

Optimize Safety With IV Compounding Robots

More pharmacies will look into IV compounding robots (IVX Station, RIVA, etc)...especially for hazardous or high-alert meds.

This automation can have benefits, such as improving efficiency...and preventing wrong-drug, dose, and diluent errors.

Think of it as similar to IV workflow systems, which also have barcode scanning to verify ingredients...and possibly gravimetrics to verify doses.

A big difference is that IV robots can have a self-contained compounding environment...to protect you from exposure to meds.

Be ready to optimize safety with IV robots in your pharmacy.

Consider volunteering to help prepare for implementation. The input of frontline staff is critical...and workflow changes with IV robots will be BIG.

Keep in mind that, even though IV robots perform compounding, techs are still needed for tasks such as cleaning, input of drug expiration dates and lot numbers, loading supplies, etc.

Don't be surprised to have an IV robot AND an IV workflow system. IV robots tend to be slower...which is one reason their use may be limited, such as to batches or certain types of meds.

Get hands-on training before using an IV robot...even if you're experienced in sterile compounding. User error due to lack of knowledge is a common cause of problems with technology.

For example, you'll need to know about any special supplies...syringes, needles, labels, etc...and how to prevent accidental dispensing of failed preps.

Ensure you're able to handle issues, such as the need to input new drug info due to changes, shortages, etc...or downtime.

Work with your team to ensure compounding staff maintain manual compounding skills that may be needed when there's downtime. This may be a good opportunity to incorporate simulations.

Never assume that technology is foolproof. Keep your eyes open for any new errors that may come up with IV robots...and report them to your admin or med safety officer ASAP.

Continue to take measures to avoid contamination of sterile preps.

Brush up on sterile compounding basics with our resource, *Sterile Compounding: Keeping It Clean*.

Key References:

- Yang C, Ni X, Zhang L, Peng L. Intravenous compounding robots in pharmacy intravenous admixture services: A systematic review. *Medicine (Baltimore)*. 2023 May 12;102(19):e33476.
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- ISMP. ISMP survey provides insights into pharmacy compounding systems and practices. October 22, 2020. <https://www.ismp.org/resources/ismp-survey-provides-insights-pharmacy-sterile-compounding-systems-and-practices> (Accessed April 25, 2024).

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