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Calendar of Events

NOVEMBER
11 / 29 - Infectious Disease EPT

DECEMBER
12 / 19 - Radiology EPT

Improvise, Adapt, and Overcome

The United States Marine Corps represents the oldest service branch of the United States Armed Forces, initially formed in 1775. The core values of the U.S. Marine Corps are legendary. Marines are trained to Improvise, Adapt, and Overcome. This unofficial motto of the Marines was made famous to the civilian population in Clint Eastwood’s 1986 film, Heartbreak Ridge.

As clinicians we are dedicated to delivering the best care to our patients with the same degree of commitment that the U.S. Marine Corps has to accomplishing its assigned missions. Sometimes delivering that care requires us to improvise, adapt, and overcome.

I recently emailed all Saint Luke’s Care members regarding the IV fluid shortages that we are facing in the Saint Luke’s Health System. Due to significant damage from hurricanes affecting IV fluid production in Puerto Rico, these shortages will likely persist for months. Adapting to these IV fluid shortages will require us to change our practice patterns to limit the utilization of IV fluids. Please consider oral rehydration and oral electrolyte replacement, if appropriate. As always, appropriate care of the patient comes first, but efforts we make to conserve our utilization of IV fluids will help maintain our supplies. Please see Greg Teale’s, System Director of Pharmacy, SBAR report on the next page for details.

Thanks for taking the time to stay connected through Saint Luke’s Care Connect. I hope you have a great Saint Luke’s day!

William M Gilbirds II, MD

Saint Luke’s Care (SLC) Evidence-based Practice Teams (EPTs) are continuously meeting to address the needs of providers and other clinicians. Creating and modifying order sets and other clinical documents are just a few of these activities.

For more information on EPT activities and SLC multidisciplinary projects, click HERE to view the most recent Bi-monthly Update. Questions? Please contact SLC staff at saintlukescare@saint-lukes.org.
IV Fluids Shortage

Situation
National interruption in the supply and manufacturing of IV fluids with the recent hurricane in Puerto Rico.

Background
Puerto Rico is one of the largest manufacturers of pharmaceuticals in the world (see map below). Federal tax incentives enticed the pharmaceutical and biotech industry to set up manufacturing on the island. The recent destruction from Hurricane Maria is causing a disruption in these industries.

Estimates provided to Vizient and other national organizations suggest 40+ drugs are/were manufactured on the island. Unfortunately, manufacturers are not required to inform the public of anticipated drug shortages and so information is lacking on what these items are.

We do know Baxter had an IV fluid manufacturing plant on the island that was impacted. The FDA has allowed Baxter to start importing IV fluids from Ireland and Australia. We are feeling the impact of this interruption in our supply of IV fluids at this time.

Assessment
SLHS currently has a significant issue in obtaining certain IV fluids.
- 1000 ml D5 ½ NS
- 50 ml NS
- 100 ml NS

The small volume IV bags are used to prepare medications for administration. Pharmacy is actively looking for ways to conserve these items by recommending alternatives (e.g. IV push antibiotics). We anticipate this to be a very unstable and unpredictable market for several weeks to months.

Recommendation
Providers, nurses and pharmacists will continue to collaborate on strategies to conserve IV fluids. Encouraging oral hydration and critically evaluating patients each shift regarding the necessary use of IV fluids.

Greg Teale, Pharm.D., BCPS
System Pharmacy Director
Sedation Management in the ICU - Online CME

Saint Luke’s Care is proud to announce the publication of a new FREE online CME module for Sedation Management in the ICU.

Course Objectives
Know and understand:
• Agitation assessment
• Etiology for agitation
• Pain assessment / management
• Anxiety management
• Delirium assessment / management
• ABCDE bundle

Be familiar with PAD guidelines

Presenters
Created & approved by: Majdi Hamarshi, MD with the assistance of Scott Aldridge, Pharm.D., BCPS

Click HERE to access the SLC FREE CME Library using Coupon Code SLCare-17

Saint Luke’s Care - INMED CME Website Updates

Based on user feedback, Saint Luke’s Care facilitated a joint effort with INMED’s web designers to redesign the CME web pages, where flexibility was allowed. Standard formatting, navigators, and quick access links from the home page will offer users multiple ways of maneuvering the site for a more efficient, consistent experience.
New Documents and Order Sets

**Febrile Neutropenia Order Set - EPIC 1089**
- Developed by Sarah Boyd, MD (Infectious Disease and Antimicrobial Stewardship), Vinay Gupta, MD (Oncology/Hematology), Nick Bennett (Antimicrobial Stewardship Pharmacy), Elizabeth Gustafson (Oncology/Hematology) and Lori Pudenz (Oncology Nursing)
- Content supported by the 2010 IDSA Clinical Practice Guideline for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer
- Includes standardization of the Neutropenic precautions signage with support of the Infectious Disease EPT, Infection Prevention and the Marketing department

**UTI Treatment Order Set - EPIC 1126**
- Developed by Sarah Boyd, MD and Nick Bennett
- Designed using cascading questions for clinical decision support and nested panels for medication options
- Approved by the Infectious Disease, Medicine and Emergency Medicine EPT’s
- **UTI Algorithm** is available in the Order Set as a link and can be accessed via the Clinical References tab in Epic (click [HERE](#) to view the algorithm)

**Project objectives**
- Decrease C diff rates from the overuse of broad-spectrum antibiotics, especially cephalosporins and fluoroquinolones. While the first generation cephalosporins aren’t viewed in the same light as 3rd/4th, risk still exists
- Focus on appropriate treatment duration for all antibiotics - All drugs have a pre-set stop date
- Avoid treatment of asymptomatic bacteriuria - The interactive treatment algorithm will guide providers to either a) no treatment recommended or b) risk-stratified treatment recommendations
- Algorithm contains a header that previous resistance patterns should be evaluated. If it is the first time a patient is being treated for UTI, Bactrim/Macrobid are likely acceptable
- Avoid use of fluoroquinolones for both resistance and toxicity reasons

**SLC IP Pediatric Admission Order Set - EPIC 104**
- Developed for the critical access hospitals who admit pediatric patients
- Approved by the Pediatric EPT

**SLC Cardiovascular Lab Structural Heart Post-Procedure Orders - EPIC 1165**
- Designed by Jim Schwartz, MD and Sanjaya Gupta, MD
- Approved by the Cardiology EPT

**SLC Hyperthermic Intraperitoneal Chemotherapy (HIPEC) Orders - EPIC 1123**
- Developed by Lindsey Douglass, Megan McNally, MD and Gary Johnson, MD
- Approved by the Surgery EPT
New Documents and Order Sets

SLC COPD Ambulatory Smart Set - EPIC 1077
- Developed by Andrew Schlachter, MD; Scott Russell, MD; Bruce Bellamy, MD; Kunal Patel, and Charlie Hicks. IT builders Lee Webb and Micah Rader are responsible for technical build used in this comprehensive approach for clinical decision support
- Approved by the Primary Care EPT
- Evidence-based medication choices based on GOLD Categories
- Includes outpatient point of care tools for patients with stable COPD which are accessible in the COPD Assessments: Wellness Flowsheets tab
  - Oximetry Algorithm
  - Validated and GOLD approved CAT Respiratory Assessment Tool
  - GOLD Guidelines COPD Staging categories (A,B,C,D)

Inflectra Outpatient Orders, Beacon team, Live 11/1/17
- Developed by the Beacon team and pharmacy, Leigh Ann Milburn, Erin King, Deborah Glenn and Dana Dutcher
- Approved by the Medicine EPT

SHOUT OUTS!

Sarah Boyd, MD and Nicholas Bennett
Thank you for development of the UTI Treatment order set. The appropriate antibiotic choices and reduction of antibiotic treatment of asymptomatic UTI’s will assist in combatting clostridium difficile infections and MDRO infections.

Andrew Schlachter, MD; Scott Russell, MD; Bruce Bellamy, MD; Kunal Patel, Charlie Hicks, and the Primary Care EPT
Thank you all for your subject matter expertise and support over the past year while developing the COPD Smart Set and Assessment best practice initiative.

Lee Webb and Micah Rader
Thank you to the IT Builders responsible for technical build used in this comprehensive approach.

Majdi Hamarshi, MD & Scott Aldridge, Pharm.D., BCPS
Thank you for your time and research in the creation of the Sedation Management in the ICU CME content. In addition, a special thank you for your patience during the SLC - INMED website redesign that has resulted in a delay for this CME launch, but a much better website experience for the participants.
TCPI: Phase Progression & NEW Assessment Tool

The Centers for Medicare and Medicaid Services (CMS) has emphasized the transition of enrolled practices through the Five Phases of Transformation as a marker of successful completion of the Transforming Clinical Practice Initiative (TCPI) program. The Five Phases are 1) Set aims, 2) Use data to drive care, 3) Achieve progress on aims, 4) Achieve benchmark status, and 5) Thrive as a business via pay for value approaches. Enrolled practices are encouraged to move through the phases in a linear fashion from Phase 1 through Phase 5.

At baseline (May 2017), Saint Luke’s primary care and specialty care practices are close to completion of Phases 2 and 3 with both groups outperforming the Vizient PTN benchmarks in all phases. Please note Phase 1 is satisfied with the development and distribution of a system-level TCPI charter. The charter has been shared with all SLPG practices and completion of Phase 1 will be reflected in the November practice assessments.

All SLPG practices will focus initially on completion of Phase 2 by establishing consistent performance improvement (PI) strategies and building staff PI skills by deploying education sessions with enrolled practices beginning in January 2018. The objectives of the education sessions, include:

- Understand the PI model is designed to view process improvements from the perspective of the patient
- Remember the PI model is PDCA (Plan, Do, Check, Act)
- Recognize the PI tools that will be used during improvement projects
- Acknowledge that staff is empowered to identify opportunities and develop solutions

In addition to PI education sessions, the SLC TCPI team will be coordinating with practices to form workgroups to explore opportunities based on practice assessment results, prioritize potential TCPI projects, and create a library of previous and current initiatives.

NEW Support & Guidance Tool

The SLC TCPI team created a new support and guidance tool to assist SLPG Directors and Practice Leaders in the completion of the biannual practice assessments. This tool will serve as a central location for tracking practice assessment results, recording past and current projects, and analyzing progress overtime.

On November 8th, the support and guidance tool was showcased at the national level during a Vizient TCPI Practice Transformation Network (PTN) monthly meeting. Saint Luke’s Care staff shared the purpose of the tool and presented the different components. The tool received significant positive feedback from the Vizient PTN and was shared with and made available for use by all other enrolled organizations and practices.

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