Pharmacy & Therapeutics Committee Meeting

Private Dining Room

June 10, 2021 7:00 a.m.

Agenda Items	Individual Responsible
1. Call to Order	Nathan Chamberlain, MD
2. Conflict of Interest Disclosure	Rachel Kile, PharmD
3. Approval of April 2021 Minutes	Nathan Chamberlain, MD

Next Meeting Date: August TBD at 7:00 a.m. in the Private Dining

PHARMACY AND THERAPEUTICS COMMITTEE

DATE: April 15, 2021 CALLED TO ORDER: 7:00 a.m.
LOCATION: Private Dining Room + Zoom conference call ADJOURNED: 7:33 a.m.

Members Present:		**Members Absent**:	**Guests**:
Nathan Chamberlain, MD	Karen Frank, RN-Quality	Vimal Ramjee, MD	Sierra Detwiler, PharmD
Mark Anderson, MD	Patrick Ellis, PharmD	Justin Blinn, MD	La'Travia Howard, PharmD
F. Lee Hamilton MD	Rachel Kile, PharmD	Rhonda Hatfield, RN-CNO	Kristen Liveris, PharmD
Chad Paxson, MD	Karen Babb, PharmD	Kevin Hopkins, RT	Andrea Wilkinson, PharmD
Matthew Kodsi, MD	Daniel Marsh, PharmD	Lori Hammon, RN-Quality	Proxies for Rhonda Hatfield:
Aditya Mandawat, MD	Carey Smith, RPh	Shannon Harris, RN	Petra Green, RN
	Susan Fuchs, RD		Natasha McGhee, RN
	Rodney Elliott		Rebecca Jones, RN

This meeting will be convened under the protection of the Tennessee Statute 63-6-219 and the Health Care Quality Improvement Act of 1986, Public Law 99-660. All information, case reviews, meeting minutes, statistics and correspondence are confidential and protected. Included in that protection are those that are involved in the review of the information. Any discussion of this information outside the realm of Peer Review constitutes a breach and violates the protection of the persons involved in the breach.

AGENDA ITEM	FINDINGS OR CONCLUSION	ACTION, RESPONSIBILITY	STATUS
Minutes	The February 2021 minutes were approved as submitted.	Approved	Complete
CommonSpirit Health System P&T Committee	**February & March 2021 Decision Briefs:** The medication decisions that were approved at the CommonSpirit Health System P&T committee meetings were reviewed. All new system formulary medications or changes were either consistent with existing CHI Memorial formulary decisions or are described in the "Therapeutic Interchanges and Formulary Changes" section of the minutes below, or will be reviewed at an upcoming P&T committee meeting. The only exception was the pain order set guidance which instructs removal of all opioid pain medication orders from the "mild pain" medications options within order sets. Rachel will ask IT to generate a report to identify which order sets and medications this applies to at CHI Memorial. This will be assessed with recommendations brought for review to the next P&T meeting.	Approved	In progress
Formulary Decisions & Therapeutic Interchanges	1. **CommonSpirit Health Formulary Alignment:** The February & March 2021 System P&T committee meetings reviewed additional medications for formulary alignment opportunities across the entire system. The below medications represent formulary variances from the current CHI Memorial formulary: a. BiDil (isosorbide dinitrate 20 mg plus hydralazine 37.5 mg): It was recommended to remove BiDil brand name product from local formulary and approve a therapeutic interchange to the individual components during inpatient admission. This recommendation was approved by Cardiology. b. Demeclocycline 150 mg: Utilization is very low and cost is high. It was recommended to remove from formulary and allow patients to utilize their own supply. 2. **Droperidol:** Droperidol was reintroduced to the market in Feb 2019. It was recommended to be added to formulary with more restrictive criteria than the CommonSpirit Health approved restrictions. The below restrictions were approved for CHI Memorial: ● Maximum single dose = 2.5 mg ● Indications:	Approved Approved	Complete Complete

	○ Prevention and/or treatment of nausea and vomiting associated with surgical and diagnostic procedures ○ Prior to using droperidol for off-label indications (such as nausea and vomiting, migraine and agitation), other treatments should be utilized, as clinically appropriate ○ When used for agitation: a. Utilize 2.5 mg IV or IM dose b. Use limited to scenarios of urgent potential harm to the patient and/or staff and other medications for agitation were attempted first (EHR documentation should reflect) c. Do not administer if K+ and Mg++ are abnormal (if labs available) ● Baseline Monitoring: ○ Baseline SBP >100 mmHg ○ Baseline electrocardiogram is recommended; use of droperidol is not recommended if there is evidence of QTc prolongation 3. **Lurbinectedin (Zepzelca®):** Alkylating drug FDA indicated for the treatment of adult patients with metastatic small cell lung cancer (SCLC) with disease progression on or after platinum-based chemotherapy. It was recommended to approve lurbinectedin to formulary with restrictions to the outpatient setting for FDA-approved indications or payer-approved off-label subsequent to insurance approval or prior authorization. 4. **Inpatient COVID-19 Vaccine:** Patrick provided a brief update on plans for inpatient COVID-19 vaccination since administration of J&J vaccine has been paused globally. The committee approved administration of J&J vaccine for inpatients in alignment with updated EUA guidelines, once it is deemed safe to administer by the CDC and FDA. 5. **Emergency use authorization (EUA) medications for COVID-19:** On March 5th, the committee chairman approved emergency use of bamlanivimab/etesevimab instead of bamlanivimab alone, as a pharmacist-driven therapeutic interchange for orders for bamlanivimab. The committee reviewed this decision.	Approved Approved Approved	Complete Complete Complete
Medication Use	1. **Vancomycin IV: Pharmacist-led MRSA Nasal PCR Protocol MUE Results:** Sierra Detwiler, pharmacy resident, presented the results of her MUE which demonstrated that by pharmacists automatically ordering MRSA nasal PCR tests, there was no difference seen in the primary outcome of median duration of IV vancomycin therapy for patients with pneumonia. Reeducation was identified as the primary need to ensure future success of this initiative. A plan for pharmacist and hospitalist reeducation was presented. A post-education MUE will be performed to evaluate the ongoing impact of this workflow and associated interventions.	Informational	Complete
Protocols & Orders	1. **TPN Ordering Criteria:** It was recommended to modify the existing "Consult to Pharmacy to Dose TPNs" order in the EHR to require an indication for TPN from a selection of indications which are in alignment with American Society of Parenteral and Enteral Nutrition (ASPEN) guidelines for parenteral nutrition support. The committee also recommended establishing a formal process for automatic multidisciplinary clinician review of patients discharging on a new TPN. Rachel will coordinate the development of this committee.	Approved	Complete

Medication Safety	1. **ADR Summary:** Rachel reviewed the adverse drug reaction summaries for May-July 2020 and no new trends were observed. Steroid induced hyperglycemia and leukocytosis remain the most common inpatient ADRs reported. There were zero category 3 ADRs.	Informational	Complete
Policies	1. **Central Venous Access Device- Thrombolytic Declotting for Occlusion:** This policy was updated to reflect current EHR practices. No clinical content modifications were required.	Approved	Complete

There being no further business, the meeting was adjourned at 7:33 a.m. The next P&T meeting is **June 10, 2021 at 7:00 a.m.**

Respectfully submitted,
Patrick N. Ellis, PharmD, Director of Pharmacy
Rachel Kile, PharmD, Pharmacy Clinical Manager

Approved by,
Nathan Chamberlain, MD, Chairman

CSHSYSTEMPHARMACYANDTHERAPEUTICSCOMMITTEEDECISIONBRIEF

May 2021Decisions

NOTE: Local/divisional P&T committees may implement more restrictive statuses

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
BENRALIZUMAB	Treatment of patients with severe asthma with an eosinophilic phenotype.			FASENRA	• Outpatient setting for FDA-approved indications or payer-approved off-label subsequent to insurance approval or prior authorization. • Preferred for new starts • Continuation of current therapy	Within 90 days of decision
MEPOLIZUMAB				NUCALA	• Outpatient setting for FDA-approved indications or payer-approved off-label subsequent to insurance approval or prior authorization. • Continuation of current therapy • New starts if insurance mandates use	
RESLIZUMAB			CINQAIR			
OXYMORPHONE	Treatment of moderate to severe pain			OXYMORPHONE IR	• Continuation of home therapy • New starts restricted to pain services, anesthesia, or palliative care medicine for opioid tolerant patients only to treat • Cancer pain uncontrolled by or unable to use formulary opioids • Chronic non-cancer pain unable to use formulary opioids	Within 90 days of decision
			OXYMORPHONE ER		Oxymorphone ER interchange	
BUPIVACAINE HCL	Acute postsurgical pain relief	GENERIC BUPIVACAINE INJ				Within 90 days of decision

			MARCAINE			
			SENSORCAINE			
			XARACOLL			
			POSIMIR			
			EXPAREL			

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
FERRIC MALTOL	Iron deficiency		ACCRUFER			Within 60 days of decision
DERISOMALTOSE	Iron deficiency		MONOFERRIC			Within 60 days of decision
LACTILOL	Constipation and hepatic encephalopathy		PIZENSY		Lactitol interchange	Within 60 days of decision
TENECTEPLASE	Thrombolytic treatment of acute ST elevated myocardial infarction (STEMI) and ischemic stroke	TENECTEPLASE				Within 90 days of decision

ALTEPLASE				ALTEPLASE	2 mg vial (Cathflo): • Catheter-directed fibrinolytic therapy/peripheral arterial occlusion • Catheter clearance: Utilize 0.5 to 1 mg doses for management of catheter occlusions at sites with moderate to high use of Cathflo® for catheter occlusion where sterile compounding regulations allow • Effusions and empyema for intrapleural administration 50 and 100mg vials (Activase): • Pulmonary embolism • Acute ischemic stroke	
MISOPROSTOL	Used for cervical ripening and labor induction	MISOPROSTOL				Within 120 days of decision
DINOPROSTONE				DINOPROSTONE	When mechanical methods are unavailable or mechanical methods fail	
LEVETIRACETAM	Seizures	LEVETIRACETAM VIALS				
				LEVETIRACETAM INFUSION BAGS	• Facilities with non 24-hour pharmacy coverage if needed during hours the pharmacy is closed • Facilities that do not have a Class 7 ISO sterile compounding area	Within 90 days of decision

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		

DIGOXIN IMMUNE FAB	For the treatment of patients with life threatening or potentially life threatening digoxin toxicity or overdose			DIGIFAB	• Patients with life-threatening or potentially life threatening digoxin toxicity or overdose, including: Acute ingestion of fatal doses of digoxin • Digoxin >10 mg in adults • Digoxin level >10 ng/mL post-distribution (generally 6-8 hours post-dose) • Chronic ingestions causing steady-state serum digoxin concentrations > 6 ng/mL in adults • Manifestations of life-threatening toxicity (at supratherapeutic digoxin level > 2 ng/mL post distribution- 6 to 8 hours post-dose) • Ventricular arrhythmias (multifocal ventricular bigeminy, ventricular tachycardia, AV dissociation • Bradycardia (< 50 bpm) unresponsive after atropine 1 mg IV with hyperkalemia > 5.5 mEq/L • Second- or third-degree heart block • Serum potassium levels > 5.5 mEq/L in patients with rapidly progressive signs/symptoms of digoxin toxicity • Life threatening ingestions of naturally occurring Cardiac Glycosides (Oleander) • Ventricular arrhythmias (multifocal ventricular bigeminy, ventricular tachycardia, AV dissociation • Bradycardia (< 50 bpm) unresponsive after atropine 1 mg IV with hyperkalemia > 5.5 mEq/L • Second- or third-degree heart block **Dosing Guidelines:** • For acute and chronic digoxin intoxication in adults, administer 40-80 mg (1-2 vials) DigiFab® at a time and repeat after 60 min if patient is still symptomatic, sooner if patient	Within 90 days of decision

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
					is clinically unstable. In general, 40 – 120 mg (1 – 3 vials) should be sufficient. • In the event of cardiac arrest or other life threatening signs or symptoms, a larger neutralizing dose (10-20 vials = 400-800 mg) of digoxin-Fab is indicated.	
SUGAMMADEX SODIUM	Reversal of neuromuscular blockade induced by rocuronium and vecuronium			SUGAMMADEX 200MG/2ML VIAL	See comprehensive decision brief for final P&T restrictions	Within 90 days of decision
			SUGAMMADEX 500MG/5ML VIAL			
VENTOCLAX	For the treatment of chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL)			VENTOCLAX	Inpatient Use: • First cycle or for admitted patients and next cycle is needed (unable to defer to outpatient administration) • Restricted to hematology oncology service • CLL, chronic lymphocytic leukemia • SLL, small lymphocytic lymphoma • AML, acute myelogenous leukemia • Bridge until home medication supply can be attained Outpatient Use: • FDA approved indication Payer-approved off-label indications subsequent to insurance approval or prior authorization	Within 60 days of decision

ADENOSINE	Pharmacologic stress testing in the inpatient and outpatient settings			ADENOSINE	Utilize when contraindications for exercise testing are present and no contraindications for adenosine are present **Contraindications for exercise testing** • Acute myocardial infarction with 2 days • Unstable angina not previously stabilized by medical therapy • Uncontrolled cardiac arrhythmias causing symptoms or hemodynamic compromise • Symptomatic severe aortic stenosis • Uncontrolled symptomatic heart failure • Acute pulmonary embolus or pulmonary infarction • Acute myocarditis or pericarditis • Acute aortic dissection • Left main coronary stenosis • Moderate stenotic valvular heart disease • Electrolyte abnormalities • High-degree atrioventricular block • Moderate to severe systemic hypertension (resting systolic blood pressure >180 mmHg) • Tachyarrhythmias or bradyarrhythmias • Hypertrophic cardiomyopathy and other forms of outflow tract obstruction • Mental or physical impairment leading to inability to exercise adequately • Contraindications for adenosine • Known reactive airway disease • Recent caffeine intake • First-, second- or third-degree AV heart block • Sinus node disease, such as sick sinus syndrome • Symptomatic bradycardia • Known hypersensitivity to adenosine • Hypotension (SBP <100 mmHg) • Hypertension (SBP >200 mmHg) • Recent oral dipyridamole use	Within 120 days of decision

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
REGADENOSON	Used for pharmacologic stress testing in the inpatient and outpatient settings			REGADENOSON	Utilize when contraindications for exercise testing are present and no contraindications for regadenoson **Contraindications for exercise testing** • Acute myocardial infarction with 2 days • Unstable angina not previously stabilized by medical therapy • Uncontrolled cardiac arrhythmias causing symptoms or hemodynamic compromise • Symptomatic severe aortic stenosis • Uncontrolled symptomatic heart failure • Acute pulmonary embolus or pulmonary infarction • Acute myocarditis or pericarditis • Acute aortic dissection • Left main coronary stenosis • Moderate stenotic valvular heart disease • Electrolyte abnormalities • Tachyarrhythmias or bradyarrhythmias • Hypertrophic cardiomyopathy and other forms of outflow tract obstruction • Mental or physical impairment leading to inability to exercise adequately • High-degree atrioventricular block • Moderate to severe systemic hypertension (resting systolic blood pressure >180 mmHg) **Contraindications and warnings for regadenoson** • Active wheezing or bronchoconstriction Signs or symptoms of myocardial ischemia • SA nodal block • First-, second- or third-degree AV heart block • Atrial fibrillation/flutter • Hypotension (SBP <100 mmHg) • Hypertension (SBP >200 mmHg)	Within 120 days of decision

					• Known hypersensitivity to regadenoson • Seizure • Stroke	

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
DOBUTAMINE	Pharmacologic stress testing in the inpatient and outpatient settings			DOBUTAMINE	May utilize if exercise, adenosine or regadenoson cannot be used or if patient is actively wheezing and no contraindications to dobutamine present **Contraindications and warnings for dobutamine** • Idiopathic hypertrophic subaortic stenosis • Known hypersensitivity to dobutamine • Hypertension (SBP >200 mmHg) • Ventricular ectopic activity • Beta blocker therapy	Within 120 days of decision
PANTOPRAZOLE	Used to treat GERD, peptic ulcers, and H. pylori			PANTOPRAZOLE ORAL TAB AND INJ	See comprehensive decision brief for final P&T restrictions	Within 90 days of decision
			PANTOPRAZOLE PACKETS AND SUSPENSION		PPI Interchange	
LANSOPRAZOLE				LANSOPRAZOLE SUSPENSION	See comprehensive decision brief for final P&T restrictions	
			LANSOPRAZOLE TAB, CAP, ODT		PPI Interchange	

OMEPRAZOLE				OMEPRAZOLE SUSPENSION	See comprehensive decision brief for final P&T restrictions	
			OMEPRAZOLE TAB, CAP, PKTS		PPI Interchange	
ESOMEPRAZOLE			ESOMEPRAZOLE		PPI Interchange	
DEXLANSOPRAZOLE			DEXLANSOP RAZ OLE		PPI Interchange	
RABEPRAZOLE			RABEPRAZOLE		PPI Interchange	

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
DENOSUMAB	Utilized to prevent skeletal-related events (SREs)			DENOSUMAB (XGEVA)	• To delay skeletal related events (SRE's) due to bone metastases from Castration-Resistant Prostate Cancer (CRPC) and breast cancer in the outpatient setting. • To delay SRE's due to bone metastases from cancers other than CRPC and breast cancer when bisphosphonate therapy has been tried and failed, is contraindicated, or the patient is intolerant to in the outpatient setting. • For the treatment of hypercalcemia of malignancy when bisphosphonate therapy has been tried and failed or is contraindicated in the outpatient setting	Within 90 days of decision
ZOLLEDRONIC ACID		ZOLEDRONIC ACID (ZOMETA)				

FOSAPREPITANT	Prevention of post operative nausea/vomiting (PONV)			FOSAPREPITANT	PONV: Patients undergoing bariatric surgery at high risk of post-op nausea and vomiting Must be used in combination with 5HT3 antagonist and steroid as part of multimodal approach in high risk patients for prevention of PONV CINV: Based on CINV risk: Use in combination with 5HT3 antagonist + dexamethasone with high risk for CINV and with moderate risk to improve coverage for experienced delayed CINV	Within 90 days of decision
APREPITANT			APREPITANT 40MG, 80MG, 125 MG			
L. ACIDOPHILUS/B. ANIMALIS/FOS	Probiotic			FLORATUMMYS	Neonates and breast fed/formula fed infants	Within 90 days of decision
LACTOBACILLUS REUTERI				GERBER SOOTHE		
B. INFANTIS			EVIVO			

Medication Name	Medication Used For	Formulary Decision			Comments/Restrictions/Therapeutic Interchange	Timeline to Implementation
		Formulary Unrestricted	NonFormulary	Formulary Restricted		
B. LACTIS/B. INFANTIS/S. THERMOPHILUS			SIMILAC PROBIOTIC TRI BLEND			

Medication	FDA Approval Date	Indication	CommonSpirit Health Formulary Status
berotralstat	12/4/2020	To treat patients with hereditary angioedema	NonFormulary
naxitamab-gqgk	11/25/2020	To treat high-risk refractory or relapsed neuroblastoma	NonFormulary
lumasiran	11/23/2020	To treat hyperoxaluria type 1	NonFormulary
lonafarnib	11/20/2020	To treat rare conditions related to premature aging	NonFormulary
atoltivimab, maftivimab, and odesivimab-ebgn	10/14/2020	To treat ebola virus	NonFormulary
pralsetinib	9/4/2020	To treat non-small lung cancer	NonFormulary
ansuvimab-zykl	12/21/2020	To treat ebola	NonFormulary
relugolix	12/18/2020	To treat advanced prostate cancer	NonFormulary
margetuximab (anti-HER2 mAb	12/16/2020	To treat HER2+ breast cancer	NonFormulary
trilacicilib	2/12/2021	To mitigate chemotherapy-induced myelosuppression in adult patients with small cell lung cancer	NonFormulary
evinacumab-dgnb	2/11/2021	For the treatment of homozygous familial hypercholesterolemia	NonFormulary
umbralisib	2/5/2021	For the treatment of certain patients with marginal zone lymphoma and follicular lymphoma	NonFormulary
tepotinib	2/3/2021	To treat non-small cell lung cancer	NonFormulary
voclosporin	1/22/2021	To treat lupus nephritis	NonFormulary
tirbanibulin	12/14/2020	To treat actinic Keratosis of the face or scalp	NonFormulary
setmelanotide	11/25/2020	To treat obesity and the control of hunger associated with pro opiomelanocortin deficiency, a rare disorder that causes severe obesity that begins at an early age	NonFormulary

FORMULARY ALIGNMENT

Critical Care and Cardiology	CommonSpirit Health Formulary Status

Epoprostenol IV / inhaled	Formulary restricted: Veletri (and generic) 1. Patients with pulmonary arterial hypertension (PAH).

	2. Restricted to Cardiology, Cardiothoracic surgery, Pulmonary, Trauma, Intensivist, Anesthesiologists for initiation 3. For continuation of home therapy, home supply to be used first if/when available 4. Patients with severe ARDS (inhaled only) Nonformulary: Flolan

Gastrointestinal	CommonSpirit Health Formulary Status
L. ACIDOPHILUS,CASEI,RHAMNOSUS	NonFormulary
L. ACIDOPHILUS/L.BULGARICUS	NonFormulary
L. ACIDOPHILUS/LACTOBAC SPOR	NonFormulary
L. ACIDOPHILUS/PECTIN, CITRUS	NonFormulary
L. RHAMNOSUS GG/INULIN	NonFormulary
LACTOBACIL 2-S.THERMO-BIFIDO 1	NonFormulary
LACTOBACILLUS ACIDOPHILUS/PECT	NonFormulary
L. RHAMNOSUS GG	Formulary Unrestricted
SACCHAROMYCES BOULARDII	Formulary Unrestricted

Infectious Disease	CommonSpirit Health Formulary Status

Fidaxomicin (Dificid)	Restricted to ID providers and/or via AMS/ID pharmacists or pharmacy manager approval. Usage restricted to patients with ≥1 recurrence within 2 months of the last Clostridioides difficile infection. May be considered for first occurrence on a case by case basis if the patient is very high risk for recurrence (2 or more of: >65 y/o, concurrent systemic antibiotics that cannot DC, chronic PPI that cannot DC, multiple co-morbidities, immunocompromised host, severe disease upon presentation), or if the patient has not improved on first line therapy by treatment day 7

General Medicine	CommonSpirit Health Formulary Status
Premarin cream interchange	NonFormulary Premarin cream interchange

THERAPEUTIC INTERCHANGES

Oxymorphone

Facilities may use pre-existing therapeutic interchanges if preferred.

ORDERED	PROVIDED
Oxymorphone ER capsules Total Daily ER Dose = ER dose x 2 doses	Oxymorphone IR tablets ER Dose given Q12H / 4 doses = IR Dose Q6H

Lactitol (Pizensy®)

ORDERED	PROVIDED
Lactitol 20 g	Lactulose 20 g

Proton pump inhibitors

ORDERED						PROVIDED
Medication	Dexlansoprazole (Dexilant)	Esomeprazole (Nexium)	Lansoprazole (Prevacid)	Omeprazole (Prilosec/ Zegerid)	Rabeprazole (Aciphex)	**Pantoprazole (Protonix)**
Oral	30 mg daily	20 mg daily	15 mg daily	10 mg daily	n/a	**20 mg daily**
Oral	60 mg daily	40 mg daily	30 mg daily	20 mg, 40 mg daily	20 mg daily	**40 mg daily**
Oral	60mg BID	40 mg BID	30 mg BID	20 mg BID	20 mg BID	**40 mg BID**
IV	--	20mg or 40mg daily	--	--	--	**40 mg daily**
IV	--	40 mg BID	--	--	--	**40 mg BID**

Premarin cream

ORDERED	PROVIDED
Premarin cream	Generic estradiol cream at same dose and frequency

FORMULARY UPDATE

THERAPEUTIC CLASS: Fibrinolytic

GENERIC NAME: Alteplase

PROPRIETARY NAME: Activase® 50 or 100 mg vials

BACKGROUND/RATIONALE:

The December 2020 CHI Memorial P&T committee meeting reviewed and approved replacing Activase® (alteplase) with TNKase® (tenecteplase) for the treatment of acute ischemic stroke at CHI Memorial hospitals.

The May 2021 CommonSpirit Health System P&T committee meeting voted in favor of using tenecteplase for acute ischemic stroke for facilities that wish to do so per local formulary approval processes. During that meeting, the committee also approved the following formulary restriction criteria for alteplase:

50 and 100mg alteplase vials (Activase®) are formulary, restricted to the following indications: pulmonary embolism and acute ischemic stroke.

RECOMMENDATION/DISCUSSION:
It is recommended to revise the formulary status for Activase® 50 mg or 100 mg vials to the following restricted indications:

1. Pulmonary embolism
2. Acute ischemic stroke when alteplase is required for clinical trial participation only

Local EHR, including order set(s), build will reflect the above formulary recommendations.

Erythropoietin Agents- Therapeutic Interchange

BACKGROUND:
The below therapeutic interchange from darbepoetin alfa (Aranesp®) to epoetin alfa-epbx (Retacrit®) was previously approved by the CommonSpirit Health System P&T committee in 2020. For CHI Memorial, this interchange impacts patients who are prescribed darbepoetin alfa as an outpatient/clinic administered medication and a dose is required to be administered during their inpatient admission in order to ensure clinical improvement and allow for safe discharge. Retacrit is the current formulary product for epoetin alfa.
Our oncology providers have reviewed and approved this therapeutic interchange.

Long Acting ESA Interchange

Medication Ordered		Formulary Medication Equivalent Dose and Frequency		
Darbepoetin alfa	10mcg/week or less	Epoetin alfa-epbx	2,000 units	SubQ once a week
	10.5 to 24.5 mcg/week		4,000 units	SubQ once a week
	25 to 39.5 mcg/week		4,000 units	SubQ twice a week
	25 to 39.5 mcg/week		8.000 units	SubQ once a week
	40 to 59.5 mcg/week		10,000 units	SubQ once a week
	60 to 99.5 mcg/week		20,000 units	SubQ once a week
	100 mcg/week or more		20,000 units	SubQ three times a week

PHARMACOECONOMICS/COST:

Product	Example cost per dose		
Aranesp® (darbepoetin alfa)	10 mcg = $34.73	25 mcg = $86.83	40 mcg = $138.93
Retacrit® (epoetin alfa-epbx)	2,000 units = $16.45	8,000 units = $65.81	10,000 units = $82.26

RECOMMENDATION/DISCUSSION:
It is recommended to approve the above interchange table as a pharmacist-driven automatic therapeutic interchange from darbepoetin alfa (Aranesp®) to epoetin alfa-epbx (Retacrit®), or to the most cost effective epoetin alfa biosimilar agent on formulary. Inpatient orders for darbepoetin alfa for interchange to the epoetin alfa biosimilar should be limited to those scenarios in which the administration of the medication cannot be deferred to post-discharge.

Review of Order Sets with Opioid Analgesics for Mild Pain

BACKGROUND:

At the February 2021 meeting, the CommonSpirit Health System P&T committee approved system wide order set guidance to remove opioid medication orders for mild pain scale (1-3). At our local April 2021 P&T meeting, the committee recommended a review of order sets which include orders for opioid medications for mild pain scale (1-3).

OPIOIDS FOR MILD PAIN ON ORDER SETS:

Table 1

Opioid for Mild Pain (1-3)	Current Alternative(s) for Mild Pain (1-3) on Order Set	Order Set(s)
Tramadol 50 mg tab	Tylenol 650 mg every 6 hours PRN	MCT ED MD ADMISSION/BRIDGING [160000500] MCT IP ANE CONTINUOUS NERVE PLEXUS CATHETER POST-OP [3040001208] MCT IP BREAST SUR POST-OP [3040001125] MCT IP CAR CAROTID ARTERIOGRAM POST-OP [3040001221] MCT IP CAR TRANSCATHETER VALVE REPLACEMENT (TAVR) POST-OP [3040001142] MCT IP CC CRITICAL CARE ADMISSION [3040001000] MCT IP GEN DIABETIC KETOACIDOSIS (DKA) [30400001450] MCT IP GEN GENERAL ADULT ADMISSION [3040000750] MCT IP GEN IMMEDIATE POST DIALYSIS ACCESS [3040001109] MCT IP GEN PNEUMONIA [3040004913] MCT IP GEN URINARY TRACT INFECTION [3040004924] MCT IP GI BLEED [3040001135] MCT IP GYN GYNECOLOGY SURGERY OUTPATIENT POST-OP [3040001270] MCT IP GYN GYNECOLOGY SURGERY POST-OP [3040001266] MCT IP HSPC HOSPICE ADMISSION [3040001119] MCT IP NEU STROKE NON TPA & TIA ADMISSION [3040000761] MCT IP ORT SURGERY PREOP SPINE SURGERY [3040004925] MCT IP PATH BONE MARROW ASPIRATION POST-OP [3040001295] MCT IP PLS PLASTIC SURGERY POST-OP [3040001200] MCT IP PUL INTERVENTIONAL PULMONOLOGY PLEURAL POST-OP [3040001190] MCT IP RAD ABSCESS AND CYST DRAINAGE POST-OP [3040001231] MCT IP RAD CT GUIDED BIOPSY POST-OP [3040001234] MCT IP RAD MICROWAVE ABLATION LIVER/RENAL POST-OP [3040001267] MCT IP RAD MRI GUIDED PROSTATE BIOPSY POST-OP [3040001235] MCT IP RAD TPA DECLOT INFUSION FOR PORT-A-CATH POST-OP [3040001273] MCT IP SUR GENERAL SURGERY POST-OP [3040007103] MCT IP URO LITHOTRIPSY POST-OP [3040001116] MCT IP URO POST-OP [3040004915] MCT IP VAS ABDOMINAL AORTIC SURGERY POST-OP [3040004931] MCT IP ANE ANESTHESIA ORDERS PHASE II [3040001211] MCT IP ANE PERIPHERAL NERVE CATHETER POST-OP [3040001188] MCT IP CAR ACUTE CORONARY SYNDROME / NON-STEMI [3040001002] MCT IP CAR ATRIAL FIBRILLATION CDU [3040001006] MCT IP CAR CARDIAC CATH LAB POST-OP [3040001004] MCT IP CAR CARDIOLOGY ADMISSION [3040001001] MCT IP CAR CHEST PAIN CPOU [3040001120] MCT IP CAR ELECTROPHYSIOLOGY (EP) STUDY WITH / WITHOUT ABLATION POST-OP [3040001101] MCT IP CAR ICD (DEFIBRILLATOR) / SICD IMPLANT POST-OP [3040001102] MCT IP CAR ICD (DEFIBRILLATOR) TESTING POST-OP [3040001100] MCT IP CAR IMPLANTABLE ECG (LOOP) RECORDER POST-OP [3040001111] MCT IP CAR LEFT ATRIAL APPENDAGE CLOSURE POST-OP [3040001110] MCT IP CAR MITRAL CLIP POST-OP [3040001124] MCT IP CAR MITRAL CLIP PRE-OP [3040001239] MCT IP CAR PERIPHERAL VASCULAR (INTERVENTION AND DIAGNOSTIC) POST-OP [3040001216] MCT IP CAR PERIPHERAL VASCULAR ANGIOPLASTY STENT ORDERS POST-OP [3040004941] MCT IP CAR PERMANENT PACEMAKER INSERTION / EVENT RECORDER REMOVAL POST-OP [3040001265] MCT IP CAR TAVR / MITRACLIP CSSU POST-OP [3040001115] MCT IP CTS CARDIAC SURGERY POST-OP [3040001240] MCT IP CTS CARDIAC SURGERY PRE-OP [3040001182] MCT IP CTS THORACOTOMY / THORACOSCOPY PRE-OP [3040001217]

		MCT IP CTS THORACOTOMY TRANSFER [3040001262] MCT IP CTS TRANSCATHETER VALVE REPLACEMENT (TAVR) PRE-OP [3040001229] MCT IP ORT SURGERY PREOP HIP FRACTURE [3040004926] MCT IP RAD ARTERIOGRAM / VENOGRAM POST-OP [3040001255] MCT IP RAD BILIARY/NEPHROSTOMY TUBE CHANGE POST-OP [3040001256] MCT IP RAD BILIARY/NEPHROSTOMY TUBE CHANGES PRE-OP (3040001250) MCT IP RAD BILIARY/NEPHROSTOMY TUBE PLACEMENT POST-OP (3040001257) MCT IP RAD BILIARY/NEPHROSTOMY TUBE PLACEMENT PRE-OP (3040001251) MCT IP RAD CHEMOEMBOLIZATION POST-OP (3040001258) MCT IP RAD KYPHOPLASTY POST-OP (3040001254) MCT IP RAD MICROWAVE ABLATION LUNG POST-OP (3040001244) MCT IP RAD PLEURAL DRAINAGE CATHETER INSERTION POST-OP (3040001247) MCT IP RAD SPECIAL PROCEDURES POST-OP (3040001245) MCT IP RAD TPA STANDING ORDERS POST-OP (3040001271) MCT IP VAS CAROTID ENDARTERECTOMY POST-OP (3040001263) MCT IP CTS THORACOTOMY / THORACOSCOPY POST-OP [3040001218] MCT IP ORT ERAS SURGERY POST-OP [3040004916] MCT STANDARD POST ANESTHESIA ORDER SET [1455]
Tramadol 50 mg tab	No alt for mild pain; Tylenol 1000 mg q 6 hours scheduled for mod pain (4-6)	MCT IP SUR COLORECTAL SURGERY POST-OP [3040004935]
LORTAB solution 7.5 mg-325 mg/15 mL	Gabapentin 300 or 600 mg BID scheduled; no additional PRN mild pain orders	MCT IP BAR SUR POST-OP [3040001141]

TRAMADOL 50 MG UTILIZATION BY ADMINISTERED DOSES FROM ORDER SETS:
(6 months, Nov 2020-April 2021)- Table 2

Row Labels	Every 12 hours PRN	Every 4 hours PRN	Every 6 hours PRN	Grand Total
Administration	**10**	**1**	**1134**	**1145**
Adult General Admission MCT	**9**		**388**	**397**
mild pain (1-3)	9		383	392
moderate pain (4-6),mild pain (1-3)			5	5
Colorectal Surgery Post-Op MCT			**66**	**66**
mild pain (1-3)			66	66
Diabetic Ketoacidosis (DKA) MCT			**5**	**5**
mild pain (1-3)			5	5
General Surgery Post-Op MCT			**8**	**8**
mild pain (1-3)			8	8
Gynecology Major Surgery Post-Op MCT			**24**	**24**
mild pain (1-3)			24	24
Gynecology Surgery Outpatient Post-Op MCT			**5**	**5**
mild pain (1-3)			5	5
Hip Fracture Pre-Op MCT			**1**	**1**
mild pain (1-3)			1	1
MCT Standard Post Anesthesia Order Set			**443**	**443**
mild pain (1-3)			443	443
Orthopedic ERAS Surgery Post-Op MCT		**1**	**180**	**181**
mild pain (1-3)		1	180	181
Spine Surgery Pre-Op MCT			**5**	**5**
mild pain (1-3)			5	5
Stroke & TIA Admission MCT	**1**		**8**	**9**
mild pain (1-3)	1		8	9
Urinary Tract Infection (UTI) MCT			**1**	**1**
mild pain (1-3)			1	1
Grand Total	**10**	**1**	**1134**	**1145**

DISCUSSION/RECOMMENDATIONS:

1. *Tramadol 50 mg* PO every 6 hours PRN mild pain is the most common opioid order included on 68 order sets for as needed treatment of mild pain
    a. Of orders administered to patients, the following order sets generated the majority of documented administrations:
        i. 39% - Standard Post Anesthesia Order Set
            1. *Note- Only 9% of administrations originated from the Post-Op area
        ii. 34% - Adult General Admission
        iii. 16% - Orthopedic ERAS Surgery Post-Op
        iv. 6% - Colorectal Surgery Post-Op
    b. **Recommendation(s)**:
        i. Remove tramadol from the above order sets which also have acetaminophen as a mild pain option currently available (see Table 1 above)
            1. Exception- Standard Post Anesthesia Order Set. Defer to anesthesiologists' recommendation for guidance on preferred mild pain treatment option(s) (9%)
            2. Exception- Colorectal Surgery Post-Op. Defer to colorectal surgeons for ERAS guidance on preferred mild pain treatment option(s) (6%). ERAS meeting this Friday a.m.
2. *Lortab solution 7.5 mg-325 mg/15 mL* q4 PRN mild pain on the Bariatric Surgery Pre Op order set
    a. **Recommendation:**
        i. *Approved by Dr. Jaime Ponce*: Remove the pre-checked Lortab solution 7.5 mg-325 mg/15 mL and replace it with a pre-checked Tylenol solution 325 or 650 mg every 6 hours PO PRN as an alternative option for mild pain

POLICY

Title: **CARDIAC ARREST POST CARDIAC SURGERY**			
		Page 1 of 3	
Policy Number: ICU-		Date Last Reviewed/Revised: 5/2021	Valid Until: 5/2022
Campus: ☒ CHI Memorial Glenwood ☐ CHI Memorial Hixson ☐ CHI Memorial Georgia *Check all that apply*			
Department(s) Affected: CVICU		Review Period: every 1 year	

OUTCOME:
To provide an evidence-based resuscitation protocol to meet the needs of patients immediately after cardiac surgery (within the first 24hrs post-op in CVICU)

PERSONNEL: Only applicable to CVICU nurse

POLICY:
Cardiac arrest post cardiac surgery protocol will be utilized in CVICU within the first 24hrs post cardiac surgery.

PROCESS & PROCEDURES:

1. Omit central pulse check if all pressure waveforms (arterial line, pulmonary artery line, CVP, pulse oximeter and ETCO2) flat line at the same time. Verify the cables have not become disconnected.
2. Defibrillator pads will be stocked on top of crash cart. RN will apply pads as soon as ventricular fibrillation or pulseless ventricular tachycardia is detected, **while other staff will bring chest cart and ultrasound. (Sternotomy cart and ultrasound stay outside patient room until requested by MD).**
3. Second rescuer will bag patient per standard ACLS guidelines. Additional staff will bring ultrasound to outside of room for MD to use to rule out pneumothorax. Patient should NOT be intubated immediately during ACLS unless patient is not getting sufficient ventilations from bag valve mask, or if the suspected reason for the arrest is respiratory in nature.
4. As with ACLS, high quality chest compressions are essential to successful resuscitation of a post cardiac surgery patient who experiences cardiac arrest

POST CARDIAC ARREST ALGORITHM DETAILS:

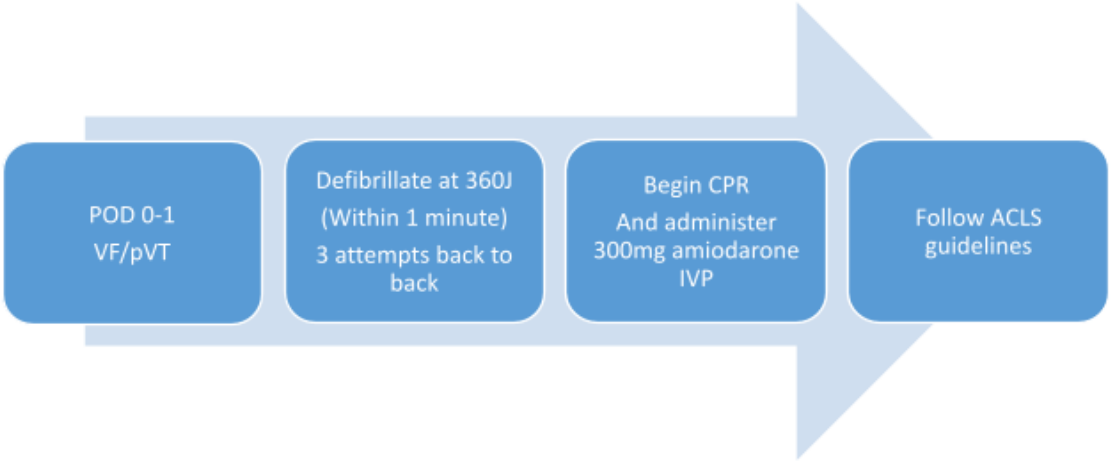
1. Ventricular Fibrillation (VF) / Pulseless Ventricular Tachycardia (pVT) Arrest
    a. Deliver 3 shocks in a row within one minute of identification of VF or pVT before initiating CPR.
    b. Shock at max joules with each defibrillation attempt.
    c. After 3 attempts to defibrillate and VF/pVT persist, initiate CPR and give 300mg iv push amiodarone
    d. After 3 stacked shocks and amiodarone administration, follow standard ACLS guidelines.

2. Asystole/ Severe Bradycardia
    a. Attempt pacing with epicardial wire(s) within one minute prior to initiating CPR.
        i. Connect ventricular wires first using "emergency"/ DOO mode.
        ii. Epicardial wires will be kept connected to pacing cables until after the patient has gotten out of bed to the chair for the first time.
        iii. The pacer will be kept at the bedside of the patient for the first 24 hours post-operatively or until the patient is transferred out of CVICU (if transfer occurs prior to 24 hours post op.)
    b. If pacing is not successful to treat asystole, begin ACLS per protocol and bring supplies to bedside. (crash cart, sternotomy cart, and ultrasound)
    c. If pacing is successful, discuss appropriate pacer mode with MD after patient has sufficient blood pressure to tolerate pacer adjustments.

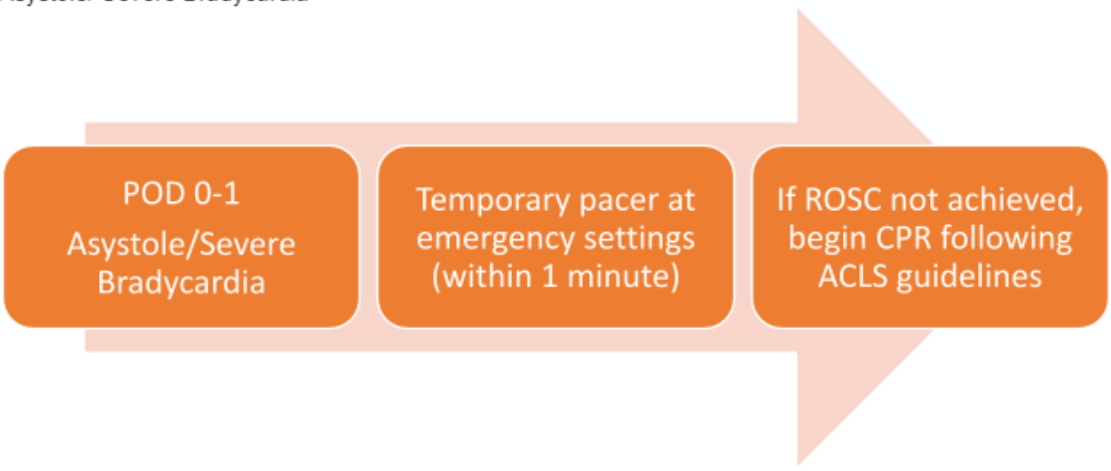
3. Pulseless Electrical Activity (PEA)
    a. If patient is being paced by temporary external pacer, pause/turn off pacer to check for underlying VF and treat according to #2 above.
    b. If true PEA, begin CPR following ACLS guidelines.

POST CARDIAC ARREST ALGORITHMS:

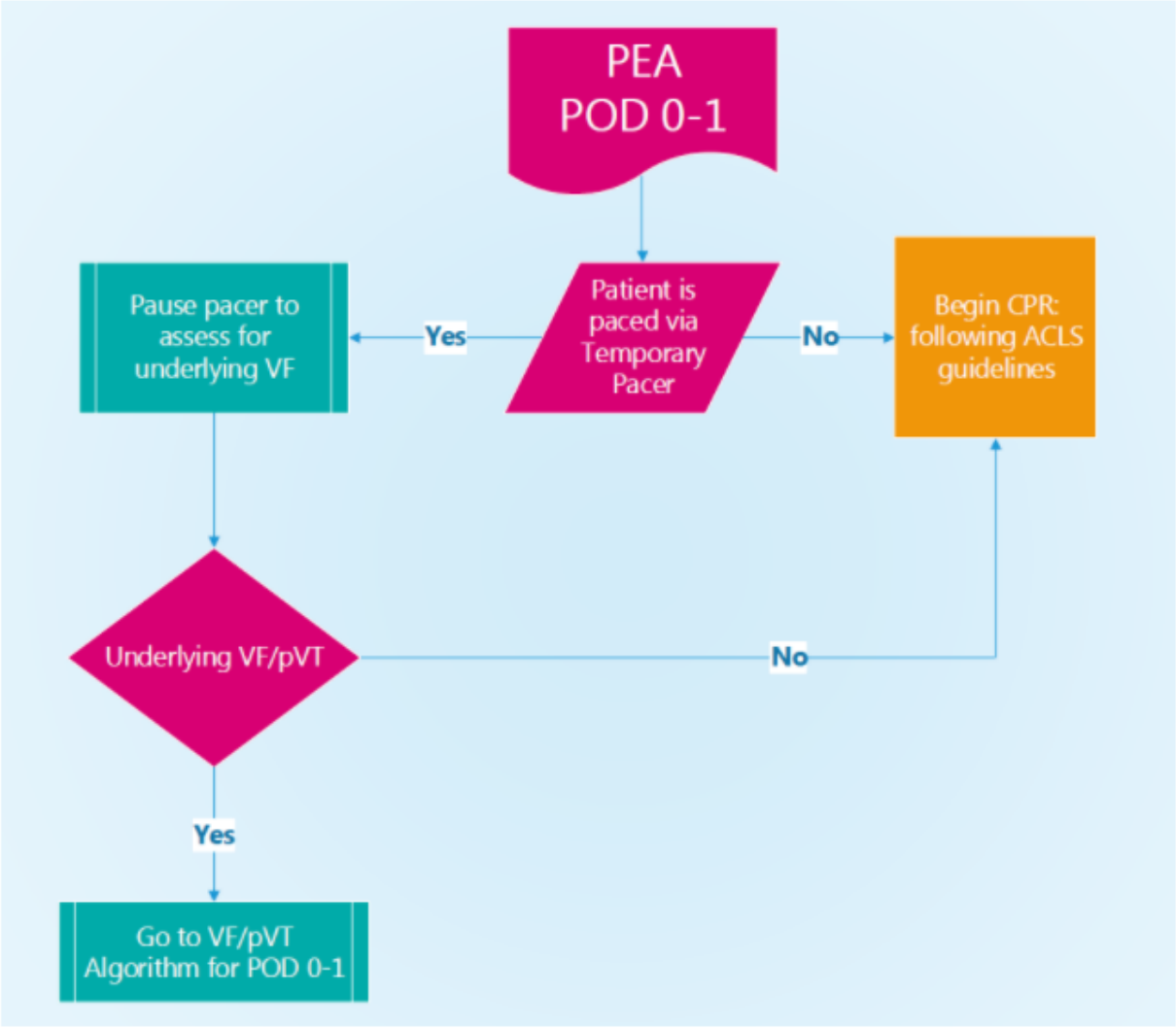
1. Ventricular Fibrillation (VF) / Pulseless Ventricular Tachycardia (pVT)



2. Asystole/ Severe Bradycardia



3. Pulseless Electrical Activity (PEA)



Key Contact: Critical Care Educator
Approved/Reviewed by: CVAA Meeting, VP of Cardiac Service, CVICU Manager, CNO, P&T Committee, Medical Staff/ VP of Medical Affairs, Intensivist meeting
Attachment(s):
Related Forms:
Date First Effective & Revision/Review dates: 5/21

IV Neostigmine EHR Order Panel

BACKGROUND:

Orders for inpatient administration of neostigmine via IV route for colonic pseudo-obstruction are uncommon but do occur for patients in the ICU and non-ICU units. The below ordering panel is a proposed EHR build from another CHI Epic facility. The orders ensure adequate patient monitoring for the administration of neostigmine IV in the absence of concurrent glycopyrrolate use (e.g. surgery) due to risk of bradycardia. The orders have been reviewed and approved by local nursing, intensivist, and anesthesiologist leadership.

Neostigmine for colonic pseudo-obstruction (Ogilvie syndrome)

Neostigmine should not be used in the presence of AV conduction disturbances, sinus bradycardia (HR < 60), hypotension (SBP < 90), elevated SCr (3 mg/dL), colon cancer or partial colon resection, GI bleeding, active bronchospasm, or if there are concerns for intestinal perforation.

☒ **Neostigmine IV**

1) One order option for neostigmine intravenous syringe- *not pre-selected*

    a. Dose: include buttons for 1 mg, 1.5 mg, and 2 mg but *none should be pre-selected*

    b. Frequency: once (expires in 36 hours)

    c. Admin. Inst: ACLS-trained RN to administer via SLOW IV push over 5 minutes and remain at bedside for 15-30 minutes following completion. Patient must be on continuous cardiac monitoring during administration and for 60 minutes afterward. Ensure atropine is available at the bedside to treat symptomatic neostigmine-induced bradycardia.

2) One order option for neostigmine IVPB-*not pre-selected*

    a. New ERX to be built from sodium chloride 0.9% 100 mL IVPB + neostigmine intravenous syringe

    b. Dose: include buttons for 1 mg, 1.5 mg, and 2 mg but *none should be pre-selected*

    c. Frequency: once (expires in 36 hours)

    d. Administer over: include buttons for 10 minutes, 30 minutes, and 60 minutes but *none should be pre-selected*

    e. Admin. Inst: ACLS-trained RN to administer and remain at bedside for duration of infusion and 15-30 minutes following completion. Patient must be on continuous cardiac monitoring during administration and for 60 minutes afterward. Ensure atropine is available at the bedside to treat symptomatic neostigmine-induced bradycardia.

☒ **Atropine** 0.1 mg/mL IV syringe 0.5 mg

1) Pre-selected dose: 1 mg

2) Frequency: as needed

3) PRN indication: bradycardia, during neostigmine administration

4) Duration: 4 hours starting today

5) Admin. Inst: Keep at bedside during neostigmine administration. May repeat 1 time. Notify the physician if dose is required.

☒ **Cardiac monitoring**

1) Frequency: cardiac reason
2) Duration: For 1 hours starting today
3) Telemetry indications: other
4) Comments: for duration of neostigmine administration and 1 hour following administration

☒ **Nursing communication**

1) Frequency: once
2) Duration: for 2 hours starting today
3) Comments: During administration of neostigmine keep patient supine on bedpan with atropine at bedside. Continuous clinical assessment for 15 to 30 minutes during and after administration. Monitor patient for bradycardia, hypotension, asystole, seizures, restlessness, tremor, bronchoconstriction, nausea, vomiting, salivation, diarrhea, sweating, and abdominal cramps

☒ **Bed rest**

1) Frequency: continuous
2) Duration: for 3 hours starting today
3) Comments: Keep patient on bedrest for 2 hours following neostigmine administration given risk of bradycardia and hypotension.

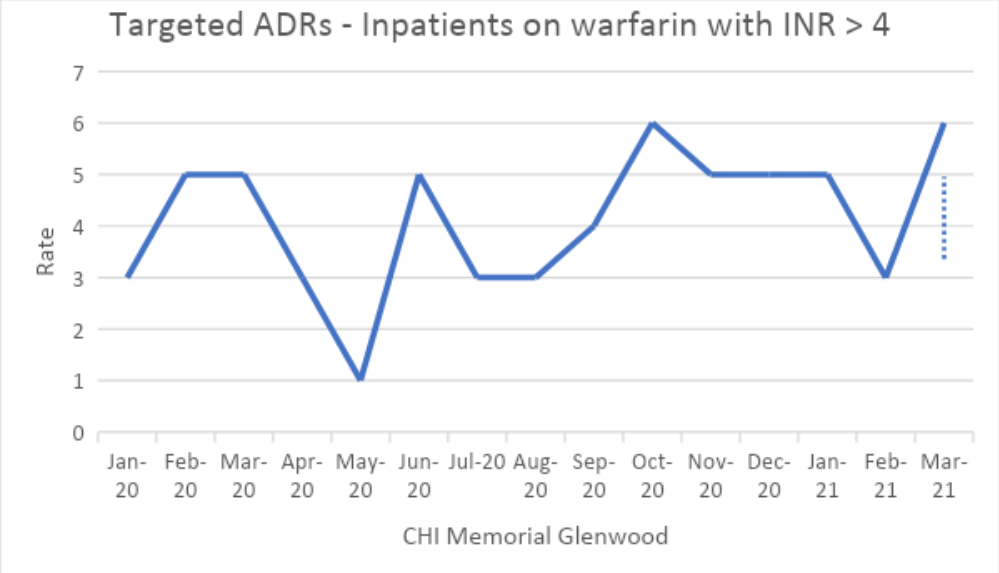
DISCUSSION/RECOMMENDATION:
It is recommended to approve the above EHR medication order panel build for neostigmine IV with restrictions to units with telemetry monitoring with neostigmine administration limited to an ACLS certified RN.

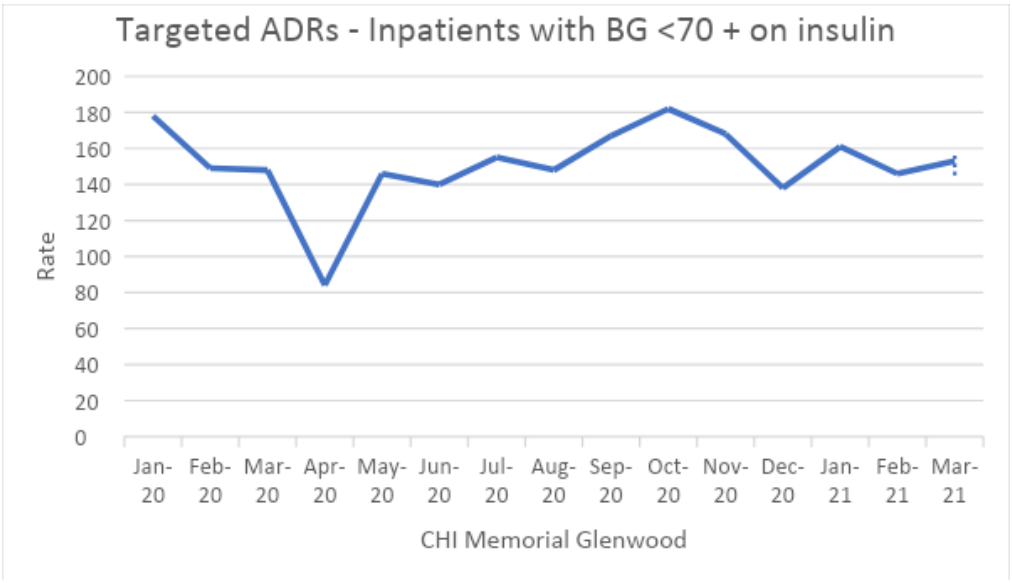
ADRs reported through Iris January-March 2021

Incident Number	Facility Name	Event Date	Generic	SR Comments/Actions	Primary Injury	ADR Preventable?	Level of Harm
210001937	GW	1/7/2021	DIFINITY	SEVERE BACK PAIN S/P DEFINITY INJECTION. TOTAL OF 2 CC (2CC DILUTED W/8CC SALINE). RECOVERED IN 15 MINUTES. CARDIAC NUC MED NURSE AND READING CARDIOLOGIST WERE NOTIFIED	No Apparent Injury	Not Preventable	2
210005642	GW	1/19/2021	IOPAMIDOL	Patient started having tremors immediately after his Coronary CTA scan. Patient put in a recliner and covered in warm blankets. VS and blood glucose stable and Dr. Lehman notified. Shaking stopped after approximately 15mins. Patient complained of feet tingling, feeling wet, and dizziness. Patient given water and after first sip started coughing and complained of difficulty swallowing.	No Apparent Injury	Not Preventable	2
210005800	GW	1/19/2021	AMIODARONE HCL	AMIO INFILTRATE,SITE MARKED,REDNESS NOTED,HYLENEX 1 ML SC GIVEN IN FIVE DIVIDED DOSES.	Skin Reaction	Potentially Prev	3
210008656	GW	1/28/2021	HYDROMORPHONE HCL	patient was administered 0.5 mg IV Dilaudid per order for severe pain. Then was assisted to BSC about 5 minutes after administration. Patient developed hypotension, clamminess, and lethargy. questionable vagal response vs. adverse reaction to Dilaudid or both?	No Apparent Injury	Potentially Prev	2
210009145	GW	1/29/2021	IOPAMIDOL	Patient was given 100ml IV contrast for Coronary CTA. Patient reported no allergies. Immediately after administration, patient began clearing his throat and hives/redness were noted on his face, chest, and neck. He also developed swelling on lips and inside his mouth. Solumedrol and Benadryl IV were administered per physician. Patient was monitored for 10 minutes post medication. Patient symptoms improved slightly, but did not resolve. D/t persistent symptoms patient was moved to emergency department for continued care per physician.	Anaphalactic/Angiodema	Not Preventable	3
210015698	GW	2/17/2021	AMIODARONE HCL	infiltrate. IV team called and proper treatment given	Tissue Damage	Potentially Prev	3
210018943	Hixson	3/1/2021	DIFINITY	Patient stated he was having Back pain around his kidneys. I told patients this was one of side effects. It lasted about 8 minutes.	Other (please specify)	Potentially Prev	2
210023518	GW	3/14/2021	AMIODARONE HCL	PAGED FOR NEW IV START&EVALUATE CURRENT IV,DCD AND MARKED PIV ON LFI,SITE 7CMX2CM.ADVICED TO TREAT WITH HYLENASE AFTER CONSULTING WITH MD&TOGET ORDER FOR PICC LINE&TO APPLY ICE FOR 30MTS TO SITE.	Tissue Damage	Potentially Prev	3
210024389	Hixson	3/17/2021	HYDROMORPHONE HCL	Patient was given multiple scheduled blood pressure medications, opioids, muscle relaxers etc. , along with prn hydromorphone and Phenergan at 2232 3/16/21 by Unit 3 RN. After 0000, Unit 3 staff when into patient's room to take a blood glucose reading and found patient unresponsive. Code Blue was called and Unit 3 was able to sternal rub patient to arouse them. This RN responded as part of Code Team from ICU. Upon arrival to patients room, patient was somnolent and confused.. Patient had become hypotensive and required administration of narcan. Despite administration of IV narcan, patient remained somnolent and was transferred to the ICU.	Hypotension, Somnolence		4

INPATIENT ADRs reported through EPIC

Date Created	Age	Drug	Reaction	Preventable ?	Severity	Patient Type	Facility Name
2/24/2021	62	Hydromorphone	excessive apnea	Y	02	Inpt	GW
2/28/2021	60	Multiple	rash	N	01	Inpt	GW
3/11/2021	75	NS	fluid overload	Y	01	Inpt	GW
3/11/2021	67	Eliquis	coffee-ground emesis	N	03	Inpt	GW
3/23/2021	83	ativan and dilaudid	oversedation	Y	04	Inpt	GW
3/30/2021	74	amiodarone	infiltration	N	03	Inpt	GW




Targeted ADRs - Inpatients with BG <70 + on insulin
Rate
200
180
160
140
120
100
80
60
40
20
0
Jan-20
Feb-20
Mar-20
Apr-20
May-20
Jun-20
Jul-20
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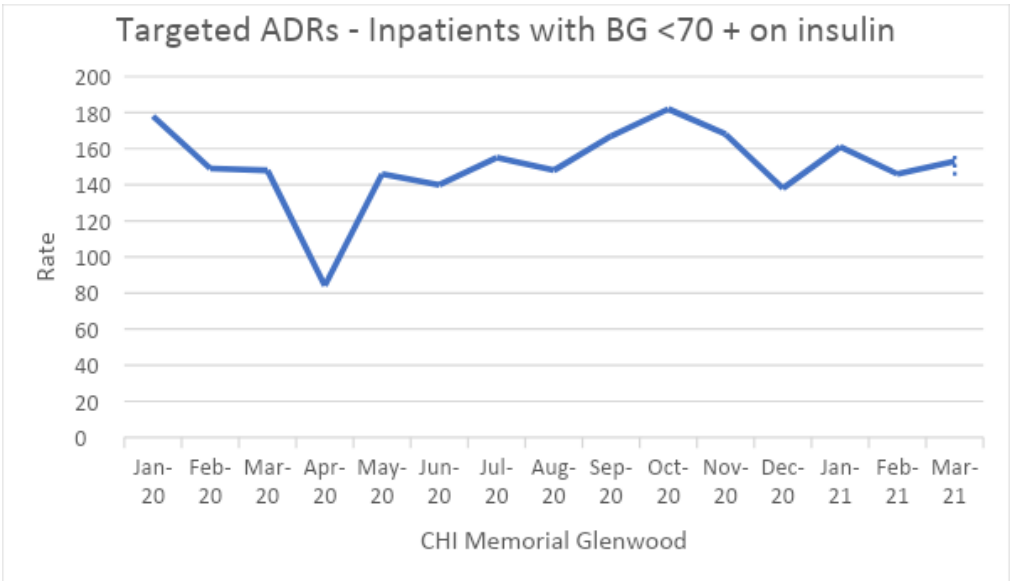
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
CHI Memorial Glenwood


Targeted ADRs - Inpatients with BG <70 + on insulin
Rate
200
180
160
140
120
100
80
60
40
20
0
Jan-20
Feb-20
Mar-20
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
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