

PHARMACY TECHNOLOGY REPORT

Packaging / Supply Chain

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Med Rec and Meds-to-Beds Programs Make a Potent Duo

By Marie Rosenthal

At Washington Health System (WHS), a small community hospital network in Western Pennsylvania, medication reconciliation and meds-to-beds programs work hand in hand.

“If we get a good list of what patients are taking coming in the door, we hope that translates into better [medications] going out the door,” said Jeremy Funkhouser, PharmD, BCPS, the assistant director of pharmacy at Washington Hospital, which is part of WHS.

Medication reconciliation began in the ER, outpatient surgery and catheterization lab, but is now being done throughout the hospital, which has an average daily census of 141 beds, according to Alycia Humbert, who was a med rec technician before becoming a pharmacy information systems technician. The med rec team performs about 1,600 medication reconciliations a month, she said.

One of the ways that the technicians capture a patient’s medication history is with XchangePoint (PharmaPoint) integrated medication management software, which enables the techs to find out which prescriptions were filled by retail pharmacies. “I can use this to compose a list that is pretty current before we even interview the patient,” said Alyssa Miller, a med rec technician. “So if the patient forgets to tell me they are on five different medications, I can find out from their community pharmacies. Then the doctor can order their inpatient medications based on that more accurate history.”

It makes sense for the pharmacy department to provide this service for the hospital rather than a nurse or physician because of the knowledge base of the department, noted Director of Pharmacy Jeffrey E. Tracey, RPh. “No one knows medications like the pharmacy. When someone says, ‘I take an aspirin a day,’ our first thought is: 81 mg or 325 mg? Is it regular or enteric coated? In the past, we would just get one aspirin a day, so, we were constantly clarifying the information,” Mr. Tracey said.

Medication reconciliation is a high-level function for a technician, but it frees up the pharmacists for other tasks, such as rounding with physicians, working on population health issues and verifying orders, he explained. “Our nurses’ accuracy for [medication history taking] was about 30%, which is comparable to the national average. Our techs are about 88% to 92% accurate, and then a pharmacist looks over the list and improves that percentage,” he explained.



Jeremy Funkhouser, PharmD, BCPS, talks with technician Alycia Humbert and Jeffrey E. Tracey, RPh.

The hospital employs 19 full-time, five part-time and three per diem technicians and two tech students. Five of the technicians are dedicated to medication reconciliation. Besides improving patient care, their work helped the facility meet a higher caseload when the hospital decided to ramp up its outpatient pharmacy with a meds-to-bed program, according to Dr. Funkhouser. The pharmacy, he noted, used to be a convenience for staff, affiliated physicians, volunteers and hospital retirees, filling a handful of prescriptions a day. Then, a surgeon asked Mr. Tracey whether they would consider filling prescriptions for outpatient surgery. “Now we are filling about 2,000 scripts a month, and we have the potential to pick up another 1,000,” he said.



Technician Alyssa Miller does medication reconciliation.

This is not an easy feat, given the rapid turnaround needed: The technicians try to deliver the medication within 30 minutes of discharge. The challenge is that no one is exactly sure when any given patient will be discharged, and several steps need to be taken before that prescription can be delivered to the bedside. The physician has to place the order; the nurse has to inform the outpatient pharmacy that it's there; the pharmacist has to verify the order; and the outpatient pharmacy technicians have to fill it and deliver it—usually to the other side of the hospital.

Counting on Help

One of the tools that makes their job easier is a KL1 Plus by Kirby Lester, a streamlined automated counting and verification device. Once a prescription is put into the system, it is sent to the Kirby Lester device, which shows an image of the medication as an added check that they've chosen the correct product, explained Olivia Davis, a technician in the outpatient pharmacy.

The bar code scan-verification forces a check for all medications (tablets, capsules and unit of use) and alerts the technician to a potential error (wrong med, strength, or quantity). The device counts the pills, prints out a label, and even tells her what container to put the pills in, helping to speed up the actual fulfillment. In addition, it keeps a record of the transaction. Olivia Davis uses the KL1 Plus by Kirby Lester, a streamlined automated counting and verification device, which helps to speed up fulfillment, while increasing medication safety.

“We take the meds to the patients, and we have iPads that can run their credit card, or we can take cash; it is not part of their hospital bill,” Ms. Davis said.

For inpatient fills, the hospital relies on Pyxis (BD) automated dispensing cabinets, and one of Ms. Humbert's main jobs is to function as the Pyxis administrator and build formulary items in the Allscripts Sunrise clinical system. The pharmacy system interacts with nursing and other departments. “If there is a new item that we are going to put on the formulary, I build it in two areas, and each has a test and functionary area, so I actually build it four times. When the pharmacist gets the order to verify, the system ‘smart selects’ the information that is needed,” Ms. Humbert said. “Even though we are 24/7 here, our staff are about 97% compliant with Pyxis on the floors.”



Olivia Davis uses the KL 1 Plus by Kirby Lester, a streamlined automated counting and verification device, to speed up fulfillment and increase medication safety.

Because the hospital is small, it tends to outsource much of its compounding, and much of that work goes to local pharmacies. Ms. Humbert said the strategy enables the community hospital to be a good neighbor, and the pricing and turnaround time are faster.

Washington Health's diminutive size doesn't mean, however, that it isn't on the cutting edge of pharmacy, Dr. Funkhouser noted. They have dedicated clinical pharmacists, a robust antibiotic stewardship program, and the pharmacists verifying orders are pushing clinical care based on the patient's medication history and laboratory results. Throughout the facility, the pharmacists "try to avoid adverse drug events and improve therapeutic outcomes. That is really what we do for most of our day," he said.

The real excitement right now at the hospital is in ambulatory care, Dr. Funkhouser explained. They just hired a population health pharmacist who will push to improve therapeutic outcomes even more.

Dr. Funkhouser said he is a fan of population health for several reasons, not the least of which is that it allows the hospital to work outside of traditional clinical and departmental silos and follow more of an accountable care model. Given the added level of risk such a model entails, he said his team, which includes the pharmacist, nurses and case managers and is overseen by a physician, plans to take a closer look at staff performance in key clinical areas.

In the case of diabetes, for example, the population health team will examine whether patients are achieving hemoglobin A1c goals, as well as which patients are doing well and which ones aren't.

The overall goal, Dr. Funkhouser noted, is to "mine" the available data "to see where the gaps are." In the process, "we want to truly manage our patients, get them on their medications and follow through for outcome improvement."

—*The sources reported no relevant financial relationships.*