

Press Release --For Immediate Release

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Telepharmacy Brings Safety to Chemotherapy Prep Room

MISSION, KS -- In this case, thinking outside the box translates to a safer and more efficient way of working inside the box--the box being the chemotherapy preparation room at the University of Kansas Hospital. Preparation of chemotherapy medications is one of the highest risk practices in hospital pharmacies. Selecting the correct drug, drawing up the appropriate volume and injecting it into the IV bag designated for the correct patient are critical. Oversight by a pharmacist is required. But with limited pharmacist resources and the complications of clean room operations, step-by-step oversight is normally impossible.

Oversight at University of Kansas and other hospitals typically involves verifying the chemotherapy preparations via the "syringe pullback method." In the isolated chemotherapy preparation room, a technician fills the syringe with medication and injects it into the IV bag. After the fact, the technician pulls back the empty syringe to show the pharmacist how much medication was injected.

"There had to be a lot of trust between the pharmacist and technician that the syringe was pulled back accurately," said Brian O'Neal, MS, PharmD and Assistant Pharmacy Director at the Hospital. "There just shouldn't be assumptions in chemotherapy preparation."

O'Neal was familiar with ScriptPro's Telepharmacy. He needed a system designed to optimize the use of pharmacists by allowing remote verification of prescription dispensing. So he called ScriptPro to see if Telepharmacy could allow pharmacists to verify activities within the chemotherapy preparation room from the outside. This would eliminate the time-consuming process of scrubbing up to enter and exit the isolated area. ScriptPro and O'Neal worked together to design and implement the first chemotherapy preparation room supported by Telepharmacy. Additionally, the system enabled barcode verification to ensure the correct medication had been selected.

The objective of the program, said O'Neal, was to find a way to improve safety by increasing the presence of the pharmacist at critical risk points during the preparation process, while making the most efficient use of the limited availability of clinical pharmacists.

"We wanted to minimize assumptions when verifying chemotherapy medications," said O'Neal. "We selected Telepharmacy, and our program is providing the assurances we want."

According to O'Neal, the system improves safety as follows:

1. A technician scans the barcode on the chemotherapy drug vial. A computer match to the patient record ensures that the correct formulation has been selected.
2. In the preparation room, the technician captures an electronic image of the vial label and the filled syringe just prior to injecting the medication into the patient's IV bag.
3. Before completing the preparation, the technician presses a button on the ScriptPro Telepharmacy screen to request pharmacist verification.
4. A clinical pharmacist, working outside the preparation room, reviews the images of the drug vial, the pullback on the syringe containing the medication, the IV bag and the patient's medication order. Confirmation of the review steps and related images are archived and available for future reference.
5. There is no need for either party to go through the procedures of entering or exiting the isolation room.

ScriptPro Telepharmacy includes a database to positively identify drugs using barcode scanning and electronic file images, digital optics to record the process steps and a webcam/microphone system to allow the users to interact and converse.

According to O'Neal, the system has improved the safety of the process in several areas. Positive matching to the patient's medication order decreases the risk of using the wrong drug. Pharmacists review digital images of the critical process steps, including volume of medication injected into the IV bag. Also, small vial labels can be enlarged on the screen for easier reading, and pharmacists are not exposed to powerful drug agents each time they verify a chemotherapy preparation.

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