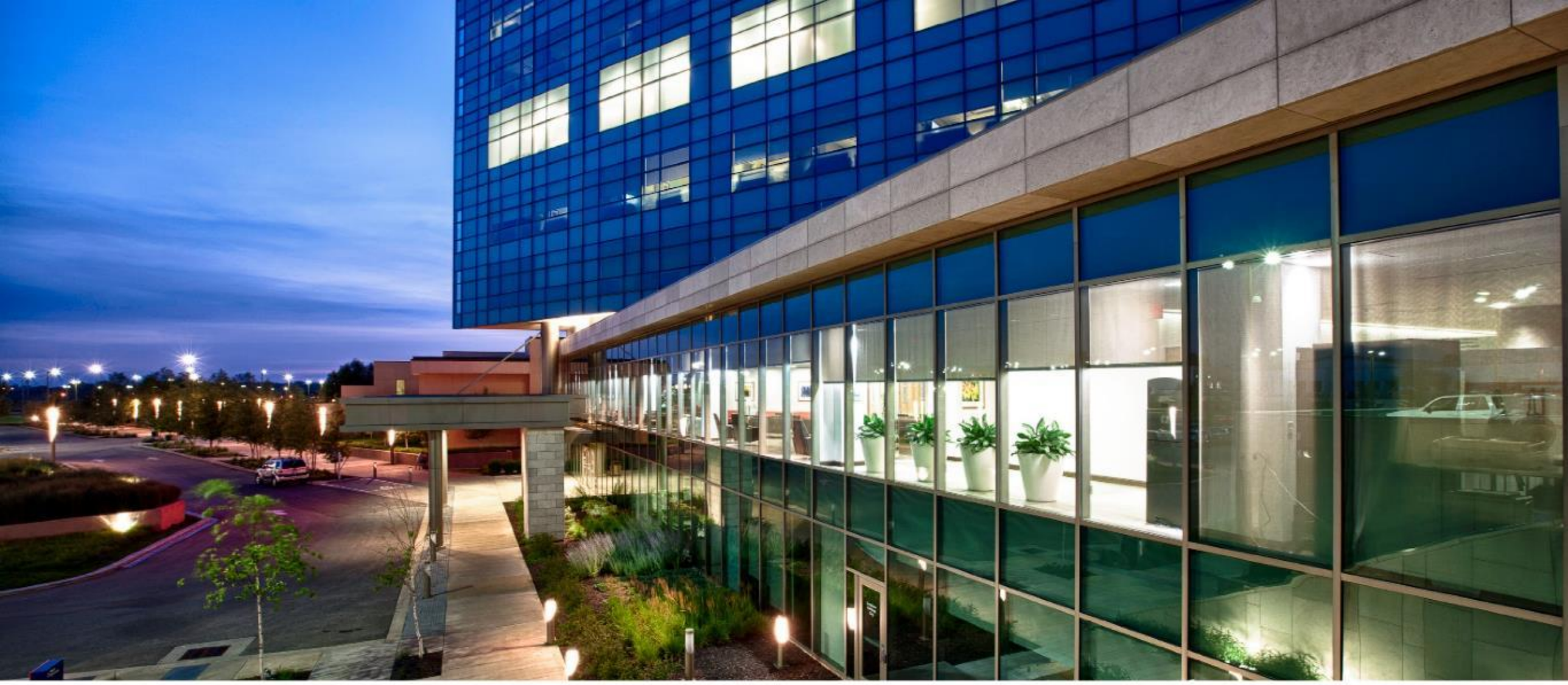

Getting to Zero

Journey to a High Reliability Organization

Shawnee Mission Health

Much more than medicine.

Getting to Zero

- Institute of Medicine report 2000
- National movement to improve patient safety
- Isolated examples of improvement – some impressive
- Given magnitude of problem – results are underwhelming at best.

High Reliability Organizations (HRO)

- Commercial air travel, nuclear power, amusement parks
- Collective mindfulness
- Significant accidents rarely if ever occur

High Reliability Organizations (HRO)

- Nuclear Power is a HRO
- 1989 U.S. Nuclear Plants experienced 0.9 sig events/year
- 2009 that rate was 0.02 sig events/year-basically 0
- Navy has a perfect safety record with 5,400 reactor years without a significant accident

High Reliability Organizations (HRO)

- Airline Industry

- 1960 there were 40 fatalities/million commercial departures

- 2000 there was 1 fatality/million departures

- There have been 0 fatalities since February 2009 involving U.S domestic carriers

So you want to understand an aircraft carrier? Well, just imagine that it's a busy day, and you shrink San Francisco Airport to only one short runway and one ramp and gate. Make planes take off and land at the same time, at half the present time interval, rock the runway from side to side, and require that everyone who leaves in the morning returns that same day. Make sure the equipment is so close to the edge of the envelope that it's fragile. Then turn off the radar to avoid detection, impose strict controls on radios, fuel the aircraft in place with their engines running, put an enemy in the air, and scatter live bombs and rockets around. Now wet the whole thing down with salt water and oil, and man it with 20-year-olds, half of whom have never seen an airplane close-up. Oh, and by the way, try not to kill anyone. Senior officer, Air Division

Evidence of Low Reliability

- Despite increasing harm due to hospital acquired infection, hand hygiene fails 60% of time
- Poor communication at transitions occur 40% of the time resulting in errors which potentially cause harm.
- Wrong side-wrong patient surgery occurs up to 50 times/week in US.

High Reliability Organizations (HRO)

- Preoccupied with failure
- Resist simplification
- Sensitivity to operations
- Commitment to resilience
- Deference to expertise

HRO's

- Preoccupied with failure
  - ✓ Health care organizations behave as if they accept failure
  - ✓ Many "never" events – incidence should be zero
  - ✓ Rare events leads to misplaced confidence and complacency

HRO's

- Resist Simplification
  - ✓ One size does not fit all "Best Practice"
  - ✓ Universal Protocol as example
  - ✓ Health Care is not simple

HRO's

- Sensitivity to Operations
  - ✓ Healthcare workers routinely observe unsafe behaviors, conditions and processes but fail to report them.
  - ✓ Contributing factors
    - Culture of low expectations
    - Lack of recognition
    - Intimidating behavior
    - Alarm fatigue

HRO's

- Commitment to resilience
  - ✓ Uncoordinated and poorly designed and monitored systems are tolerated
  - ✓ Errors are not seen as valuable information, often seen as mistakes

HRO's

- Hospitals often do not permit the most expert individual create and implement solutions.
- Hierarchies among physicians, nurses and administrators with top down attitude.
- Multidisciplinary teams in name only
- "No news is good news"

HRO

- Cannot adopt principles all at once
- Need transformation of organizations culture
- Assess current state of hospitals in order to chart a pathway

HRO

Three major changes needed in healthcare.

- Leadership commitment to ultimate goal of zero patient harm
- Incorporation of a safety culture throughout the organization
- Adoption and deployment of robust process improvement tools and methods.

Leadership

- Aligned agreement
  - ✓ Board of Trustees
  - ✓ Senior Management
  - ✓ Physician and Nurse Leaders
- Goal must be zero
- Cannot be content with current state

Leadership

- Board of Trustees
- CEO/Management
- Physicians
- Quality Strategy
- Information Technology

Information Technology

- Vehicle by which nearly perfect processes sustain their performance
- Need coordinated and connected systems across the organization
- Deployment of IT must be done in a safe manner (Avoid unintended consequences)

Safety Culture

Three central attributes

- ✓ Trust
- ✓ Report
- ✓ Improve

Safety Culture

- Aim is not a “blame-free” culture
- Must separate blameless errors (for learning) from blameworthy ones (for discipline, equitably applied)
- HRO’s balance learning and accountability
- Eliminate intimidating behaviors
- Hold everyone accountable for consistent adherence to safe practices

Robust Process Improvement

- Lean
- Six Sigma
- Change Management
- These methods are resource intensive with substantial training and continued education required

The Business Case

- Administrative processes are just as broken as clinical
  - Billing, supply chain, throughput
  - RPI can directly improve margins
- Quality improvements often don’t save $$
- Learning RPI allows organizations to solve their own problems, eliminate consultants
- Generate ROI now, learn tougher task of redesigning care processes

Next Steps

- Continue to encourage reporting in a non punitive safe environment
- Start to deal with intimidating behavior
- Expand Robust Process Improvement within Quality and beyond
- This process is not a sprint, it is a marathon

Questions?