SYSTEM-WIDE SEPSIS INITIATIVE

Update Part 3 - “Simplicity is the Ultimate Sophistication”

As alluded to in the last two updates, LMHS’ system-wide multidisciplinary sepsis collaborative is progressing as we develop team-based approaches and protocols to deal with this challenging disease process. With the New Year comes a focus on improving awareness and education of staff. This education reiterates that although sepsis is one of the world’s most common deadly diseases, when treating sepsis, “the simple stuff saves lives”.

Sepsis has been named as the most expensive in-patient cost in American hospitals in 2011 at over $20 billion dollars spent each year. Severe sepsis kills as many Americans each year as acute myocardial infarction (heart attacks); and sepsis kills more Americans than prostate cancer, breast cancer and HIV/AIDS combined. As prevalent as the disease is however, only one-third of Americans had ever heard the word “sepsis” in a 2010 Sepsis Alliance poll. Many health professionals are also confused as to what really defines sepsis.

To increase awareness among our health professionals, lectures are being delivered to any staff interested in learning more about those interventions that can reduce the mortality of sepsis.

We can make a difference with simple interventions and increased understanding beginning with Emergency Department care. Lives can be saved through early recognition, early antibiotic administration, aggressive fluid resuscitation, source control, and deliberate monitoring of those patients diagnosed with sepsis, yet not “sick enough” to be considered severely septic and placed in the ICU.

The Critical Care Outreach Nurse program is a pilot project at Lee Memorial Hospital designed to identify and treat such patients on the floor. The goal is to reduce sepsis mortality by preventing their progression to severe sepsis and septic shock. In concert with the outreach nurse program, EPIC developers are working to incorporate the Modified Early Warning System (MEWS) tool into the documenting system on the floors. This tool helps nurses monitor their patient’s vitals and improve how quickly a patient experiencing a sudden decline receives more aggressive clinical care.

At Health Park, the ICU team has proposed to be the primary admission team to admit the sickest septic patients. This will streamline communication between the ICU and emergency physicians and provide the patient with more focused care during the most critical 12 hours of their admission to the hospital.

(Continued on next page)
SEPSIS: Simplicity--the ultimate sophistication

Performance improvement in sepsis is a lot like a New Year's Resolution; it takes commitment as an ongoing process. These collaborative efforts are more examples of LMHS' continued commitment to improve outcomes for our septic patients. Every health care provider has a role in this effort. Working as a team, we can continue to align goals, promote cross-disciplinary awareness and communication, and home treatments through finding and defining best practices for our system. Have a Happy and Healthy New Year!

Written by Aaron Wohl, MD, FACEP
Department of Emergency Medicine,
Lee Memorial Hospital and Health Park Medical Center

Informatics Update

Happy New Year! I would like to update everyone on some happenings over the last six weeks.

ICD 10 is back on track to begin October 1, 2015. At the November Medical Executive Committees, I presented a request for mandatory ICD 10 training. I received a unanimous motion from all MEC’s to reinstitute the mandatory training. They approved a mandatory 1.5 hours of ICD 10 physician e-learning with 1.0 hour CME credit that is required for all active medical staff. This includes M.D., D.O., ARNP, PA, and CNM. The deadline for completion that was approved is April 30, 2015. Since this is the second attempt at this legislation, there are a few caveats.

1. If you completed the training last year, you do not need to complete the training again. We would however suggest you review the information as a refresher but we have maintained your Record of Completion.
2. If you receive training through your private office, please provide me a syllabus of what was covered and a certificate of completion and we will record your achievement.

I have been asked by Health Information Management and Medical Staff Services to remind everyone that access to a patient's chart is based on an established relationship. You need to have a defined relationship with that patient in order to enter the chart. A defined relationship exists when you or a member of your group has been asked to consult, admit, or otherwise care for that patient. Exceptions are made for administrative review and Quality based physician review under the patient safety organization umbrella. Any other access is considered a breach and all breaches are taken seriously. Consequences can be severe. Please don't enter a chart when you don't have a relationship with that patient. Thank you, Bill.

William Carracino MD, VP & CMIO
Lee Memorial Health System
Pharmacy Alert
Pharmacy and Therapeutics Committee Update
August 2014 Meeting

Formulary Decisions:

Deletions:
Chloral hydrate will be removed from formulary. It is no longer manufactured.

Additions:
Adalimumab (Humira®)

Added to formulary on a consignment basis for in-hospital 1st dose administration restricted to use by gastroenterologists, rheumatologists or dermatologists. These prescribers will administer the medication themselves or can designate the administration to a trained designee. The prescriber will need to educate the designee on administration as well as educating the patient on proper self-injection of the medication. A patient follow-up appointment should be made for additional training on self-injection of the medication. A QuantiFERON-TB blood test will be ordered prior to administration of Adalimumab (Humira®) and it should be documented that these patients have failed previous first line therapy on infliximab.

ADDITIONAL INFORMATION:

IV Acetaminophen (Ofirmev®) Revision

IV acetaminophen duration of therapy will be reduced from 72 to 24 hours. In order to provide appropriate coverage for pain/fever in patients after 24 hours of IV acetaminophen therapy, pharmacy recommends 650mg PRN APAP PO/PR q6h prn temp/mild pain when able to tolerate PO/PR.

A Stop Order will be automatically implemented by the pharmacist at 24 hours. This action will be implemented immediately as it will take some time to revise all existing order sets to remove the 72 hr language. The prescriber can re-order the medication if necessary.

CURRENT DRUG SHORTAGES- IV:

Cefotetan – limited availability
Dextran 10% - limited availability
Fosphenytoin – limited availability
Hydroxyzine injectable - not available
Indigo Carmine 0.8% - limited availability
Pancuronium (Pavulon®) - not available

For additional information please see the August 2014 P & T Newsletter or contact John Armitstead, MS, RPh, FASHP john.armitstead@leememorial.org or Doug Peterson, Pharm.D, BCPS doug.peterson@leememorial.org Co-Vice Chairs P & T Committee
Medical Library News

Clinical Key, the database of 1,300 + full-text books, more than 500 journals, multimedia, drug monographs, and patient education handouts has been recently optimized for tablets. Among the latest book additions:

- Head and Neck Imaging
- Musculoskeletal Imaging
- Textbook of the Cervical Spine
- Nathan and Oski’s Hematology and Oncology of Infancy and Childhood
- Urogynecology and Reconstructive Pelvic Surgery

Clinical Key offers physicians Internet Point of Care CME credits for self-directed, structured, online learning. CME credits are provided by the Cleveland Clinic Center for Continuing Education. Physicians may earn 0.5 AMA PRA Category 1 Credit for each qualified search conducted on this database.

The program requires the initial registration with Clinical Key and with Cleveland Clinic, which can be done only when accessing Clinical Key on IntraLee. Please request detailed instructions from the library staff: 343-2410 or stop at any of the Medical Libraries for assistance.

Starting January 1, 2015, the CE Headquarters, another point-of-care continuing education program has been discontinued. To read about all other library-based continuing medical education options, please visit Continuing Education Online page on the Medical Library website.

Research Tools are now available on the Medical Library website to help researchers and authors involved in evidence-based medicine projects to search for, identify, and to appraise relevant studies. The Research Tools page provides, among others, links to:

PubMed and the Evidence-Based Universe - a presentation by Holly Ann Burt, Outreach and Exhibits Coordinator, NN/LM GMR and Cleo Pappas, Assistant Information Services Librarian and Associate Professor, UIC LHS. (2013)

Literature Search form - a strategy form for evidence-based search employing PICO questions

Medical Subject Headings (MESH), Qualifiers/Limits - use to search PubMed for evidence-based material

Types of Research Designs - definitions or short descriptions (Orriola, J. 2014)

Identifying the Best Study - Identifying the best type of study to answer a given type of question (Orriola, J. 2014)

Critical Appraisal of Randomized Trial, webinar presented by Brian Alper, MD, MSPH, FAAFP, Founder of DynaMed, Vice President of Evidence-Based Medicine Research and Development, Quality and Standards.

Critical Appraisal: Notes and Checklists - tools developed by the Scottish Intercollegiate Guidelines Network, Healthcare Improvement Scotland, SIGN, to help researchers appraise the validity of various types of studies.

Citing Medicine: the NLM Style guide for Authors, Editors, and Publishers - guidance for citing twenty-six types of published and unpublished material, ranging from print books and journal articles to blogs and wikis according to the National Library of Medicine's (NLM) rules.

For help with using the research tools, please contact narges.ahmadi@leememorial.org
Continuing Medical Education  

**Stroke**  
Nasser Razack, M.D. & Anthony Kam, M.D., Neurointerventional Radiology  
Thursday, February 5, 2015 - 7:30 -8:30 am  
Gulf Coast Medical Center Education/Community Room  
RSVP for CME and Breakfast by February 3rd - 424-2680

**Dealing with the Patient who has an Addiction: Alcohol Withdrawal and Polysubstance Abuse**  
Ajay Mayor, M.D., LPG Psychiatric Consultation Services  
Thursday, February 12, 2015 - 6:30 – 7:30 pm  
Lee Memorial Hospital Auditorium  
RSVP for CME and Dinner by February 10th - 424-2680

**The Aging Athlete**  
Francesca M. Swartz, D.O., Orthopedic Associates of Southwest Florida  
Monday, February 16, 2015 - 6:00 – 7:00 pm  
Gulf Coast Medical Center Education/Community Room  
RSVP for CME and Dinner by February 13th – 424-2680

**The Nutritional Reversal of Cardiovascular Disease: Fact or Fiction?**  
Caldwell B. Esselstyn, Jr., M.D., F.A.C.S., Cleveland Clinic Wellness Institute  
Author of “Prevent and Reverse Heart Disease”  
Wednesday, February 18, 2015 - 7:30 – 8:30 am  
HealthPark Medical Center Rooms HP1A & 1B  
RSVP for CME and Breakfast by February 16th – 424-2680

**Concussion Syndrome - Pediatric Grand Rounds**  
John W. Kuluz, M.D., Director of Traumatic Brain Injury & Neuro-Rehab  
Miami Children’s Hospital  
Wednesday, February 18, 2015 - 6:30 – 7:30 pm  
HealthPark Medical Center Room H500  
RSVP for CME and Dinner by February 16th – 424-2680
Lee Memorial Hospital • Gulf Coast Medical Center • Cape Coral Hospital • HealthPark Medical Center • www.LeeMemorial.org/Stroke
ADULT INSULIN MANAGEMENT ORDERS

In 2009, the American Diabetes Association and the American Association of Clinical Endocrinologists adopted a published consensus statement that advocates for basal insulin, nutritional (pre-meal) insulin, and a supplemental (correction) insulin methodology for hospitalized patients. Lee Memorial Health System has had a basal bolus insulin regimen for several years that was not widely utilized. Under the direction of the Endocrine Section, Lee Diabetes Care has developed a revised Adult Insulin Management order set that incorporates the insulin methodology promoted by these two organizations.

Within this order set, the physician may choose a basal (Lantus or Levmir) insulin dose, pre-meal bolus (Novolog) insulin doses, and a correction (Novolog) scale. If a physician does not order basal insulin and pre-meal boluses, the patient will only be on a correction scale for blood sugars greater than 150 mg/dl. It is recommended that all “prior to admission” diabetes medications, including insulin, oral agents, and other injectable meds, be discontinued. This order set will replace the existing Adult Sliding Scale Insulin order set (FM # 3471).

Dr. Freddie Rodriguez, Inpatient Specialist of Southwest Florida Hospitalist, completed a CME lecture in August entitled, “Adult Inpatient Glycemic Control: A Basal Bolus Approach,” which overviews inpatient glycemic management and the use of this order set. This lecture is available on-line for CME credit at:

- [www.leememorial.org](http://www.leememorial.org)
- Medical Staff
- Continuing Medical Education
- Online CME
- Username: doctor
- Password: doctor1

Also, the order set is available in the Epic sandbox for practice with implementing the order set.

Physician education will continue throughout the month of January and the order set will “go live” effective 2/10/15.

Please contact Sherry Ludwig, RN, BSN, CDE at 424-3120 or Sharon Krispinsky, RN, BSN, CDE at 343-0412 for assistance with any education opportunities to learn about this important quality patient care initiative.
New and Revised Orders Sets

**NEW**
3873  PEDIATRIC CRITICAL CARE EPOPROSTENOL NEBULIZATION ORDERS
3874  HIGH DOSE CYTARABINE CHEMOTHERAPY ORDERS

**REVISED**
3022  ANESTHESIA EPIDURAL ANALGESIA ORDERS
3068  ORTHOPEDIC POST-PROCEDURE ORDERS
3232  GYNECOLOGICAL POST-PROCEDURE ORDERS
3253  LABOR EPIDURAL ORDERS (ANESTHESIA)
3268  AMIODARONE (CORDARONE) INFUSION ORDERS
3269  NEONATAL IMMUNIZATION ORDERS
3363  OXYTOXIN (PITOCIN) INDUCTION/AUGMENTATION ORDERS
3369  ADULT GRANULOCYTE COLONY STIMULATING FACTOR ORDERS
3385  NEONATAL WITHDRAWAL SYNDROME ORDERS
3405  PANTOPRAZOLE (PROTONIX) INFUSION/SUBSTITUTION ORDERS
3429  NEONATAL PREVENTION OF HIV TRANSMISSION ORDERS
3436  FOLFIRI CHEMOTHERAPY ORDERS
3459  GYNECOLOGICAL PRE-PROCEDURE ORDERS
3579  ORTHOPEDIC POST-PROCEDURE HIP SURGERY ORDERS
3638  ORTHOPEDIC SHOULDER POST PROCEDURE ORDERS
3658  OBSTETRIC HEMORRHAGE PROTOCOL ORDERS
3659  PEDIATRIC ANESTHESIA POST PROCEDURE ORDERS
3663  COMPLEX WOUND MANAGEMENT ORDERS
3688  HIGH DOSE METHOTREXATE ORDERS
3698  PHYSICIAN BLOOD TRANSFUSION NEONATAL ORDERS
3780  NEONATAL WHOLE BODY HYPOTHERMIA ORDERS
3788  METHOTREXATE ORDERS FOR ECTOPIC PREGNANCY
3794  NICU WHOLE BODY HYPOTHERMIA TRANSPORT ORDERS
3800  ORTHOPEDIC POST-PROCEDURE KNEE SURGERY ORDERS
3819  ADULT HYPERKALEMIA ORDERS
3867  ADULT INPATIENT ANTIEMETIC ORDERS
3871  ADULT OUTPATIENT ANTIEMETIC ORDERS

Congratulations, Dr. Darren Miter, General Surgeon for being selected LMHS Physician of the Month. His colleagues and co-workers nominating him stated, “He is all about patient satisfaction...” “He has sensitive rapport with patients and co-workers...a wealth of knowledge while making you feel equal..” “He is a regular reminder of why I love my job!” This month we salute Dr. Miter for exemplifying the qualities of an excellent physician and we are privileged to have had Dr. Miter as a respected member of our medical staff since December, 2005.