HOUSTON Methodist LEADING MEDICINE

HOUSTON METHODIST
PHARMACY & THERAPEUTICS NEWS
March 2024

FORMULARY UPDATES

Laura M. Blackburn, PharmD

The following medication was ADDED to formulary

Medication	Formulary Updates
Efgartigimod alfa and hyaluronidase-qvfc (Vyvgart Hytrulo®)	• Neonatal Fc receptor blocker indicated for the treatment of generalized myasthenia gravis (gMG) in adult patients who are anti-acetylcholine receptor (AChR) antibody positive • Restricted to FDA-approved indications • Restricted to neurology providers • Restricted to outpatient setting with prior financial approval

The following medication was reviewed but not added to formulary

Medication	Formulary Updates
Carbidopa/ levodopa extended release (Rytary®)	• Not added to formulary • May use patient own medication (PTOM) process • Dopamine agonist, anti-Parkinson Agent • FDA approved for Parkinson's disease, post-encephalitic parkinsonism, parkinsonism that may follow carbon mon-

Policy Updates

Laura M. Blackburn, PharmD

RXCLIN 170 Pharmacy Procedure for Obtaining, Reviewing and Completing Consults for a Medication History

- Triennial review
- Inaccurate medication histories can lead to errors and patient harm
- Pharmacists assume key roles in improving the quality of a medication history. NOTE: A Medication History occurs *before* orders are entered and may be completed by a nurse or pharmacist. Medication Reconciliation on the other hand, occurs during admission order entry and per HM policy is the responsibility of the physician.
- The pharmacy procedure and attachments were updated as a practice guide supporting the optimal attainment and documentation of the Best-Possible Medication History. The document is a reference for any health-care professional who takes medication histories.

To request a medication for formulary review, **click here**

The *Pharmacy & Therapeutics News* is dedicated to providing the most current information regarding medication-use policy and formulary issues. Each issue details recently approved actions from the system P&T committee as well as relevant patient safety, pharmacotherapy and drug distribution updates. Entity representatives to the system P&T committee structure can be found here.

Medication Access and Administration Updates

Droperidol Added to Pyxis Override List

Droperidol, an antipsychotic agent, used for the treatment of acute agitation was **approved** for addition to the emergency department ADC override list. Refer to System_PCPS152 Overriding Medications in Automated Dispensing Cabinet for further details.

Extended Infusion Beta-Lactam Administration Strategy Approved

Beta-lactam antimicrobials are optimized when maintained above a bacteria's minimum inhibitory concentration (MIC) between 40-70% of the dosing interval.

Extended infusion (EI) administration increases the time above MIC and probability of target attainment, improves clinical success rates, and reduces mortality.

P&T approved the standardization of EI dosing on all doses of cefepime, piperacillin-tazobactam, and meropenem outside of the ED and OR areas. The practice change will be implemented in the coming months once Epic changes and provider and nursing education are complete.

Formulary Management & Pharmacoeconomic Updates

Andrew Mulder, PharmD

Pharmacy Procedure for IV Levothyroxine Order Review and Adjustment—Triennial Review Update

Background

At Houston Methodist, intravenous (IV) levothyroxine is commonly used for the management of thyroid hormone deficiencies and in the management of organ donors after brain death. The effective half-life of levothyroxine is 6-10 days. While the oral dosing forms of levothyroxine are less than $0.60 per dose, IV levothyroxine formulations cost approximately $100 per 100 mcg vial.

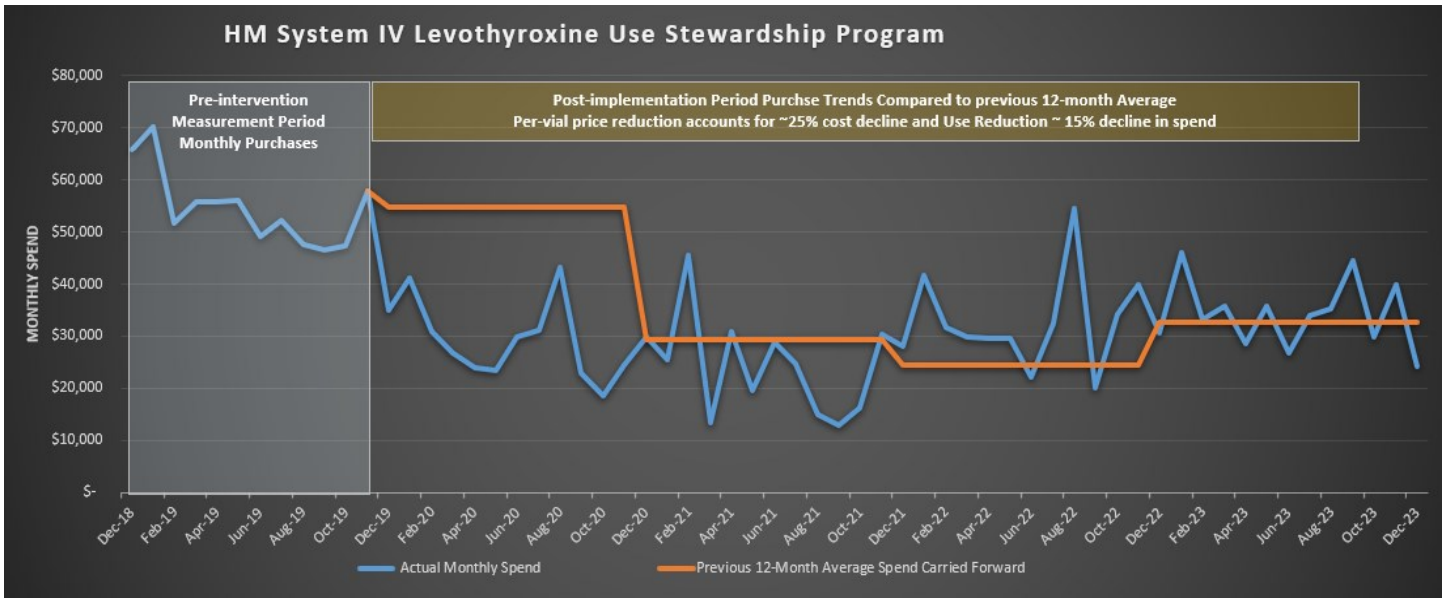
Published studies reported that weekly administration of levothyroxine is successful without impacting TSH or the development of hypothyroid symptoms. Furthermore, some researchers reported a potential relationship between IV levothyroxine administration and new onset arrhythmias.

A Houston Methodist Formulary Policy Approval in December 2019 allowed pharmacists to implement either an automatic IV to PO conversion OR an automatic temporary delay (up to 5 days) before administering IV therapy policy when a patient meets medical staff approved criteria

Assessment

Pharmacists are effectively using the IV-PO iVent category as well as the "Communication to Clinical" iVent category to safely implement the program. Pharmacy held doses per protocol (36% of held doses) with no direct adverse effects found. System-wide there was a low utilization of the protocol for delayed start of IV levothyroxine attributed to improved prescribing prompts built within Epic. Most patients had an exclusion criteria allowing use of the IV route.

Intravenous levothyroxine use pattern changes and medication acquisition costs declined as a result of the implementation of the program as projected.



Actions and Next Steps

To improve the communication to pharmacists responsible for verification of IV levothyroxine orders, indication buttons for exclusion criteria will be placed in epic for providers to select. The next review of the program will be in three years.

Have a medication-related, cost-saving idea? **Submit your idea here**

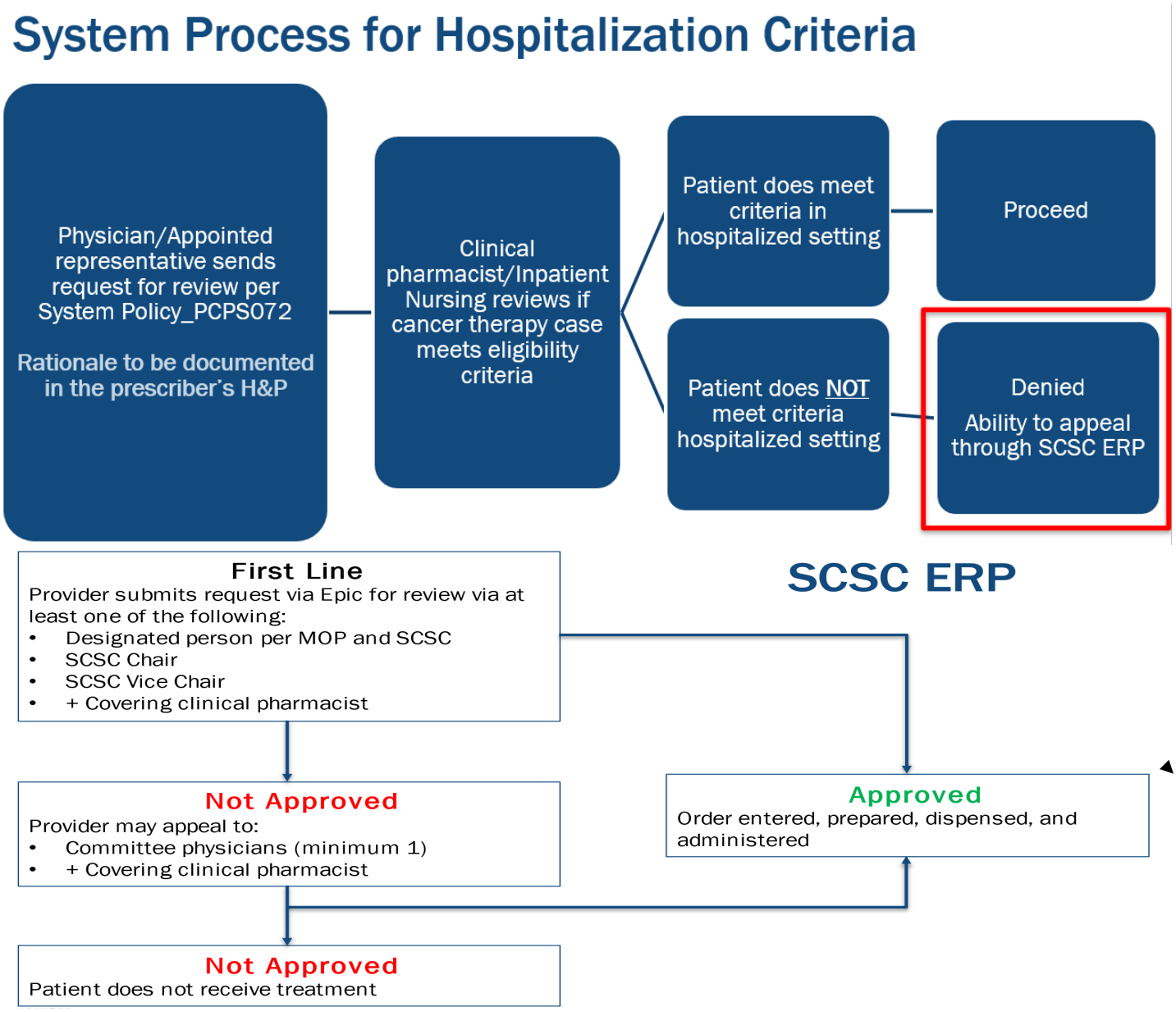
SYSTEM CHEMOTHERAPY STEWARDSHIP COMMITTEE

Adam Smith, PharmD

In order to standardize the Exception Review Panel (ERP) process for hematology/oncology related issues across the HM system, the P&T committee upon the recommendation of the SCSC approved the following review and appeal framework for exception requests related to Formulary Policy Adherence or Hospitalization for Anti-cancer Therapies.

- Formulary policy use exceptions relate to inpatient requests and/or appeals to use a formulary medication in an unsupported, off-label manner or outside HM-approved formulary policy
- Hospitalization for anti-cancer therapy outside criteria outlined per System Policy_PCPS072—Chemotherapy Administration: Hospitalization Eligibility Criteria will be reviewed through this process as well.

The outcomes from each exception review will be reported to P&T and policies / procedures updated as needed.



MEDSAFETY MATTERS!

Amaris Fuentes, PharmD

ISMP's 2024-2025 Targeted Medication Safety Best Practices for Hospitals

ISMP released its updated Targeted Medication Safety Best Practices for Hospitals for 2024-2025 which seek to identify recurring problems in medication safety and mobilize national adoption of best practices. These best practices are updated on a 2-year cycle. The latest iteration brings forth 3 new Best Practices as follows:

Best Practice 20: Safeguard against wrong-route errors with tranexamic acid

Various look-alike mixups have been identified that resulted in wrong route areas, particularly incorrect neuraxial administration of tranexamic acid leading to severe patient debility and death. Various storage and look-alike, sound-alike mitigation strategies are outlined for implementation.

Best Practice 21: Implement strategies to prevent medication errors at transitions in the continuum of care

Inadequate medication history and medication reconciliation steps have contributed to significant harm events where critical therapies are omitted, restarted, or provided at the wrong dose. Strategies for obtaining the most accurate medication list upon admission and evaluated all changes of level of care are highlighted.

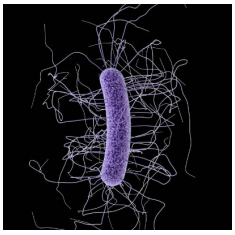
Best Practice 22: Safeguard against errors with vaccines administered in the inpatient and associated outpatient settings

Errors with age-specific formulations, wrong patient errors, wrong route, wrong dose, and name confusions have been noted with vaccine administration across the continuum of care. Strategies around storage, administration safeguards, and patient engagement are outlined to mitigate error potential.

ANTIMICROBIAL STEWARDSHIP

Shivani Patel, PharmD

Two-Step C. Diff Testing Updates



Starting in December 2023, Houston Methodist introduced a revised C. Diff testing strategy to incorporate 2-step testing for confirmation of clinically significant C. Diff. Clostridium difficile infection (CDI) is the leading cause of nosocomial diarrhea in the United States. Accurate and timely diagnosis of CDI is crucial for effective patient management and infection control. The implementation of the two-step testing process is recommended by the most recent IDSA/SHEA and ACG guidelines as a method to aid clinicians in distinguishing colonization from active infection. The two-step testing approach consists of initial screening with a sensitive assay (C. Diff PCR) followed by confirmatory testing using a specific assay (C. Diff toxin). The initial review of the impact of the change from January 2024 were notable.

In January, 640 C. Diff tests were ordered across the system for inpatients. Of those, 19.2% (123/640) had a positive PCR screen but only 7.5% had a positive PCR and positive toxin results supporting treatment.

While there was improvement in reducing unneeded anti-C.Diff medication use, 38% of anti-C.Diff treatment days, or approximately 262 days of therapy were deemed unnecessary as they were used in patients with discordant results. Refer to the table to the right for the interpretive guidance for current C.Diff testing.

***C. difficile* Toxin Gene (PCR) Result**	***C. difficile* Toxin Antigen Result**	**Interpretation**
Not detected	Not detected	• Toxigenic *C. difficile* is not detected • **Treatment is not recommended**
Detected	Detected	• Toxigenic *C. difficile* is detected • **Treatment is recommended**
Detected	Not detected	• Positive *C. difficile* PCR likely represents colonization • **Treatment is not recommended**

Outpatient Parenteral Antimicrobial Therapy (OPAT)

Houston Methodist continues to look for opportunities to improve the quality of care related to the use of OPAT. The System Antibiotic Stewardship Committee and P&T will serve as the clearing house for policies and procedures for patients discharged on OPAT and are actively working to enhance IT resources and clinical decision support for safe, efficient transitions of care. A patient registry and outcomes dashboard will be developed to monitor quality indicators such as index hospital LOS, and readmission rates. Future updates on changes to the processes of care for OPAT patients will be shared in future P&T Newsletters.