

## Patient Safety Awareness Week 2020

### *MEDITECH's Commitment To Safety And Education*

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MEDITECH is fortunate to have so many customers who have used our EHR to ensure patient safety is a top priority. In honor of Patient Safety Awareness Week, we highlighted some of them here.

### Using Rules To Stop Metformin Orders Before Imaging Procedures With Contrast

#### **Ralph Jacob, RPh, Halifax Health**

In the clinical practice, providers were commonly ordering imaging procedures requiring contrast, prior to evaluating the patient's current medication list for drugs contraindicated with contrast administration. Metformin, used for treating diabetes, is the most common offender — if it's not stopped prior to contrast administration, it can cause damage to the kidneys. Therefore, an Imaging Department policy is in place — if an imaging procedure requiring contrast is ordered and the patient is taking Metformin, and the patient's eGFR (estimated Glomerular Filtration Rate) is less than 60, the physician must hold or discontinue Metformin for 48 hours or until the eGFR improves. To ensure compliance with this policy and to avoid the consequences of overlooking the patient's current medication list, Ralph built rules to detect the patient's eGFR and the presence of an active inpatient or outpatient order for Metformin. If both conditions are met, a reflex order is sent to Pharmacy (PHA) to stop Metformin until further notice, and a lab order to measure eGFR is scheduled to be drawn in two days.

**For more information regarding how to set up rules to assist with contrast ordering, please review the following Safety Workflow/Education-related Knowledge Base article: [RULE: Contrast Ordering - Utilizing Alerts To Assist With Delivery Of Optimal Patient Care](#).**

### Ensuring Discharge Orders Are Accurate Using Indicators On Rounding Lists

#### **Jason Schumacher, RPh, Lima Memorial**

At Lima Memorial, pharmacists round directly on the inpatient floors and review all discharge orders prior to the nurse printing the Discharge Summary. A process was established using indicators on the Rounding Lists in Physician Care Manager (PCM) to flag the pharmacist that discharge orders have been entered and are ready for review. At this point, the pharmacist opens the Medication Snapshot to look at the Discharge tab to review all of the decisions made on the patient. They compare this to the inpatient orders to ensure the discharge information contains no omissions or dosing errors. Once review is completed, the pharmacist enters a pending order with a CDS attached, indicating clarification is required for some of the discharge medications. This places a yellow flag telling the nurse not to print the discharge instructions. If no medication issues were found, an order is entered that places a green flag on the Patient Care System (PCS) Status Board. The nurses are trained to monitor the status board and will not proceed with printing the discharge packet until pharmacist review is completed successfully. Prior to this process, there were inaccuracies and errors occurring for discharge orders, which are now caught and addressed — increasing patient safety at discharge.

For more information regarding how to set up indicators for home medications, please review the following Knowledge Base article: [Home Medication Indicator And Medication Snapshot](#).

## Improving Pediatric IV Ordering & Dosing Procedures Using Pharmacy Dosing Sets

### Carl Sherman, RPh, St. Luke's Hospital

St. Luke's recently implemented an initiative for standardization of their pediatric IV dosing, and moved from a QS method (constant volume) of preparing doses to a fixed concentration method. Over the past two years, their pediatric census has grown substantially as a result of hiring two pediatric hospitalists. Prior to that, they didn't admit many pediatric patients outside of the birthing center, and there wasn't an established build within MEDITECH for providers to order pediatric-specific IV doses. Often, providers ordered strings meant for adults, and the low volume of pediatric patients allowed Pharmacy (PHA) to fix the orders prior to administration. The pharmacist would calculate the weight-based dose, determine the volume, and then add additional diluent to bring the volume up to a preset amount. For example, all doses of Ampicillin for the nursery were dispensed as 5 mL. It required the pharmacist to reinvent the dose with each new patient, confirming the drug concentration was safe for infusion. It also amounted to a custom job for the compounding technician with every dose.

St. Luke's decided it would be much safer to redesign the pediatric IV dosing. Among the various improvements, they defined a fixed concentration for each drug so the preparation of the dose is consistent. Related to the Ampicillin example, all doses of Ampicillin are now fixed at a concentration of 100 mg/mL. This allows the dose to be prepared by simply adjusting the volume. The pharmacist no longer has to worry the concentration might be too high, and the technician always follows the same directions no matter the dose. This method also lends itself well to building weight-based dosing in MEDITECH, as the drug can be built with the predetermined concentration and easily included within a dosing set as a premix. St. Luke's now has more than 300 strings in the PHA Dosing Set Dictionary, and a Pediatric Medication Safety Committee meets weekly to discuss ongoing build, dosing, and operational issues related to pediatric medications.

For more information regarding the use of PHA Dosing Sets, please review the following Knowledge Base articles [Best Practice: Dosing Sets \(6.x/Expanse\)](#) and [Dosing Sets: Ordering Predefined Dosing Sets In POM \(C/S\)](#).

## Questions

Please contact Manager [Nichole Sikora](#).