

Chasing Zero

The Journey to Rural Hospital High Reliability

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Chasing Zero



- A project by Texas Institute of Medical Technology (TMIT) and SafetyLeaders
- Endorsed by Dennis Quaid after his newborn twins were overdosed on Heparin
- No high reliability health care organizations exist, but the **journey** can begin now!

Plan for Today

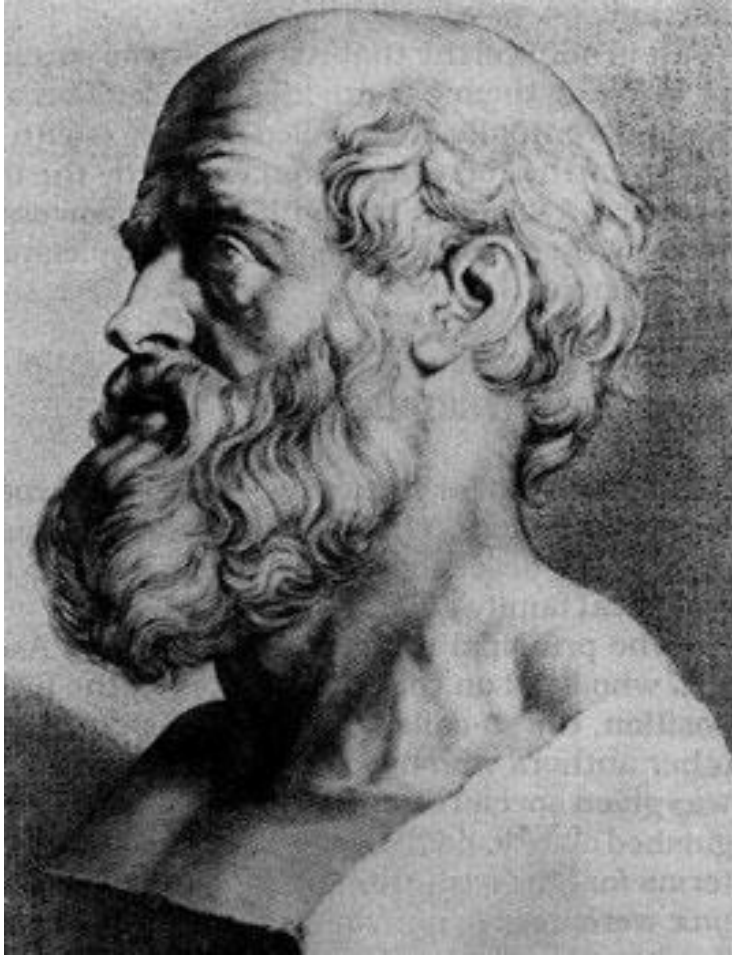


- The patient safety tragedy
- How harm and death occurs
- High Reliability Organization
- Rural hospital journey

IHI's Triple Aim, or CMS's Three Aims



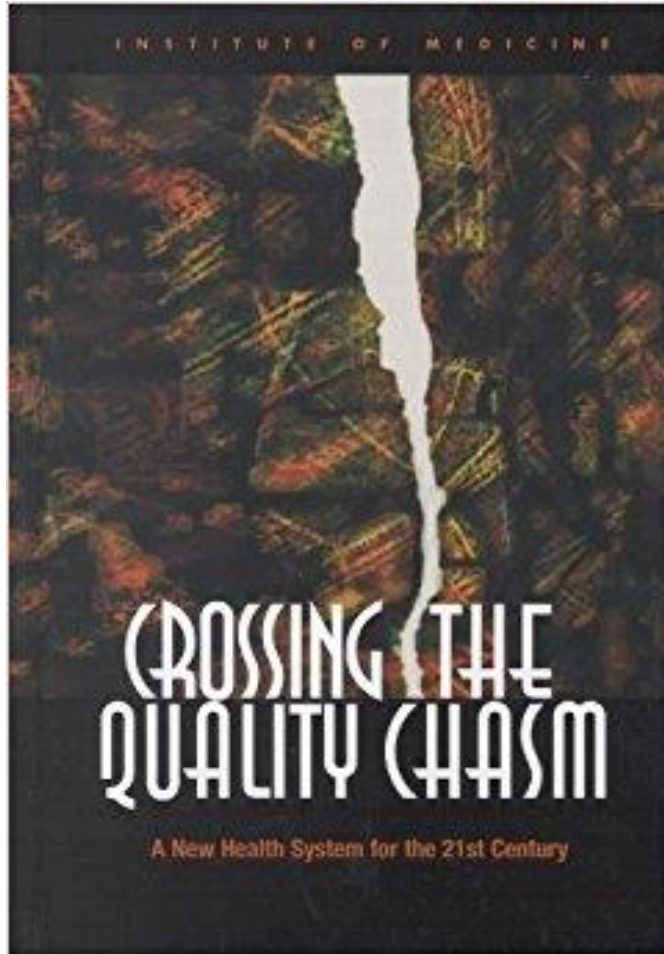
Patient Safety



Primum
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“Please don’t hurt me”

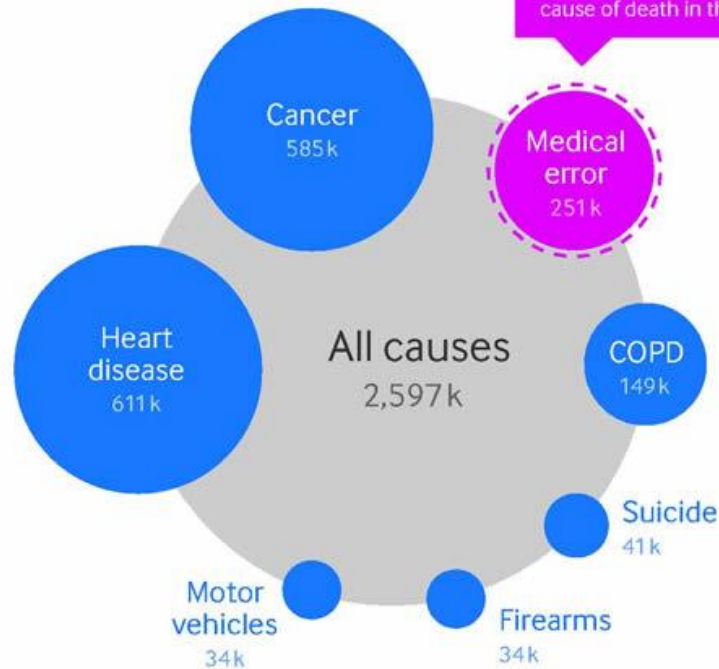
Crossing Quality Chasm – Six Aims



- **Safe** – failure results in serious harm
- **Effective** – failure from not applying evidence
- **Patient-centered** – failure from disregarded patient values
- **Timely** – failure from untimely action
- **Efficient** – failure from duplication
- **Equitable** – failure from unfairness

Deaths from Medical Error

Causes of death, US, 2013



However, we're not even counting this - medical error is not recorded on US death certificates

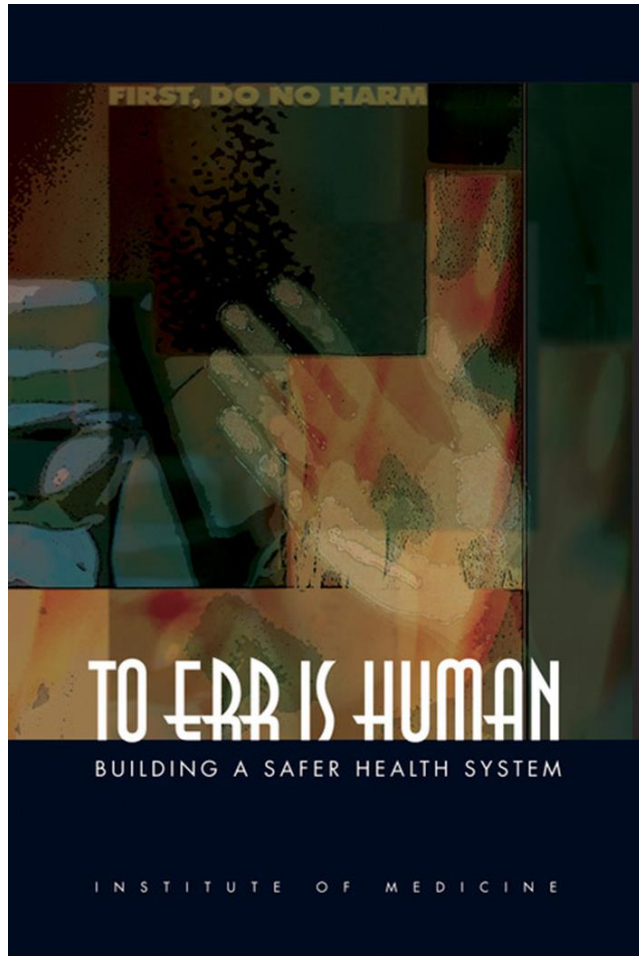
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Data source:

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

- *To Err is Human* – 198,000 deaths per year (IOM, 1999)
- Johns Hopkins researchers – 251,000 deaths per year (Makary, 2016)
- 10% of US deaths due to medical error
- Medical errors are **third** most common cause of death in the US

To Err is Human



- As if two airliners crashed and killed every passenger each and every day
- Would we fly? Would we become numb to the numbers?
- “When one person dies...”
 - Joseph Stalin’s cruel inhumanity
 - Unless it is me, my family, or my friend

We're Human



We're Human



Errors per Encounters

Humans can't do it →

3.4 per 1 million
Six sigma

Pretty darn safe →

<1 per 100,000
Nuclear power plants
Scheduled airlines

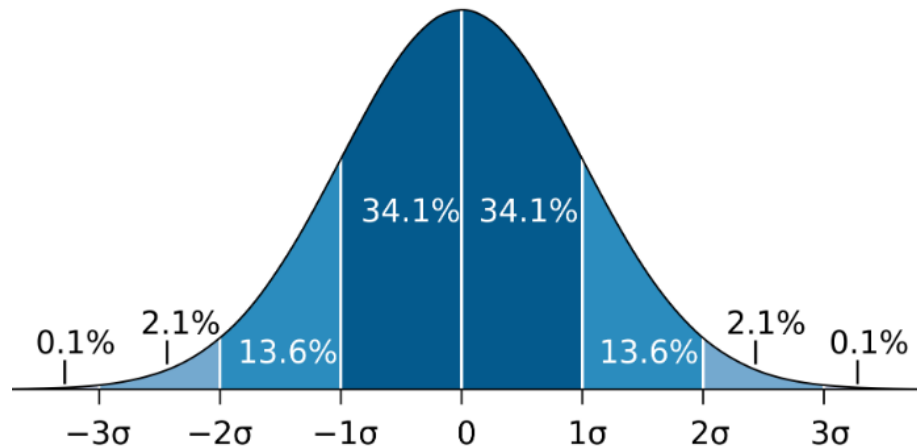
Probably know someone →

>1 per 100,000, but
<1 per 1,000
Driving
Chemical manufacturing

It might happen to you →

>1 per 1,000
Bungee jumping
Medical care

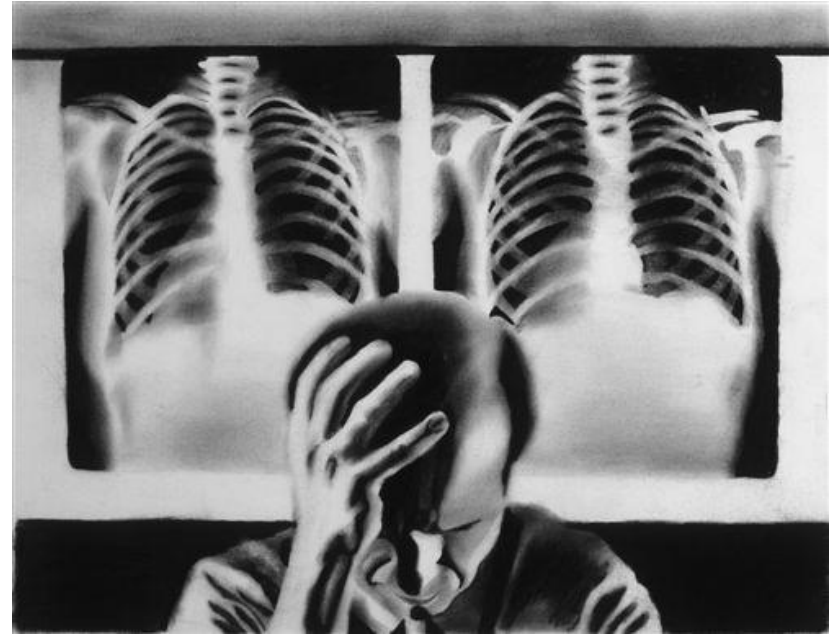
Six Sigma Performance



- Six Sigma refers to 3.4 errors per 1 million tries
- **But humans make an error every 100 tries!**
- No hospitals are at 6σ , but we can be much safer than we are!
- *Highly reliable systems must compensate for the limits of human ability.*

It's the System, NOT the People

- Despite the best intentions of a dedicated and highly skilled workforce, our system, which intends to heal, too often does just the opposite – leading to unintended harm and unnecessary deaths at alarming rates.

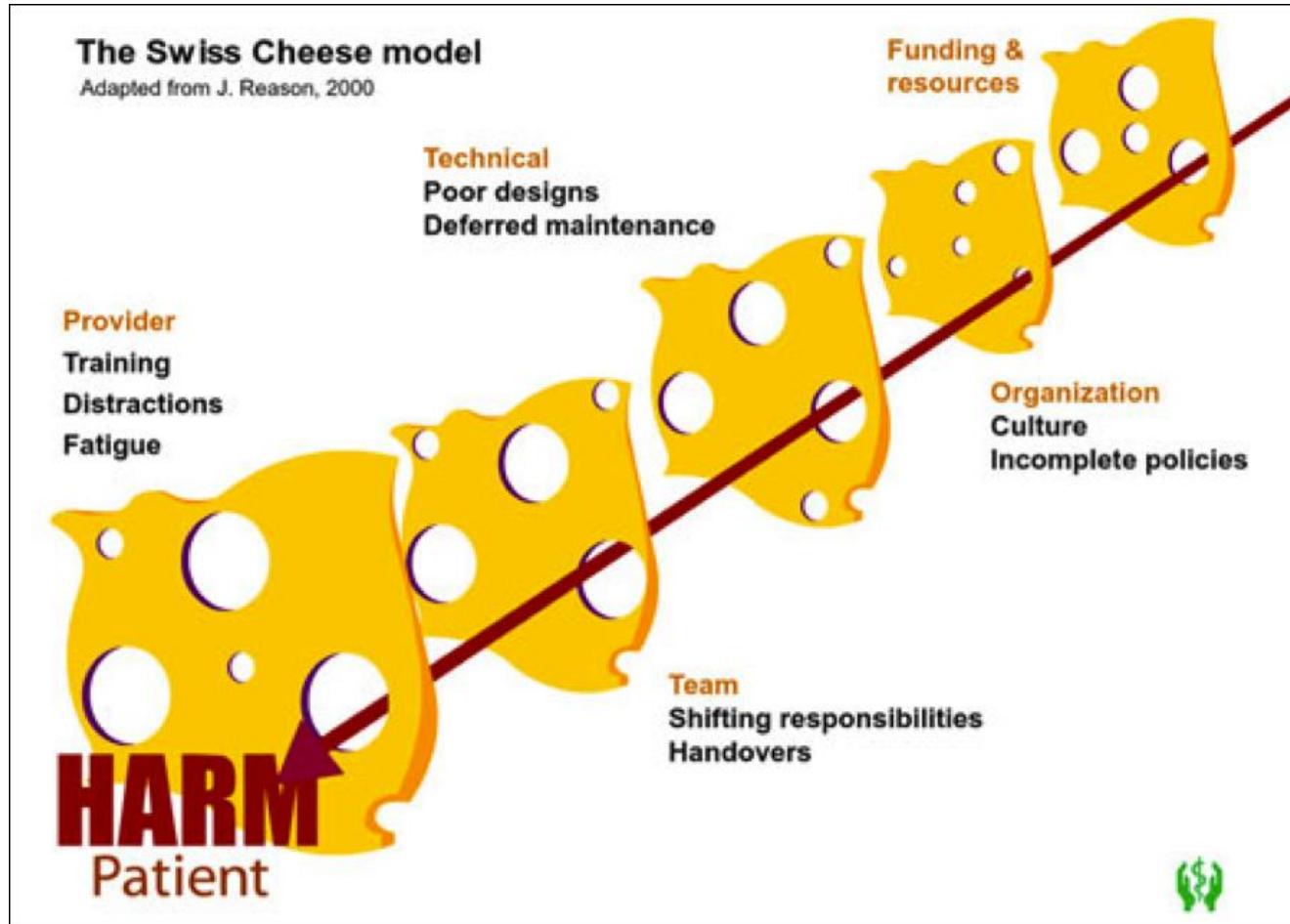


– IHI 100K Lives brochure, 2004

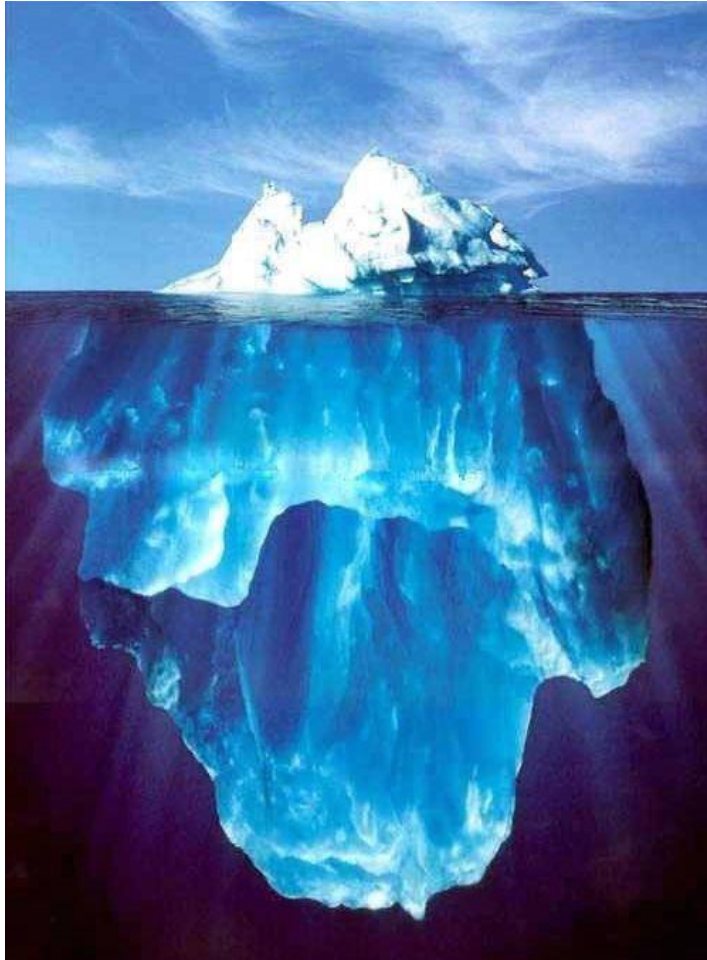
“Every system is perfectly designed to produce exactly the results it produces.”

Systems = Culture

How Patient Harm Occurs



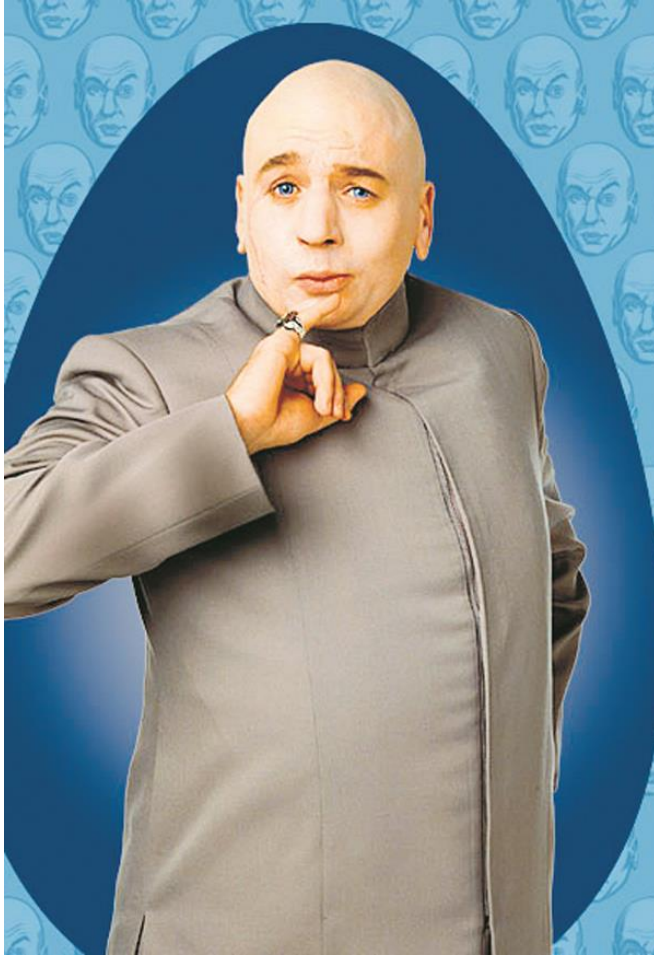
Culture



- Culture is the residue of success.*
- An environment of behaviors and beliefs
- **What we do becomes what we believe.**
- Culture is *measurable*

* Source: Edgar Schein, 1999

Health Care's (Dr.) Evil



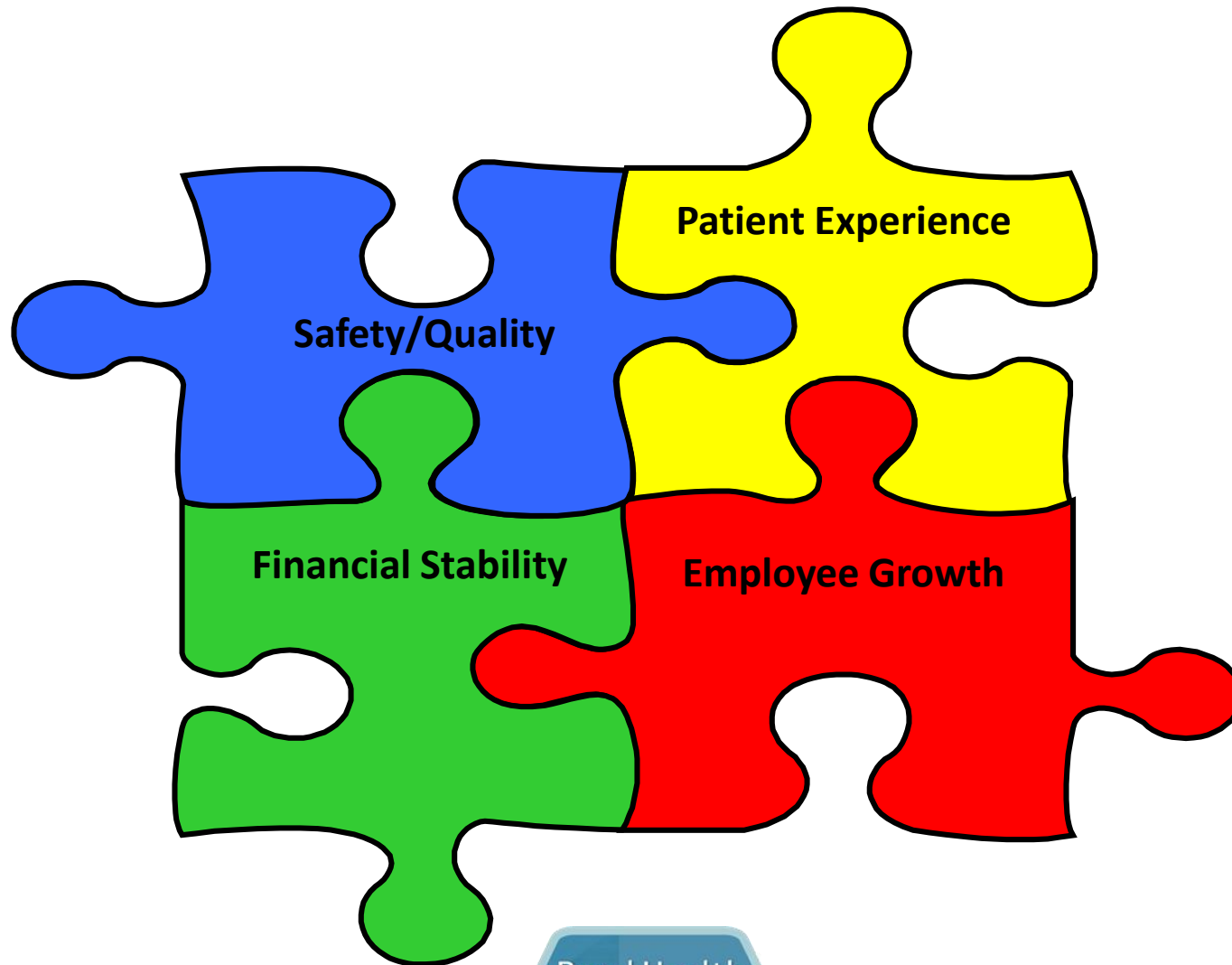
Health System Culture

- Steep hierarchies
- Authority resource
- Prioritized autonomy
- Memory reliance
- Feeble teamwork
- Iron man mentality
- Human fallibility denial
- Punitive approach

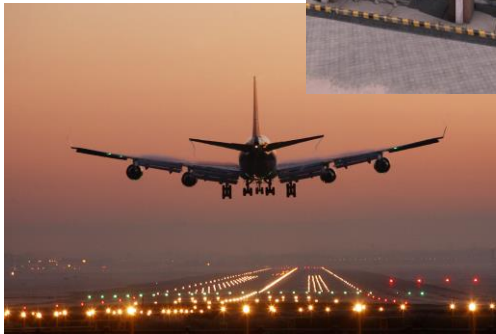
The “Worstest” Cultural Barrier



Balance versus Safety Priority



High Reliability Organizations



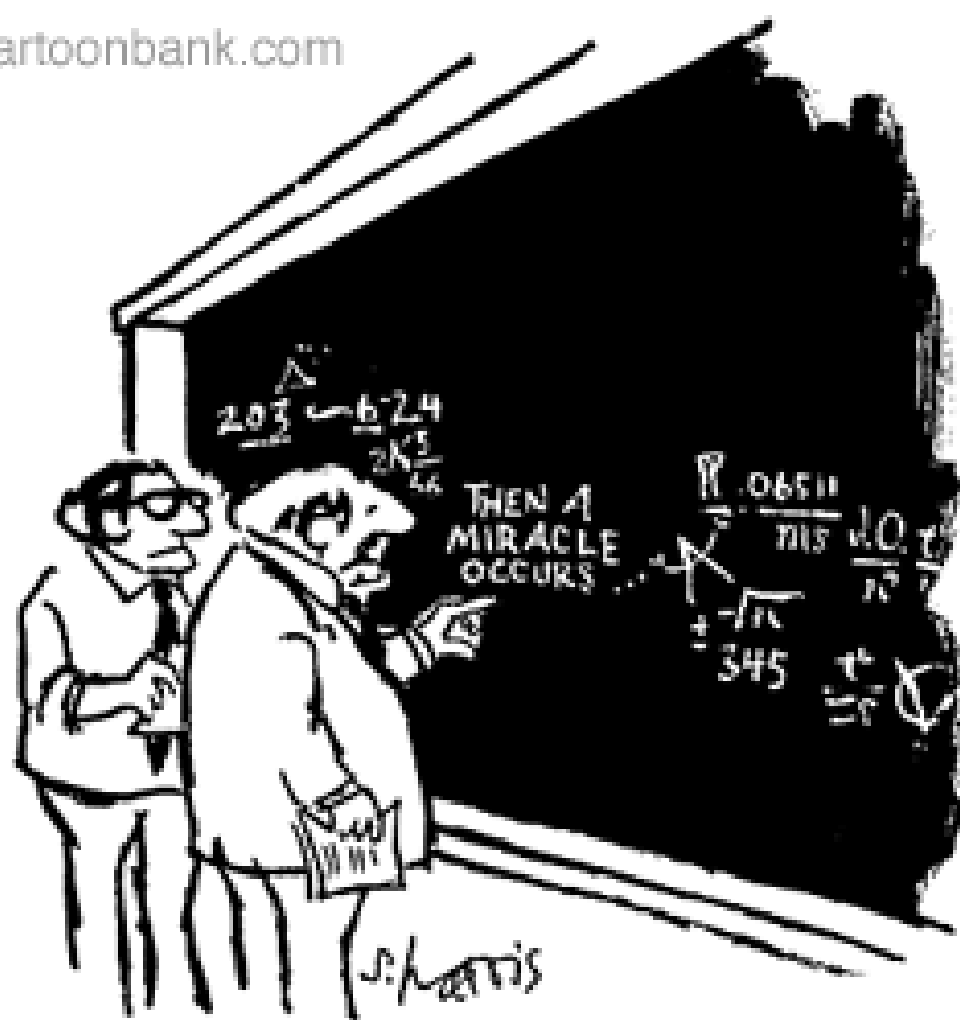
- Operate in complex, high-hazard domains
- Go beyond standardization to persistent mindfulness
- Anticipate, and detect, potential problems early to prevent catastrophes
- Examples
 - Aircraft carriers
 - Nuclear power plants
 - Scheduled airlines

High Reliability Health Care Organization



- A high reliability organization
 - Implements predictable and repeatable care systems
 - Calls for consistent execution of operations and care protocols
 - Catches and corrects potentially catastrophic errors
- Reduces variation, not chases averages
- Does not focus on PI at the expense of examining the habits of people

Source: Deao, C and Marshall, D. Is Your Organization Reliable? Studer Group and Huron. Hardwired Results: Issue 24.



"I think you should be more explicit here in step two."

Getting from Here *Toward* There



- *Where* you start is less important
- Instead, relentless commitment to safety
- Yet here are some ideas



[View the website](#)

5 Traits of a High Reliability Organization

1. Preoccupation with failure
 - De-stigmatize failing – “Failing is not failure.”
 - Encourage near-miss reporting
 - Identify what’s working – and replicate it
2. Reluctance to accept “simple” explanations
 - Dig deeper to identify root problems – “Why, why, why?”
 - Use data to challenge long-held beliefs
3. Sensitivity to operations
 - Be transparent
 - Round regularly
 - Don’t make assumptions

Source: Interview with Quint Studer. 5 Traits of High Reliability Organizations and How to Hardwire Each in Your Organization. ASC Communications. 2017.

5 Traits of a High Reliability Organization

4. Deference to expertise

- Ask and listen – front line staff often more knowledgeable
- Schedule “no-meeting zones” to allow rounding and learning
- Seek out fresh perspectives from new employees

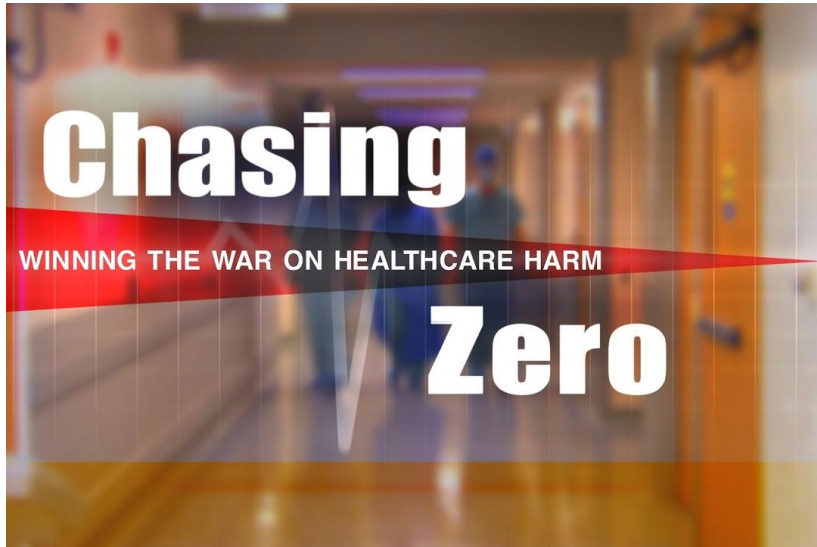
5. Commitment to resilience

- Assume system is at risk for failing
- Use good tools – scorecards, action plans, common goals
- Cultivate situation assessment and cross-monitoring
- Link everyday jobs to a purpose – a shared vision

“We will be the safest hospital in the region.”

Source: Interview with Quint Studer. 5 Traits of High Reliability Organizations and How to Hardwire Each in Your Organization. ASC Communications. 2017.

Commitment to Zero at CPH



[Watch the one hour documentary on YouTube](#)

If you were a patient in your own department, what would you be most concerned about?

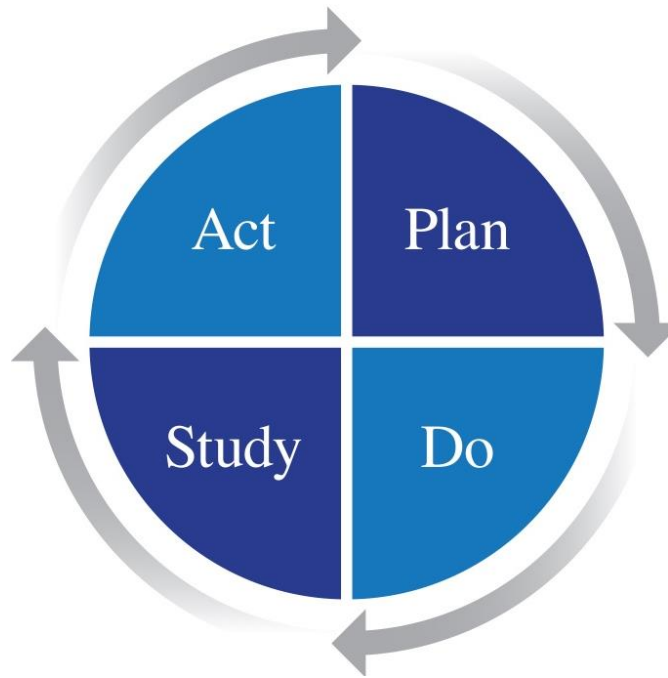
- Commitment to zero preventable harm by 2021
 - a Big Audacious Goal
 - Leadership commitment
- *Safety*: an organizational value
- Transparency
 - Daily Safety Huddle – ask!
 - Board reports, Hospital Compare, and Leapfrog
 - Safety data openly available and discussed

Measurement and Transparency



- To improve it, you must measure it and attend to it
- Attention is the currency of leadership
- Harm that reaches patient
 - Sentinel Events? (JC)
 - Patient Safety Indicators? (CMS)
 - Serious Safety Events? (ASHRM)
- Days since harm, or rate?
 - What's the denominator?
 - Adjusted Patient Days?

Process Improvement Focused on Safety



- “Anything that can go wrong will go wrong.”
- PDSA, process maps, FMEAs
- Debriefs – all high-risk and low-frequency events
- First order and second order problem solving
 - “Workarounds” often rewarded
 - A manager’s job to fix process
- ***HRO is more than PI***; a cultural focus on reducing variation

Organizational Behaviors Signal Culture



- **Safety** as an organizational and publicly shared “value”
- Organization behaviors
 - Budget and operations
 - Job descriptions and evaluations
- Leaders’ role
 - Rounds (MBWA)
 - Up/down communication
 - Encourages everyone to continuously look for something not quite right
 - Safety is paramount

Just Culture

- “A just culture recognizes that competent professionals make mistakes and acknowledges that even competent professionals will develop unhealthy norms (shortcuts, “routine rule violations”), but has zero tolerance for reckless behavior....
- Frontline personnel feel comfortable disclosing errors – including their own – while maintaining professional accountability.”

Actions

- Educate caregivers about risk
- Hold caregivers responsible to follow best practices
- Create a safe haven around reporting
- Recognize what we can and can't control

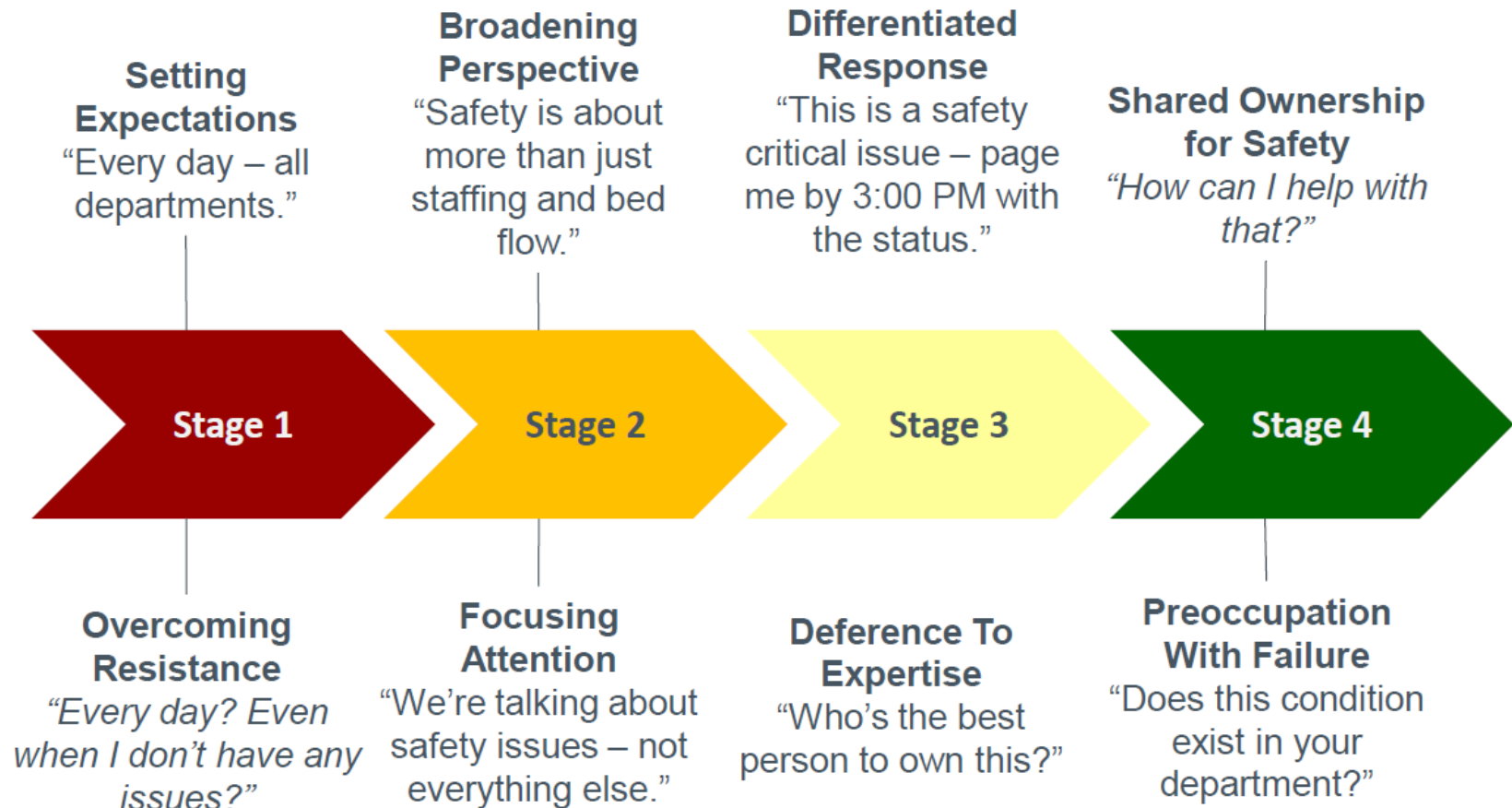
Sources: Agency for Healthcare Research and Quality (AHRQ) and Jill Blazier, Central Peninsula Hospital. The concept of “Just Culture” was championed by David Marx.

Just Culture



- Builds trust
 - Fair, enlightened, reasonable assessment of behaviors
- Promotes reporting
 - Collects, analyzes and spreads knowledge gained from incidents and near-misses
- Fosters “mindfulness”
 - Supports creation of a High Reliability Organization
 - Systemic approach to error reduction

Evolving Safety Perspective



Source: Presentation by Karen Scoggins, CNO. Central Peninsula Hospital. Soldotna, Alaska, October 2017.

Sustaining the Journey



- Laser leadership focus
- Message repetition
- Internal web page
- Daily email blast
- Periodic story highlight
- *Speak Up* award
- Safety as a *value*
- Measurement
- Quant. and qual. reporting
- Celebrations

Leadership and High Reliability

The Formula for Successful Change

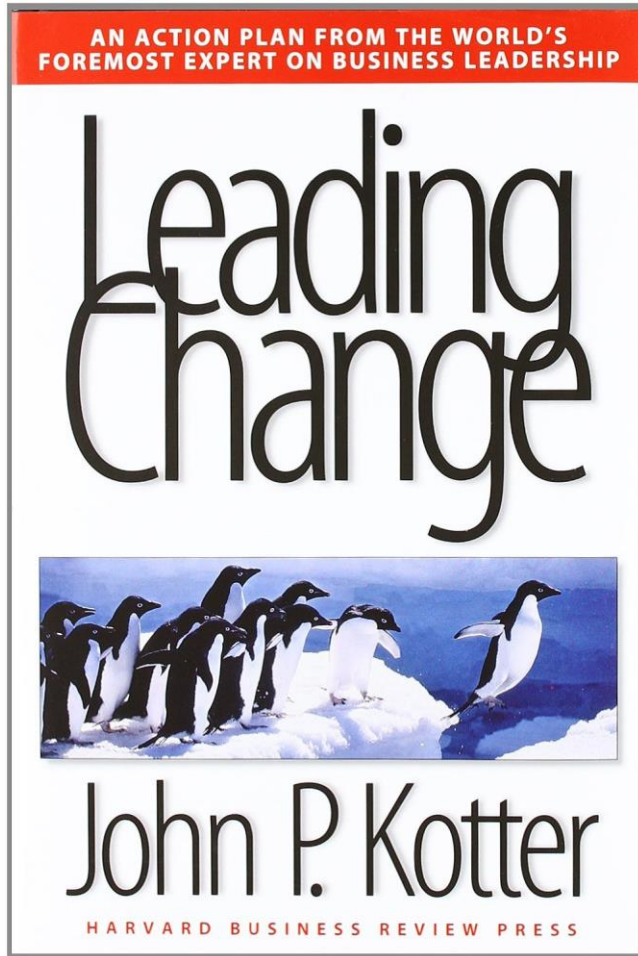
Successful change requires all five ingredients. Otherwise, consistent excellence is in jeopardy.

SHARED VISION	+	SKILLS/TRAINING	+	INCENTIVES	+	RESOURCES	+	ACTION	=	SUCCESSFUL CHANGE
X	+	SKILLS/TRAINING	+	INCENTIVES	+	RESOURCES	+	ACTION	=	CONFUSION
SHARED VISION	+	X	+	INCENTIVES	+	RESOURCES	+	ACTION	=	ANXIETY
SHARED VISION	+	SKILLS/TRAINING	+	X	+	RESOURCES	+	ACTION	=	GRADUAL CHANGE
SHARED VISION	+	SKILLS/TRAINING	+	INCENTIVES	+	X	+	ACTION	=	FRUSTRATION
SHARED VISION	+	SKILLS/TRAINING	+	INCENTIVES	+	RESOURCES	+	X	=	FALSE STARTS

Source: Adapted from Knoster, T., Villa, R., & Thousands, J. (2000). *A framework for thinking about systems change*.

Reprinted from: Deao, C and Marshall, D. Is Your Organization Reliable? Studer Group and Huron. Hardwired Results: Issue 24.

Change Management



Rocket science of improvement

1. Establish a sense of urgency
2. Form a powerful coalition
3. Create a Vision
4. Communicate the Vision
5. Empower others to act
6. Plan for and create wins
7. Consolidate improvements to produce still more change
8. Institutionalize new approaches

What's Different about a Rural Hospital



- Smaller than urban, but still complex (and dangerous)
- Fewer resources is offset by smaller denominator
- Easier to monitor and improve safety
- Nimble? Let's prove it!
- Who will be the **safest** hospital?

HRO Resources

- [Agency for Healthcare Research and Quality. \(2016\). Patient Safety Network: High reliability.](#)
- [Anderson, J. \(2015\). Becoming a high reliability organization.](#)
- [Chassin, M. & Loeb, J. \(2013\). High-reliability health care: Getting there from here. *The Milbank Quarterly*, 91\(3\), 459-490.](#)
- [DuPree, E. \(2016\). High reliability: The path to zero harm. *The Joint Commission, Healthcare Executive*. 66-69.](#)
- [Hoppes, M. & Mitchell, J. \(2014\). Serious safety events: A focus on harm classification. *American Society for Healthcare Risk Management, Getting to Zero White Paper Series – Edition No. 2.*](#)
- [Nolan, T., Resar, R., Haraden, C., & Griffin, FA. \(2004\). Improving the reliability of healthcare. *IHI Innovation Series white paper*. Boston: Institute for Healthcare Improvement.](#)
- Sculli, G. & Paull, D. (2015). *Building a high-reliability organization: A toolkit for success*. Brentwood, TN: HCPPro.
- Weike, K. & Sutcliffe, K. (2001). *Managing the unexpected: Assuring high performance in an age of complexity*. San Francisco, CA, US: Jossey-Bass.

Thanks to Jill Blazier, RN for providing this resource list

Healthy Communities

