

## Assessment Test

### New and Emerging Strategies for Minimizing Errors in I.V. Preparation: Focus on Safety and Workflow Efficiency

This activity is located at <http://www.ashpadvantage.com/ivsafety>



This assessment test has been provided as a study aid only. When you reach the end of the presentation, follow instructions to complete the online process and obtain CE credit. You may print your CE statement immediately after successful completion of the online assessment test and evaluation.

---

1. Which organization sets federal standards for traditional sterile compounding?
  - a. U.S. Pharmacopeial Convention (USP).
  - b. American Society of Health-System Pharmacists (ASHP).
  - c. Joint Commission.
  - d. State Department of Health.
2. Which of the following is NOT a goal of best practices?
  - a. Increased safety and efficiency.
  - b. Decreased standardization.
  - c. Decreased errors.
  - d. Streamlined workflow.
3. What challenge does hazardous drug compounding present that is NOT typically a concern in non-hazardous drug compounding?
  - a. Patient safety.
  - b. Requirements for aseptic technique.
  - c. Containment.
  - d. Training requirements.
4. I.V. Workflow software systems can automate which of the following processes?
  - a. Recording of data.
  - b. Quality processes.
  - c. Remote order verification.
  - d. All of the above.
5. I.V. robotic capabilities vary between robot manufacturers. What is the only dosage form that can be made by ALL of the current i.v. robotic technologies available?
  - a. Elastomeric pumps.
  - b. I.V. bags.
  - c. I.V. syringes.
  - d. I.V. glass bottles.
6. Volumetric and gravimetric methods are used for checking i.v. dose accuracy. Which of the following statements is true about the dose checking capabilities of the two commercially available i.v. workflow management technologies?
  - a. Both use the volumetric method for dose checking.
  - b. Both use the gravimetric method for dose checking.
  - c. One uses the gravimetric method and the other uses the volumetric method.
  - d. Neither of these methods for checking i.v. sterile compounding accuracy are used.

7. Besides the weight of the compounded medication, what other data point must be known about the pharmacologic substance being tested using gravimetrics?
  - a. Total volume.
  - b. Volume to be infused.
  - c. Specific gravity.
  - d. Viscosity.
8. M.D. Anderson's failure mode and effects analysis (FMEA) uncovered how many failure modes, or potential failures, in the i.v. sterile compounding process?
  - a. 97.
  - b. 334.
  - c. 170.
  - d. 56,780.
9. In terms of cost savings in the M.D. Anderson analysis, which sub group showed more cost savings?
  - a. Direct labor costs.
  - b. Indirect labor costs.
  - c. Both had equal cost savings.
  - d. There was no cost savings realized in either category.
10. The i.v. management system implemented at M.D. Anderson impacted what percentage of failure modes?
  - a. 10%.
  - b. 22%.
  - c. 52%.
  - d. 82%.