Patient Safety in the Cardiac Operating Room: What Can, Will and Might
Make Patients Safer and You Happier

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Learning Objectives:
1) describe the current state and limitations of safety science as it relates to communication, culture and the environment,
2) incorporate current safety principles into their practice, and
3) differentiate latent errors in a care delivery system from adverse patient events.

The cardiac operating room is a complex environment consisting of four teams of providers, surgeons, nurses, perfusionists and anesthesiologists, a myriad of complicated equipment often shoved into a space that has not been well thought out. Preventable errors are not related to failure of technical skill, training or knowledge but represent cognitive, system or teamwork failures. The Systems Engineering Initiative for Patient Safety (SEIPS) model, now in generation 2.0, describes the health care delivery system and its complex interactions. (Figure 2). The work system is comprised of the tools and technologies we use, the tasks we complete, the physical environment with which we work in, the organizational structure and finally the people – patients and health care workers. The interactions of these complex parts, both with each other and with themselves define the work system. This system then defines a care process. Finally, the care processes define and determine the outcomes. The FOCUS initiative of the Society of Cardiovascular Anesthesiologist has worked to define and improve the complex system that is the care of the cardiac surgical patient through a concentration on human factors.

Objectives used previously for this talk:

At the conclusion of this activity, the participant will:

1. Describe the impact of human error on medicine and anesthesiology,
2. Recognize environmental influences on care delivery systems,
3. Name several human factors based research projects in progress.