Updated ISMP Guidelines Call for Increased Use of Technology/Automation in Sterile Compounding

HORSHAM, Pa. – The Institute for Safe Medication Practices (ISMP) has updated its Guidelines for the Safe Preparation of Compounded Sterile Preparations to address new technologies and safety strategies. One of the most significant additions is a call for hospitals to implement systems that incorporate barcoding and other technologies to augment manual processes for preparing and verifying compounded sterile products.

Data submitted to the ISMP National Medication Errors Reporting Program (MERP) has repeatedly shown that manual inspection of IV admixture ingredients by pharmacy technicians and pharmacists is not effective enough to prevent preparation and dispensing errors.

ISMP believes that barcode scanning of base solutions and ingredients should now be considered the minimum requirement for pharmacy IV admixture services, and that hospital leadership should support acquisition of technologies such as gravimetric verification of drug and diluent volumes and/or robotic image recognition.

The guidelines call for both barcoding and gravimetrics to be used at a minimum when preparing chemotherapy and pediatric sterile products. Facilities that have yet to install these technologies should employ an independent double-check of all vials, prepared syringes, and container labels prior to addition to the final solution, for all high-alert medications (chemotherapy, PN, electrolytes, and neonatal/pediatric infusions).


About ISMP: The Institute for Safe Medication Practices (ISMP) is an independent, nonprofit charitable organization that works closely with healthcare practitioners and institutions, regulatory agencies, consumers, and professional organizations to provide education about medication errors and their prevention. ISMP represents more than 40 years of experience in helping healthcare practitioners keep patients safe, and continues to lead efforts to improve the medication use process. For more information on ISMP, or its medication safety alert newsletters and other tools for healthcare professionals and consumers, visit [www.ismp.org](http://www.ismp.org).

-end-