Answers to Unanswered Questions
from MSOS Member Briefings webinar- December 14, 2017

Jimmy Hernandez / Jennifer Matias

Q: Do you have any recommendations for increasing BCMA use in the ED?

A: Yes. 1) Get support from both Pharmacy and Nursing Leadership that this is an important safety issue; 2) share stories with staff where NOT using BCMA led to an error; 3) provide metrics on a regular basis to show how things are progressing; 4) having a process to identify barriers and strategies to overcome it (e.g. not having enough scanners available on some of the WOWs. I am happy to discuss this offline for anyone interested (Email: j.matias@RUHealth.org)

Q: How do your LIPs use barcode scanning? Suggest a medication time out for procedural sedation, LIPs can pick up wrong product from trays.

A: I agree, but at this time our LIPs are not barcode scanning. This is something we will be exploring given some of the recent regulatory changes.

Q: Do you store the high conc. ketamine in these red bags in the pharmacy as well?

A: We do not. The inpatient pharmacist who pulls narcotics for a given shift is responsible for placing the ketamine 100 mg/mL vial in its own red bag. Furthermore, the technician who refills the ADC is also responsible for alerting the pharmacist of any inconsistencies in the process (e.g. multiple vials in one bag, wrong concentration in the bag, etc.). We also don't put them in the red bags in in the pharmacy for storage since our IV room technicians use the ketamine 100 mg/mL vials for compounding purposes. Currently, barcoding is used for non-narcotic ADC picking, but not for narcotics. This is something we are interested in exploring in the future.

Q: Do you only allow the high concentration ketamine to be stocked in the ED?

A: Since ketamine is used for several indications, we stock both the low and high concentrations of ketamine in the ED. It should be emphasized that ketamine is only stored in one of four ADCs in the ED.

Q: Was it possible to remove one of the ketamine concentrations from the ADC based on usage?

A: Based on usage, the low concentration of ketamine is pulled and used more frequently for our patients in the ED. However, the physicians pushed for requesting the high concentration ketamine in the ED for the rare, but serious, cases of excited delirium syndrome. This led to a P&T discussion of the risk of storing both ketamine concentrations in the ED.

Q: Have you thought about removing ketamine 10 mg/ml from your organization and instead using ketamine 50 mg/ml?

A: We have considered this, but there are some pediatric doses that will still require the 10 mg/mL concentration. We may revisit this in the future because arguably these can be drawn up in the pharmacy for procedural sedation.

Q: How is the 10 mg/mL concentration being administered? IV push vs. intermittent infusion (IVPB)? Is the 100 mg/mL concentration always given as an IM injection?

A: Currently, ketamine 10 mg/mL can be administered IM (RN and physician) and IV push (physician only). We may be implementing a policy to have ketamine administered via IVPB for specific indications; physicians in the ED will always want the IV push option available for emergent situations, such as rapid sequence intubation or procedural sedation. Yes, the ketamine 100 mg/mL concentration is always given IM.

Q: Do you have a system that allows you to check the waste via newer technology (e.g., a device that tests the concentration of a controlled substance on-site)?

A: Yes, we use a refractometer, but at this time testing is only done on anesthesia waste.

GregORY Burger

Q: With all this data showing they do not add value then why did ASHP recommend for some products?

A: When our ASHP Medication Safety Section Advisory Group met to discuss Independent Double Checks (IDC's) and came up with best practice recommendations we were looking at the process from a global medication use sense and not just specifically at medication administration. I also believe the group understood the limitations of the use of IDC's during the administration process however, when used judiciously and within a well-defined process (possibly by using a checklist) IDC's can be an effective method in reducing errors. This recommendation is also made by ISMP as stated in the reference provided "Independent double checks: undervalued and misused. In this article ISMP states "With workload issues looming heavily over practitioners, independent double checks should only be used for very selective high-risk tasks or high-alert medications (not all) that most warrant their use. Selected tasks and medications should not be based simply on those which have historically always been double checked, but on a carful assessment of scenarios with the greatest risk." Please refer to this article for more information. The ASHP Medication Section Advisory Group supports this recommendation made by ISMP. I would also recommend referring to ISMP's new Medication Safety Self Assessment for High-Alert Medications. In this self assessment, there are some great recommendations on when and where Independent Double Checks should be used with High-Alert Medications.

Q: Do you have Rx draw up SSI doses? sliding scale

A: No, at Stormont Vail Health we currently use Insulin Pens for administering (both sliding scale and long acting) insulin on our inpatient units. The only exception to dispensing individual patient insulin pens is in our PACU/OR and our Emergency Dept. where we dispense vials. In PACU/OR our nursing staff removes the vial from our Omnicell (the Omnicell prints out a patient specific label on dispense) and the nurse then draws up the insulin at the Omnicell station, labels the syringe, and then takes the medication to the patient's bedside. In our Emergency Room we have 24/7 pharmacy coverage and the pharmacist in the emergency department draws up the insulin dose for the nurse to administer. Please note we have not removed Independent Double Checks for Insulin doses administered from vials in these areas. I am currently in discussion with pharmacy concerning the possibility of pharmacy drawing up long acting insulin (Levemir) for nursing as a possible cost saving measure. We may go this route once the IV solution shortage is over and if we get a compounding robot to relieve some of the workload off our IV compounding technicians.

Rosemary Duncan

Q: Do you have IS / IT as part of your Med Safety Team?

A: Our hospital med safety committee (MERIT) has a nursing IT rep as well as a certified Epic trainer (nurse by background by now works as one of our analysts/project coordinators). The Sig Med Event subcommittee of MERIT has the same Epic trainer and I will invite IT from nursing/pharmacy/WILLOW/CLIN DOC as needed. Our Pediatrics Med Safety subcommittee of MERIT has a nursing IT rep and the same Epic trainer. We communicate with IT daily through other committees and email.

Q: Do you include system changes on that med safety does or others too (like ICU specialist implemented)? And if you include all, how do you get info on what fixes they are implementing?

A: We focus only on systems changes that were implemented as a result of HEROs (event reports) we review. These changes result from numerous individuals/groups' efforts. We have found it to be impossible to know what projects/changes are happening across the hospital at all times (even as a result of events) so we've chosen to only focus on those we review and shepherd change for.

Q: It can take a long time to actually implement system changes. Is the date of each event on the report the date the event occurred or the date the system change was implemented? It takes several months, even years, for changes to be implemented. The month/year on the report is the month/year of the actual system change, not the date of the event.

Q: what if the hero reports are more operational rather than true med error? who "own's" the follow up?

A: I'm unsure what you mean by operational. Operational in that we have processes in place but they were not followed? We review events weekly with our pharmacy operations managers in each division/satellite pharmacy. These event reports are pulled based on the location of the event report being linked to a pharmacy (either discovery or other involved location). This ensures our pharmacy operations are reviewed regularly and changes made as needed and/or staff re-educated. Our pharmacy managers are set-up to view HERO and add follow-up/sign-off but they rely on us (our med safety officers) to review the events and participate in the process changes/education. Responsibility for event follow-up differs within departments and even on units with the same department. We have patient safety officers representing pediatrics, medicine, surgery, anesthesia, perioperative, neurology, psychiatry, phlebotomy, lifeline (transport), and respiratory. These "HERO leads" then work with the various nursing units/areas within their departments to ensure events are reviewed by managers, educators, physician advisors, specific clinicians, etc. The med related events usually require our med safety team to review (even if it just seems like a breach in practice) because we often find underlying system issues that impact more than just that unit – poorly laid out policies/protocol documents, unclear functionality in Epic, etc.

Q: What definition of harm do you use?

A: We use a modified version of the AHRQ harm scores. We do not report to a patient safety organization.

Hopkins:	**AHRQ:**
A. Unsafe Condition – no patient involved	1. Unsafe condition
B. Event did not reach patient: No harm	2. Near miss
C. Event reached patient: No Harm	3. No harm, physical or otherwise
D. Event reached patient: Harm	4. Emotional distress/no physical harm
	5. No physical harm – additional treatment
	6. Temporary harm
E. Event reached patient: Severe Harm	7. Permanent harm
	8. Severe permanent harm
F. Event reached patient: Death	9. Death