

**UNDERSTANDING SYSTEM DESIGN** When an analysis, such as an RCA is undertaken, a thorough understanding of how the system is designed (what are the defined policies and procedures) and how it actually functions (include sta in the RCA or go to the location and observe the process) is very important. When designing an action plan, include more than just actions taken with individuals (e.g., peer review, disciplinary action). A good action plan should address the gaps that were found in the system with prevention strategies to prevent the identified causes. If during a code, nursing sta pulled the wrong drug from the crash cart and it was determined that not all crash carts had the same contents and the medication labels were not readily visible, the medications were combined with other supplies, and the contents were in different drawers depending on what unit the cart was found, blaming the sta for not reading the label will not effectively prevent the next person from having similar difficulties finding the correct medication. Address the system and process issues that contributed to the human error. Appropriate to the findings of the investigation, the action plan may include departments or units within an organization, such as the patient-care areas of a hospital.

development and management of systems and processes has a direct link to the actions of individuals. According to It is clear that the / standardization of the carts, with the same drugs found in the same place regardless of cart location, placement of dosing charts in the cart to avoid calculation errors, positioning of pharmacists to pull and prepare medications, or other action to address the true causes of the error. Case Study 18–2 A pharmacist is sta ing the surgery satellite alone, entering postoperative orders for Sue Doe. She is interrupted by a nurse caring for a different postoperative patient Janie Snow from earlier in the day who has a question about her patient's orders. The pharmacist can only view one patient's profile at a time so she pulls up the computer profile to answer a question about Janie Snow. When the pharmacist returned to her original task of entering the orders for Sue Doe, she inadvertently entered them on the wrong patient. It was determined that there is a system that automatically links the scanned order page to the correct patient, but the current version of computer software does not support this process.

**Discussion Question:** Debate and discussion often ensues over whether it is possible to eliminate all errors, eliminate all harm events, or eliminate preventable harm events. Think about human nature and system design. Designate two groups to review the literature around this topic paying specific attention to human error science and system design science (mistake-proofing and similar topics). Then facilitate a discussion around the following questions: Is it possible to eliminate all errors? What should be the goal? No errors? No events of harm? No preventable harm? What questions would you like to ask the pharmacist involved in the error as part of an interview? Would you classify this error as human-error only, system-error only, or a combination of both and why