Why Medical Errors Occur
...Because we are human.

How Can We Prevent Medical Errors?
...We can’t.
What Is A “Medical Error”?  

- Use of a wrong plan to achieve an aim (error of planning)  
- Failure of a planned action to be completed as intended  

Reason, JT  
*Human Error*, 1990
What Is A “Medical Error”? 

1. Something “bad” happens
2. A “medical expert” opines that the occurrence was preventable and was someone’s fault
“Traditional Approach” To Medical Errors

• If individuals were sufficiently motivated and adequately trained, there would be no errors
• Identification of responsible individual(s) + punishment
• Simple, easy to understand, highly visible
218. If a physician make a large incision with the operating knife, and kill him, ..., his hands shall be cut off.
“Traditional Approach” To Medical Errors

- Care provided not by individual clinicians, but by a team of individuals in a complex healthcare system.
- Most medical errors not caused by incompetent individuals, but by professionals otherwise conscientious and competent.
- Dangerous…

Owenby RL: Medical Error Prevention, 2003
“Systems Approach” To Medical Errors

- Care provided not by individual clinicians, but by a team of individuals in a complex healthcare system
- Most medical errors not caused by incompetent individuals, but by professionals otherwise conscientious and competent
- Errors are inevitable and are used to improve the system rather than punish the individual

Owenby RL: *Medical Error Prevention*, 2003
“Systems Approach” To Medical Errors

- Reliance on memory and sustained attention are particularly likely to cause errors.
- High reliability organizations: anticipate and plan for unexpected events, build in fault tolerance.
- Sentinel events
- Root cause analysis
Can Medical Errors Be Prevented? The Systems Approach

- Human failure is inevitable
- Failure at any point in a critical process or pathway should not result in adverse outcome
Cockpit Resource Management (CRS): Lessons From The Aviation Industry

1. Teamwork
2. Standardized Procedures
3. Automation