set to identify patient populations which are considered low risk for VTE. This order set also contains recommendations for appropriate prophylaxis on admission. MLR nursing staff adopted the second check of VTE risk assessment on admission to verify admitting physician score. Nursing is given autonomy to hold pharmacological prophylaxis until the physician is contacted if they identify a low-risk patient.

Since the inception of this collaborative, member hospitals have had success avoiding prophylaxis in this low-risk population. Minimizing the use of drugs that have associated risks and costs has been valuable. Because of the progress which has been made on the initiative, it has been moved to maintenance mode and a smaller amount of data is being gathered although still maintaining a focus so progress will not be lost.

Figure 1-2. Partnership Between Antimicrobial Stewardship and Infection Prevention and Control Programs to Minimize Multidrug-Resistant Organism Transmission



Antimicrobial Use Collaborative

In late 2015, a pilot initiative related to the use of antimicrobials was launched in 10 pilot hospitals. McLaren Lapeer Region was one of the ten hospitals chosen for the pilot program. For this initiative, data is collected related to the antibiotics used in the treatment of hospitalized medical patients diagnosed with pneumonia or urinary tract infections. Along with many Michigan hospitals, HMS is also partnering with the Centers for Disease Control and Prevention (CDC) on this initiative. Because the pilot was successful in identifying opportunities for quality improvement, this initiative is being launched collaborative-wide. According to the HMS website, Antibiotic-resistant bacteria are a significant national threat and their control has become a national priority. With this initiative, the collaborative aims to formally assess appropriate use of antibiotics including selection of the right antibiotic for the right treatment duration, decrease antibiotic-related complications and decrease antimicrobial resistance on a population health basis.

At MLR, quarterly Antimicrobial Stewardship meetings are held. Antibiotic use data is reviewed by a multidisciplinary team consisting of doctors, nursing administration, pharmacy, education, infection control and quality to identify areas of improvement in our facility. Since its inception, the data collected for MLR has helped to identify high duration rates of antibiotics. Process improvements have occurred including daily progress notes for all inpatient Pneumonia and UTI patients by MLR clinical pharmacy manager, Linda Deitering PhD. Antibiotic orders sets have also been created for both Pneumonia and UTI and can also be located in the Sepsis order sets.

According to the CDC website, inpatient healthcare providers can contribute to the prevention of antibiotic resistance by knowing a few important facts.

- Know what types of drug-resistant infections are present in your facility and patients
- Request immediate alerts when the lab identifies drug-resistant infections in your patients
- Alert receiving facility when you transfer a patient with a drug-resistant infection
- Protect patients from drug-resistant infections by following guidelines and precautions at every patient encounter
- Prescribe antibiotics wisely
- Remove temporary medical devices such as catheters and ventilators as soon as they are no longer needed.