With an estimated one million medication errors every year, 7000 of which result in death, many hospitals, medical practices, and pharmacies are looking for solutions to reduce errors and increase patient safety. Similar labels, misread instructions, illegible handwriting, and misplaced decimal points, all contribute to medication errors. There are, however, some technology solutions to help you, your practice, or your hospital combat medication errors.

If a pharmacist is unable to read the doctor’s handwriting, a medication error becomes possible. However, using an e-prescribing software could eliminate the likelihood of that happening. E-prescribing is a method that eliminates the need for paper or faxed prescriptions. Sending the prescription to the pharmacy electronically ensures that it’s legible when it reaches the pharmacist.

Utilizing a barcode system can help minimize medication errors when managing many patients at once. The barcode scanning system ensures the right medication, in the proper dose, is given to the right patient, at the right time. If integrated with an EMR, the program can even send alerts to the nurses when a patient’s prescription is overdue.

Computerized Physician Order Entry is a program that allows physicians to electronically enter a patient’s prescription and their instructions for treatment. The information is then crosschecked against the patient’s existing information to ensure safety and appropriateness. Once everything is checked out, the prescription is sent electronically to the pharmacist. This software prevents medication error by removing the need to interpret handwriting, by ensuring the dosage is appropriate based on the patient’s information, and determining whether the prescription is safe based on
allergies and other medications the patient may be taking. Smart Infusion Pumps can help reduce errors by assisting healthcare providers in programming and calculating the dose and delivery rate of I.V. medications. When used correctly the machine has the ability to reduce patient harm by preventing I.V. medication errors.

Another solution for preventing medication errors is to have a pharmacist in the ER. When a pharmacist can review a medication order in real time, before it is administered to the patient, they can ensure everything is correct and that the patient receives the medication quickly.

Though useful interventions in their own right, these technologies are not an absolute solution for preventing medication errors. Coupled with the expertise, knowledge, and hands on experience of a doctor, however, these technologies have the ability to help significantly reduce medication errors.

Works Cited


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