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## Calendar of Events

- Opioid Stewardship Program - 7/8
- Medicine EPT - 7/14
- Radiology EPT - 7/14
- COVID-19 Clinical Task Force - biweekly meetings

### A MESSAGE FROM THE SAINT LUKE'S CARE CMO

## Fighting COVID-19

By the time you are reading this, our health system has been fighting the COVID-19 pandemic for over three months. I am all but certain every one of you are feeling inundated with constant information about this pandemic. Whether it is your SLHS email account, Medscape, professional society notifications, state and county health department notifications, medical journal articles, the lay press, and of course the ever-present specter of social media, we are all experiencing information overload on all things COVID. Unfortunately, despite this massive amount of information, it is clear that there are perhaps more unknowns than knowns regarding this disease.

That said, I can say with no hesitation that our health system has more than risen to the challenges presented by this pandemic. Saint Luke's has successfully combined the talents of our best people, a superb organizational structure, and a flexible responsiveness that has allowed us to triumph during the initial crisis phase of this pandemic. Part of this success has been years in the making with origins stemming from a team of physicians and nurses who traveled to the Center for Domestic Preparedness in Anniston, Alabama in 2015. The group received training aimed at helping our health system effectively respond to several types of catastrophic medical scenarios including mass casualty events, chemical or biological attacks, and pandemics. Attendee enrollment was arranged for by the Missouri Hospital Association and the SLHS team was led by (now retired) Dr. Gary Ripple. Other SLHS attendees also included Dr. Sarah Boyd and Dr. Marc Larsen. These two individuals have brought their diverse knowledge and expertise to the SLHS System Incident Command Team for the COVID-19 pandemic where their expertise and tireless work has made a huge difference in managing this crisis.

From a Saint Luke's Care perspective, an interdisciplinary team of talented and hard-working individuals have worked diligently within the COVID-19 Task Force to create, manage, and quickly update COVID-19 treatment guidelines. Inpatient and Emergency Department COVID-19 order sets, a Convalescent Plasma order set, and a Prone Therapy order set were created. This team's members included: physicians (Dr. Sarah Boyd, Dr. Majdi Hamarshi, Dr. Ryan Gallagher, Dr. Ryan McNellis, Dr. Andrew Schlachter, myself), pharmacists (Jeannette Ploetz, Nick Bennett, Leigh Ann Milburn), IT support (Dana Dutcher, Giuliana Swift, Luanna Thomas), and Saint Luke's Care team members (Cara Johnston, Megan Hibler, Josh Peterson). Inherent to this process, I would also like to highlight the success of our new "opt-out" workflow pertaining to the ED and IP COVID order sets.

# Fighting COVID-19

These order sets were utilized a combined 736 times since Go Live and there have been less than 5 providers opting out of use of the order set. This was very encouraging and gratifying to the task force as it indicated the clinicians treating COVID-19 patients embraced the Task Forces' efforts.

While, I believe that Saint Luke's Care's efforts around COVID-19 are a great success story, this process was not entirely without challenges. I would personally like to commend my colleagues for their clinical integrity of always placing the patient first, standing their ground based on clinical evidence and diplomatically handling verbal confrontations with clinicians that may have disagreed with them.

Finally, I will close with this parting thought. Although no military member ever wants to go to war, the finest compliment that one military member can give another military member is telling them: "I would go to war with you." The member giving this compliment is indicating that he or she recognizes the knowledge, skills, and competencies that the other military member possesses, but it more importantly recognizes that the military member possesses integrity and loyalty to other members of the military team and to the mission. COVID-19 has represented a war-like challenge for all of us, but I would rather face it with my SLHS team than with any other health care system. I thank all of you for your continued hard work and dedication in this challenging time, it does not go unnoticed.

Thanks for reading and I hope you have a great Saint Luke's day.

William M Gilbirds II, MD

## NEW Order Sets & Documents

### **ED COVID-19 Evaluation and Treatment Protocol, Epic 175**

#### **COVID-19 Inpatient Evaluation and Treatment Protocol, Epic 159**

- At the start of the COVID-19 pandemic, a Clinical Treatment Task Force formed with Saint Luke's Care. To support the assessment and management of PUI and COVID-19 patients, the Task Force developed a COVID-19 Evaluation and Treatment Order Set (versions for the inpatient and ED settings) based on a thorough review of the evolving literature.
- The order set content is further supported by a comprehensive Antiviral and Pharmacotherapy Recommendations document that was also developed by the Task Force and approved by the System Pharmacy and Therapeutics Committee. The Task Force has been on top of the new findings and literature and the content has been updated after a thorough multidisciplinary review.

### **COVID-19 Convalescent Plasma Orders, Epic 265**

- New order set developed to support the ordering and administration of convalescent plasma as a treatment option for patients with severe or life-threatening COVID-19
- The order set was developed by Dr. Gagan Mathur with the support of the COVID-19 Clinical Task Force
- Additional information: The Metro sites are registered in the Expanded Access to Convalescent Plasma for the Treatment of Patients with COVID-19 clinical trial. The Mayo Clinic IRB serves as the central IRB for this study.

### **Prone Orders, Epic 172**

- New Order Set developed by a team of Critical Care providers and nurses. Previously, this content existed in a Prone Medical Protocol, which still exists as a reference for nursing. It was requested to convert the content into an order set format. This request was expedited as this is a treatment option for COVID-19 patients.
- Approved by the Critical Care EPT

# NEW Order Sets & Documents

## Adult Code Blue Standing Orders, Epic 98

- This is a new standing order set that has a corresponding Adult Code Blue standing order document (embedded as a link in the order set). The content and workflow were developed by a multidisciplinary team led by Lisa Riggs and approved by the Critical Care EPT and entity Medical Executive Committees.
- This order set includes all ACLS algorithms to allow nurses to initiate life-saving care until a provider arrives. Within the Epic narrator, Rapid Response and Code Blue are now separate - with unique order sets available within each. Only Symptomatic Bradycardia is in both order sets.

## Coagulation Factor Concentrates Orders, Epic 1595

- New order set developed by Blood Bank Medical Director, Dr. Gagan Mathur.
- The order set combined the following orders:
  - Coagulation Factor VII Concentrate
  - Coagulation Factor VIII Concentrate
  - Coagulation Factor IX Concentrate
  - Von Willebrand Factor Concentrate
  - Other Factor Concentrates
- Previously, the orders were only available as single lab orders.
- Additional detail was added in the Factor orders (Dose, Route, Diagnosis, Indications, Inpatient/Outpatient)
- Added general instruction in the 'Transfuse' order: Refer to package insert for reconstitution and administration instructions, call pharmacy with questions.
  - This was reviewed by pharmacy and nursing: It was recommended by pharmacy to have a general statement since these factor products tend to have slightly different reconstitution devices/instructions and infusion rates.
- In the order set, added a link to the policy: Coagulation Factor Concentrates, PC-705

## COPD Orders, Epic 1572

- An abridged version of the COPD Admission Orders that does not include admission orders
- May be utilized after admission or layered with Initial Care Order Sets (avoids duplication)
- Creates more flexibility to use best practice content relative to workflow
- Reviewed and approved by the Critical Care EPT

## Cyclophosphamide (CYTOXAN®) Non-Oncology Orders, Epic 1632 (Therapy Plans: 1542, 1542 and 1546)

- New inpatient order set and therapy plans for the Infusion Center
- Reviewed by Dr. Ann Warner and Dr. Irme Akhtar
- Order content: To be ordered by Staff Physicians only – Rheumatology, Nephrology, and Pulmonology. For oncology indications, use chemotherapy orders.

## Emergent Reversal of Alteplase-Related Symptomatic Intracranial Hemorrhage Orders, Epic 1596

- With the Anticoagulation Reversal Task (ART) force committee, pharmacist, Joe Blunck developed an 'Emergent Reversal of Alteplase-Related Symptomatic Intracranial Hemorrhage' clinical algorithm, which was approved by the ART committee and Neurosciences EPT.
- The algorithm content was transformed into an order set.

## Endoscopy Small Bowel Video Capsule Study Orders - Inpatient Only, Epic 1587

- New order set request submitted by the GI Lab at SLEH
- Content reviewed and approved by Dr. Russell McCullough and RN, Lori Andera and distributed to the Medicine EPT and SLC Gastroenterologists.

# NEW Order Sets & Documents

## Sepsis Orders, Epic 1629

- New content as part of a recent Sepsis Re-Design Project
- The order set addresses fluid administration fallouts:
  - Choices for Actual Body Weight or Ideal Body Weight and LR or NaCl
  - Split bags for smoother administration between phases of care
  - Last bag gives stop instructions that flow to the MAR
- Includes a 'Clinical Time Zero' order
- Includes the Antibiotic Advisor orders (drives best practice from source of infection)
- The order set content was approved by a multidisciplinary Sepsis committee

## Ketamine Updates

- Ketamine was removed from the deep sedation policy
- Nursing administration and pharmacy are currently working on a system-wide ED portion

*The following has been communicated by Peter Holt, MD regarding ketamine at SLH for acute pain and palliative care:*

### **Low Dose Ketamine Infusions in Non-ICU settings for the Management of Complex Pain Patients**

Starting in Q4 2019, patients with severe or complex pain being managed by the acute pain service, the chronic pain service, or the palliative service will have another option. Low dose ketamine infusions will be able to be started and administered on the inpatient units at the Plaza location. The new policy allows these patients to receive this medication in a non-ICU setting.

Ketamine, a potent NMDA antagonist medication, has been shown to improve pain scores and decrease opioid use. In low dose infusions, side effects such as dysphoria, hallucinations, tachycardia, and hypertension are very rare, mild, and easily managed. Low dose ketamine infusions can be safer than traditional high dose opioid regimens in select patients. Ketamine infusions on non-ICU floor patients can only be ordered by the acute pain service, the chronic pain service, or the palliative service. These infusions are non-bolusable and non-titratable. The patients will be closely followed by the pain services and rounded on daily.

**If there are any questions, please contact Katherine Jessop, Co-Director of the Acute Pain Service at [kjessop@saint-lukes.org](mailto:kjessop@saint-lukes.org), or the Acute Pain Service at 816-932-4607.**

# Changes to Blood Transfusion Orders

*The following message was distributed on behalf of the Patient Blood Management Committee and Gagan Mathur, MD, MBA, System Medical Director, Transfusion Services*

A Patient Blood Management (PBM) Committee formed last year at Saint Luke's Hospital. A focus of the committee's work is to improve patient outcomes by reducing avoidable blood transfusions. To accomplish this work, the SLHS Blood Transfusion Order Sets were reviewed and updated. The changes were also reviewed by providers in the various specialties that utilize the order sets.

The primary changes are in the **Standard Blood Transfusion Orders**, which will **promote single unit RBC and Platelet transfusions for non-bleeding patients**. These changes went live on July 1st.

## **Blood transfusion order sets and intended use:**

- **Standard Blood Transfusion Orders** [Epic 75]: Routine orders for non-bleeding patients. Providers will be able to order 1 unit of RBC and/or Platelets at a time. Multiple plasma and/or cryoprecipitate units can be ordered. Iron studies and iron supplementation orders were added.
- **Acute Hemorrhage Orders** [Epic 2033]: For actively bleeding patients or on rare occasions non-bleeding patients requiring more than one unit of RBC and/or Platelets (Cardiology, Hematology, etc.). Defaulted to 4 RBC and 4 Plasma units, but can be changed based on clinical situation.
- **Massive Transfusion Protocol - SLH Only** [Epic 1376]: Patients with massive and ongoing blood loss (Trauma, CVOR, etc.).

## **Why are these changes needed?**

- SLHS has an opportunity to decrease RBC and Platelet use by up to 40% when compared to the 90<sup>th</sup> percentile benchmark.
- At SLHS, 30-40% of RBC and 10-15% of Platelet orders are for  $\geq 2$  units (*Goal: RBC <15%, Platelet <5%*). Unnecessary transfusions expose patients to avoidable risks and compromise patient safety, outcomes, and increases cost of care.
- At SLHS, 95% of patients with Hb <7g/dL are transfused. Only 20% of patients with anemia had iron studies ordered and <20% with severe iron deficiency were given iron supplementation. Diagnosis and treatment of root cause of anemia is often ignored and transfusion is used as the default treatment.

## **These order set changes will complement additional Patient Blood Management initiatives:**

- Why Give 2, When 1 Will Do?
- Encouraging adherence to transfusion guidelines.
- Promoting preoperative and inpatient anemia management.

*\*Data cited is from 2018 and 2019 (SLHS data), collected by the Patient Blood Management Committee.*

For more details or questions, please contact Gagan Mathur, MD, MBA, System Medical Director, Transfusion Services at [gmathur@saint-lukes.org](mailto:gmathur@saint-lukes.org).

# EPT Updates

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 updates.

## Questions?

Please contact SLC staff at [saintlukescare@saint-lukes.org](mailto:saintlukescare@saint-lukes.org)

## Sepsis

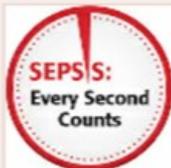
### Workflow Re-design for Sepsis rolled out in May for SLH and SLS!

- New suite of BPAs
- Nursing Standing order for Lactate – no call to the physician necessary!
- Physician and Nurse BPAs based on the Early Detection of Sepsis predictive analytics tool through Epic
- Incorporates the CRN as a critical member of the Sepsis Care Team
- Consolidation of Sepsis clinical content into 1 streamlined order set for all settings
- Clinical Time Zero – start the clock!
- Interventions checklist that follows the patient between different phases of care
- System rollout planned for late summer after data has been validated

BestPractice Advisory - Test, Attending

### Critical (1)

#### ⚠ Sepsis Alert Notification



#### Predictive Model Details

**8.6 (High)**  
Calculated 1/8/2020 13:12  
Early Detection of Sepsis Model

Factors Contributing to Score

34%	SIRS temperature criterion is met
29%	SIRS pulse criterion is met
15%	Age is 59
14%	SIRS respirations criterion is met
8%	Diagnosis of diabetes mellitus is present

No results found for: LACTATE, LACWBV

Open Order Set

Do Not Open

Sepsis Orders Set [Preview](#)

Order

Do Not Order

Sepsis Clinical Time Zero

Acknowledge Reason

Treatment in progress

Trauma

Sepsis ruled out

I am not the Attending Physician

# Saint Luke's Care Welcomes New Team Members

Saint Luke's Care would like to welcome our newest team members, Crystal Ard & Josh Peterson!

Crystal comes to Saint Luke's Care from the Saint Luke's Hospital Vascular Center, which she helped start 2.5 years ago. Prior to her time at Saint Luke's, she spent over 7 years at North Kansas City Hospital as a bedside nurse in the CVICU step-down unit, in the ambulatory setting with cardiology and vascular surgery, and as a data analyst in Process Improvement. She is board certified in Cardiac-Vascular Nursing and is a Certified Associate in Project Management.

Crystal completed her BSN from UMKC School of Nursing and is currently obtaining a Master's in Healthcare Informatics from the University of Missouri – Columbia.

Crystal lives in Kansas City, MO and enjoys camping and spending time with her family.



Josh worked bedside nursing for five years before coming to Saint Luke's Care, Four of those years were in the Neurosciences Institute at Saint Luke's Plaza on the Neuro A floor working with patients with strokes and seizures.

Josh completed his BSN degree from Nebraska Methodist College and also holds a Bachelor's of Science in Psychology from Truman State University.

Josh lives in Kansas City, MO. When not at work, he can typically be found outdoors with his dog or fiddling on a guitar.



# SHOUT OUTS

A special thank you to Dr. Majdi Hamarshi, Scott Aldridge, Jamie Buttram and Dana Dutcher for their extensive work on the insulin medical protocols/order sets.

A special thank you to system educators, Makenzie Stuck and Brooke McMillin for supporting SLC with our Enhanced Recovery After Surgery (ERAS) efforts and for developing educational videos for the nursing staff.

Huge thanks to all the champions at SLH and SLS involved in the Sepsis Re-design pilot. Your commitment and engagement has been crucial in making adjustments to prepare for a full system-roll out. Thank you – we've come a long way!