

# The Role of Leadership in Implementing a Quality Improvement and Patient Safety Program

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**Embrace Change:**  
**Building today's leaders**

Friday, October 19, 2018

## Disclosure of Conflict of Interest

I do not have any relevant financial relationships  
with any commercial interests.

# Learning Objectives

1. Describe leadership's responsibility for quality improvement and patient safety programs.
2. Describe the importance of regular quality reports to the governing board and to staff.
3. Describe how to develop a hospital culture that encourages reporting and discussing sentinel events or near misses without fear of repercussion.

# Paradox of Plenty

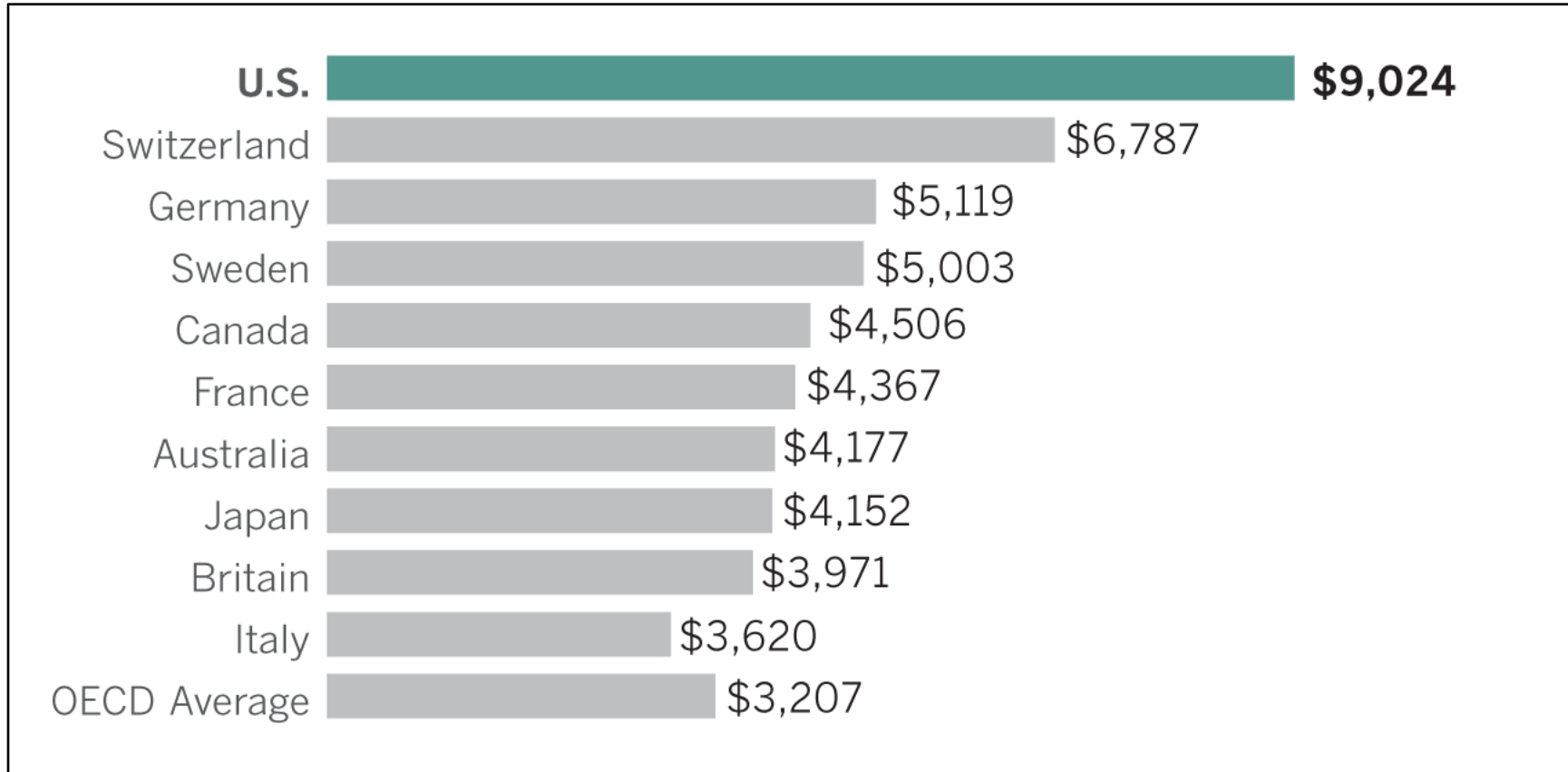
- ~Most advanced healthcare system in the world
- ~High Cost, Low Quality
- ~For the money the United States spends on healthcare, about \$3.2 trillion a year (2015)– the quality of care is unacceptably low
- ~Each year as many as 15 million patients harmed in some manner by America's healthcare system



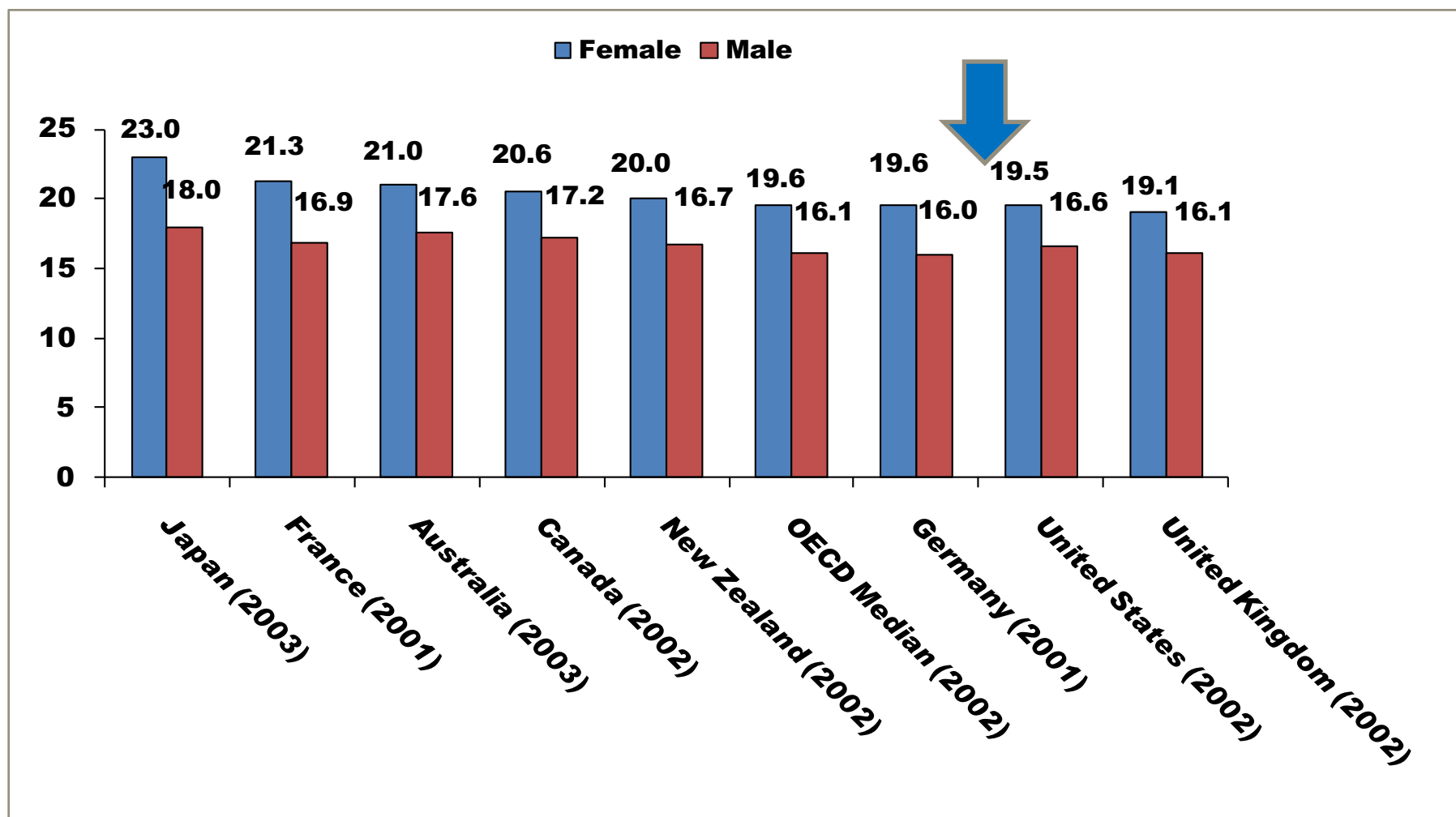


# Health Care Spending per Capita

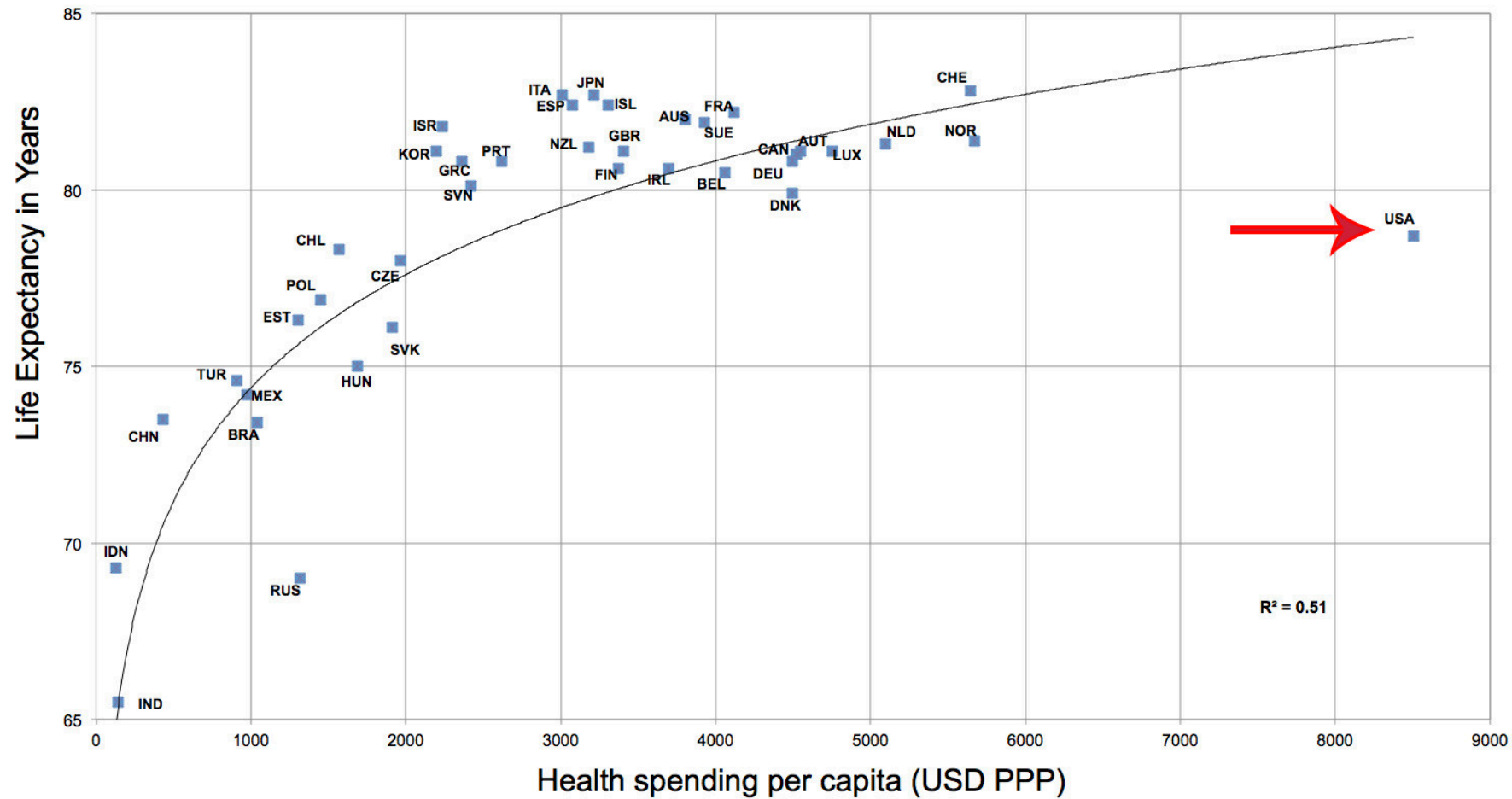
Adjusted for Differences in Cost of Living



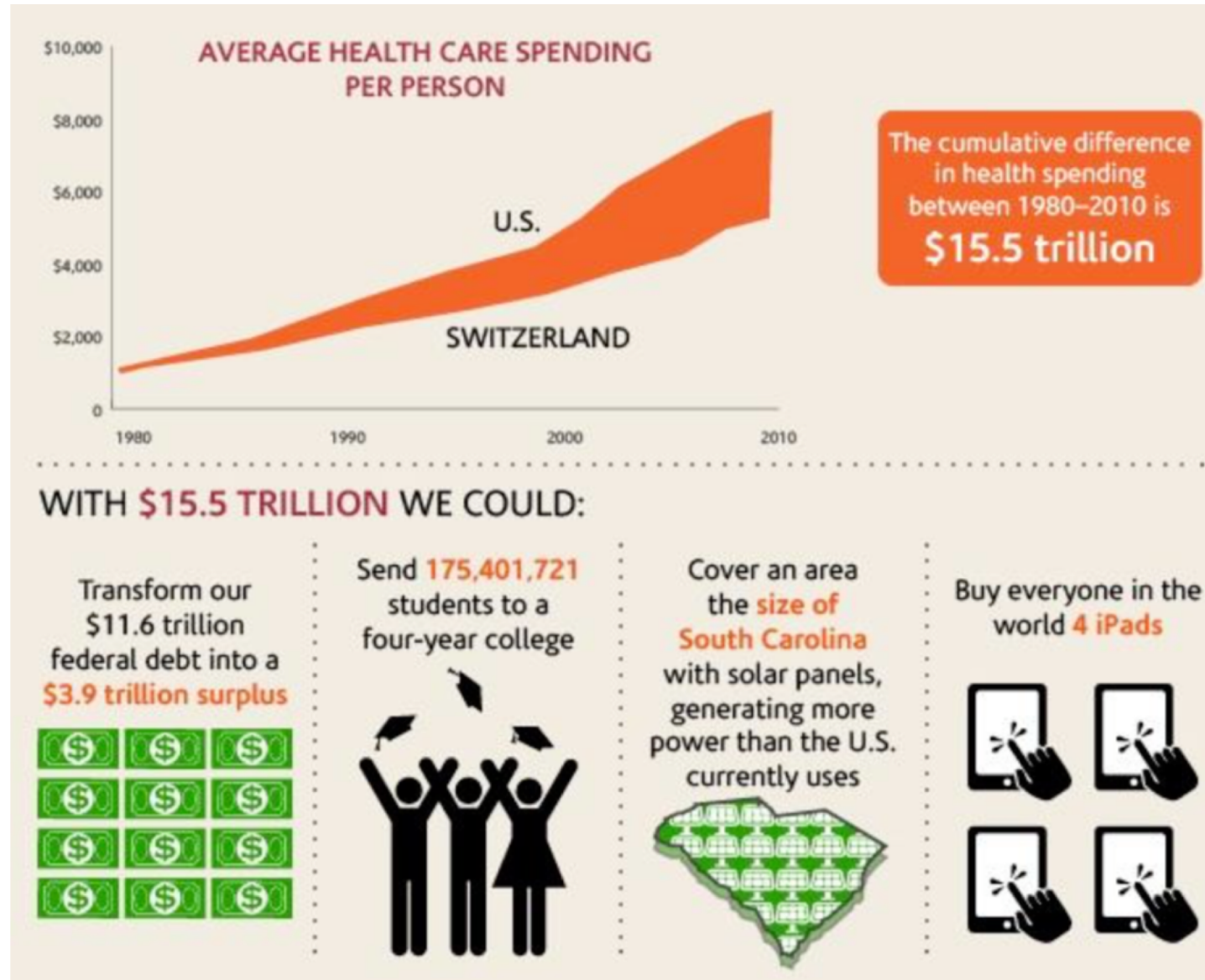
# Life Expectancy at Age 65



# Healthcare expenditure and life expectancy

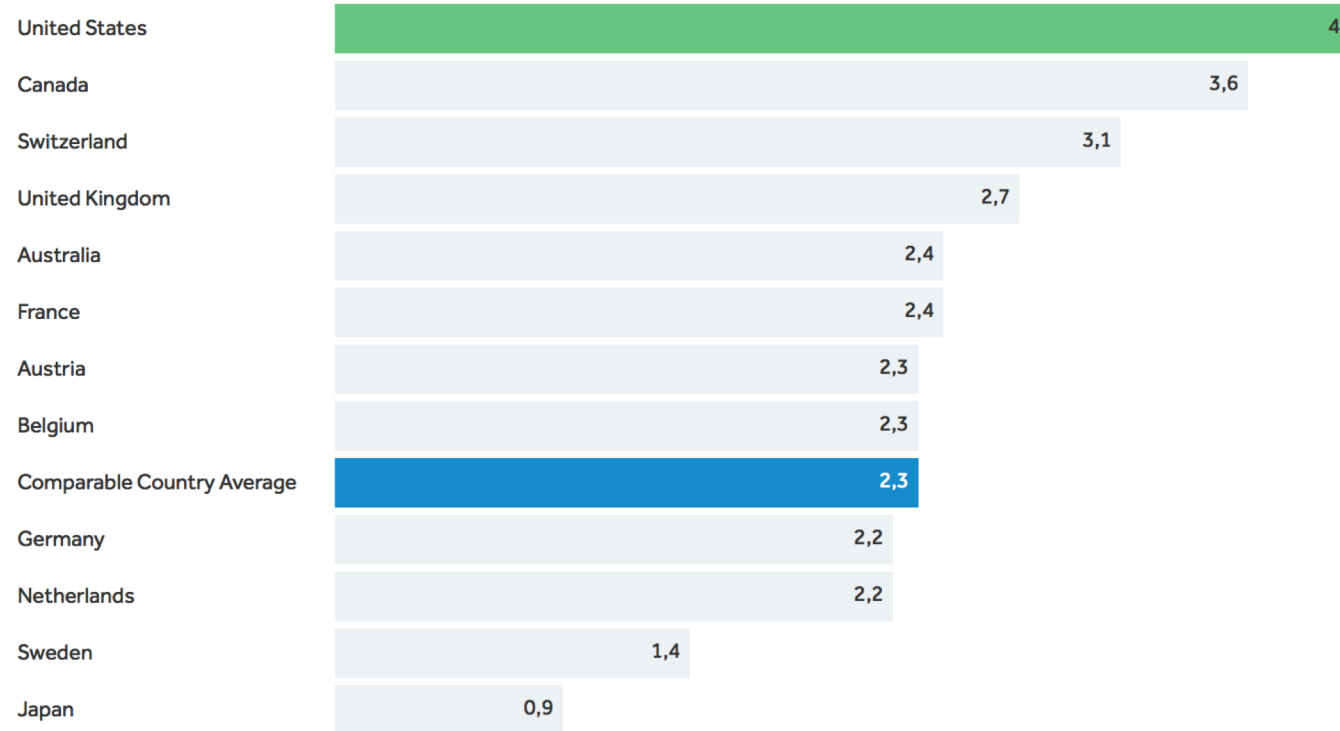


# Looking Back: What We Could Have Saved If We Had Matched the Next Highest Country (Switzerland)



# Infant Mortality Rate

Neonatal mortality per 1,000 live births, 2014



Comparable countries are defined as those with above median GDP and above median GDP per capita in at least one of the past 10 years. In cases where 2014 data were unavailable, data from the last available year are shown.

Quelle: Kaiser Family Foundation analysis of data from OECD (2017), "OECD Health Data: Health status: Health status indicators", OECD Health Statistics database. (Accessed on July 5, 2017). • PNG

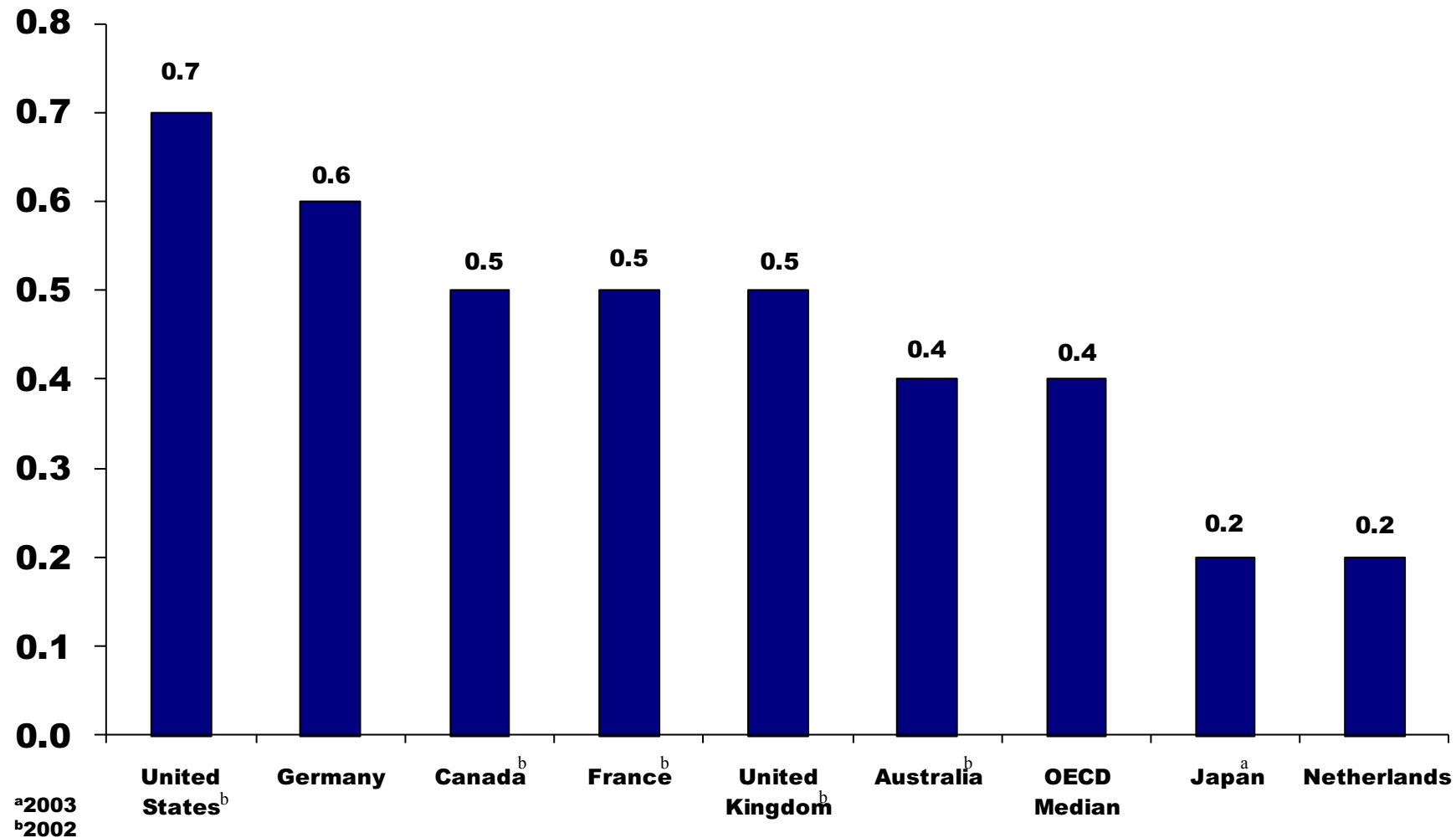
Peterson-Kaiser

**Health System Tracker**



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# Deaths Due to Surgical or Medical Mishaps per 100,000 Population

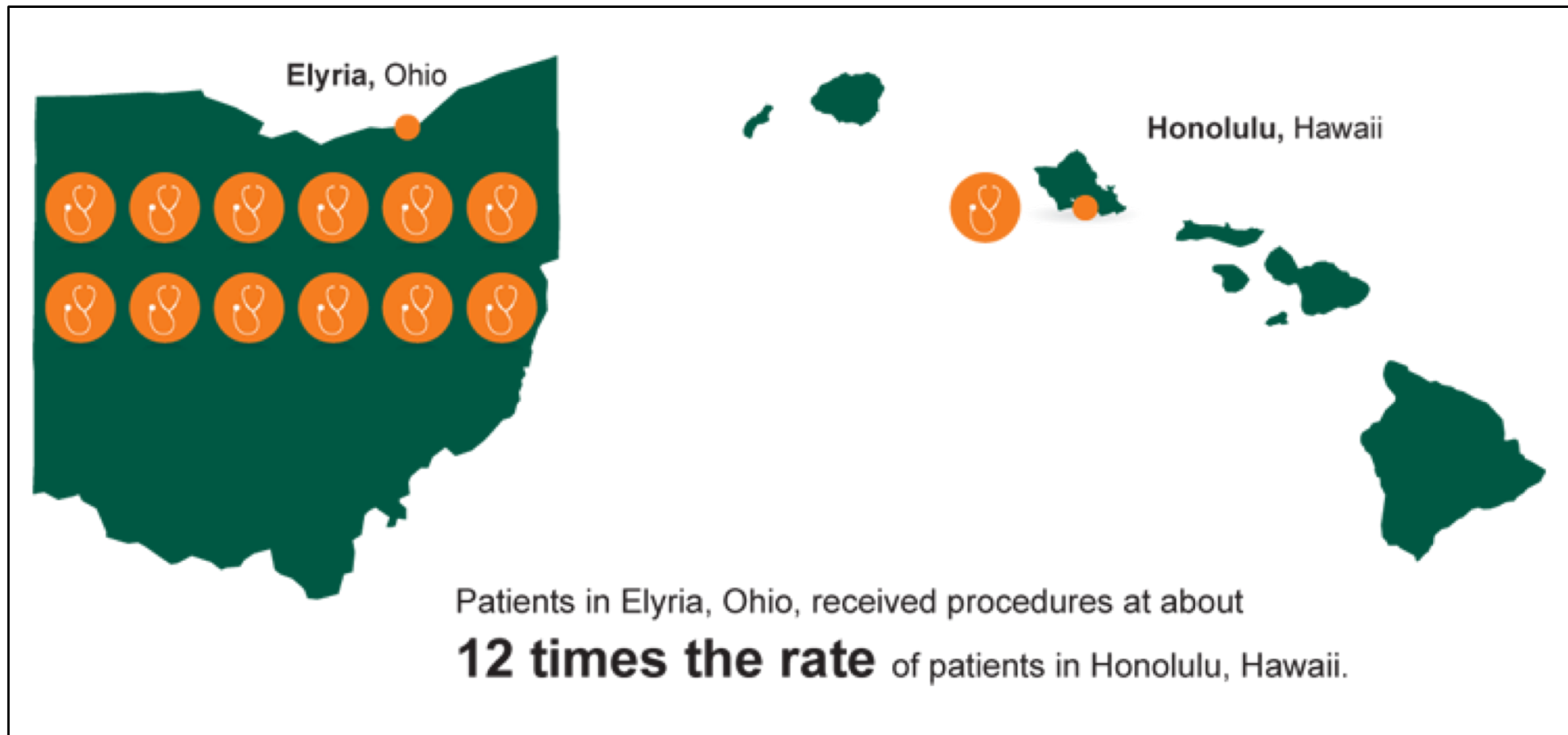


# Waste Category Annual estimates

Category	Cost to US Healthcare (2011 \$B)
Overtreatment	\$158 to \$226
Failures to coordinate care	\$25 to \$45
Failures in care Delivery	\$102 to \$154
Excess administrative costs	\$107 to \$389
Excessive Health care prices	\$84 to \$178
Fraud and Abuse	\$82 to \$272
<b>2011 Total waste</b>	<b>\$558 to \$1263</b>
<b>% of Total Spending</b>	<b>21% to 47% (MED =34%)</b>

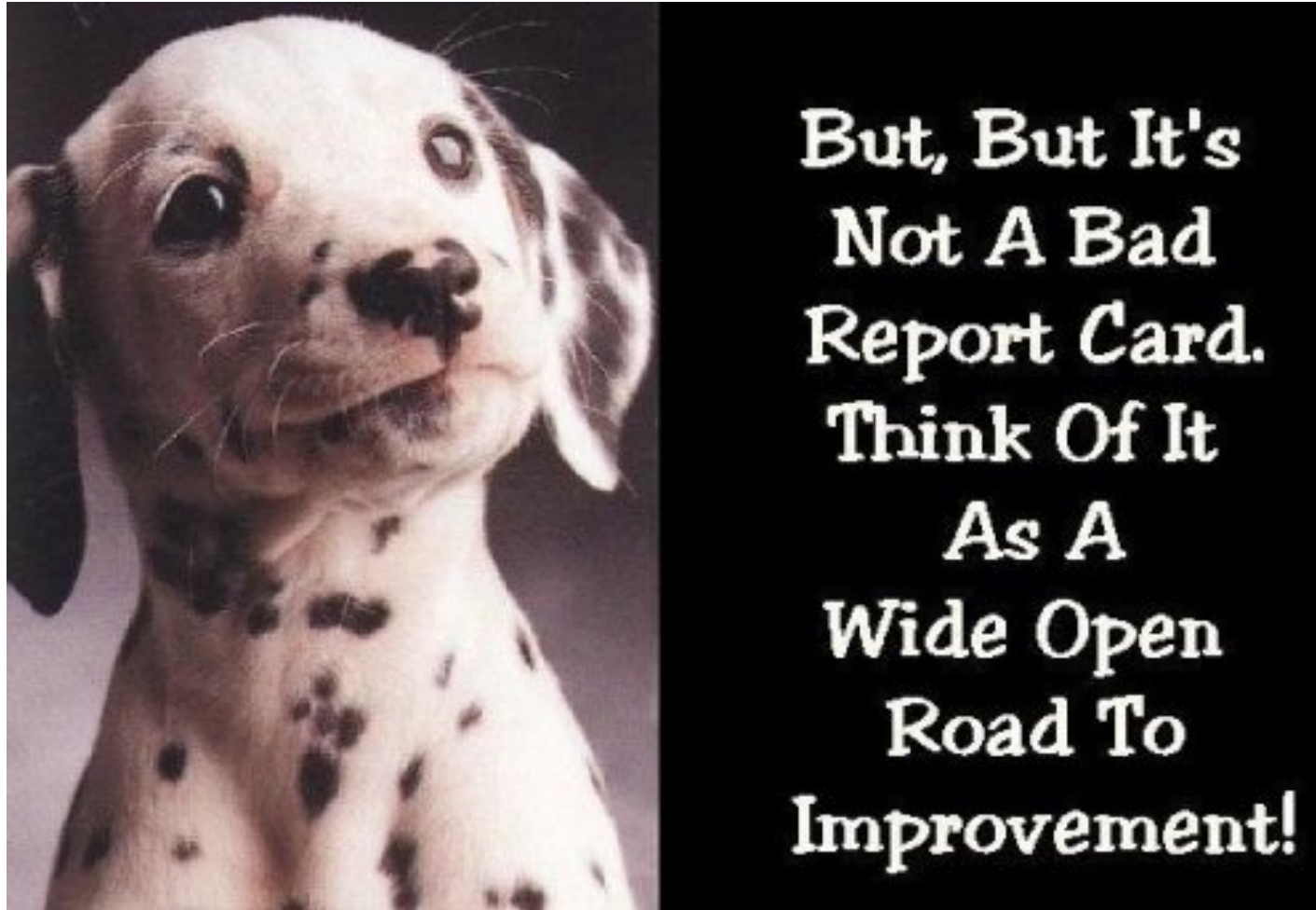


# Variation in Cardiac Care from State to State





# Quality Efforts in Healthcare



# Quality Efforts in Healthcare

Quality in healthcare...

...what is it?

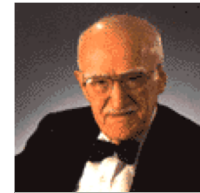
It depends



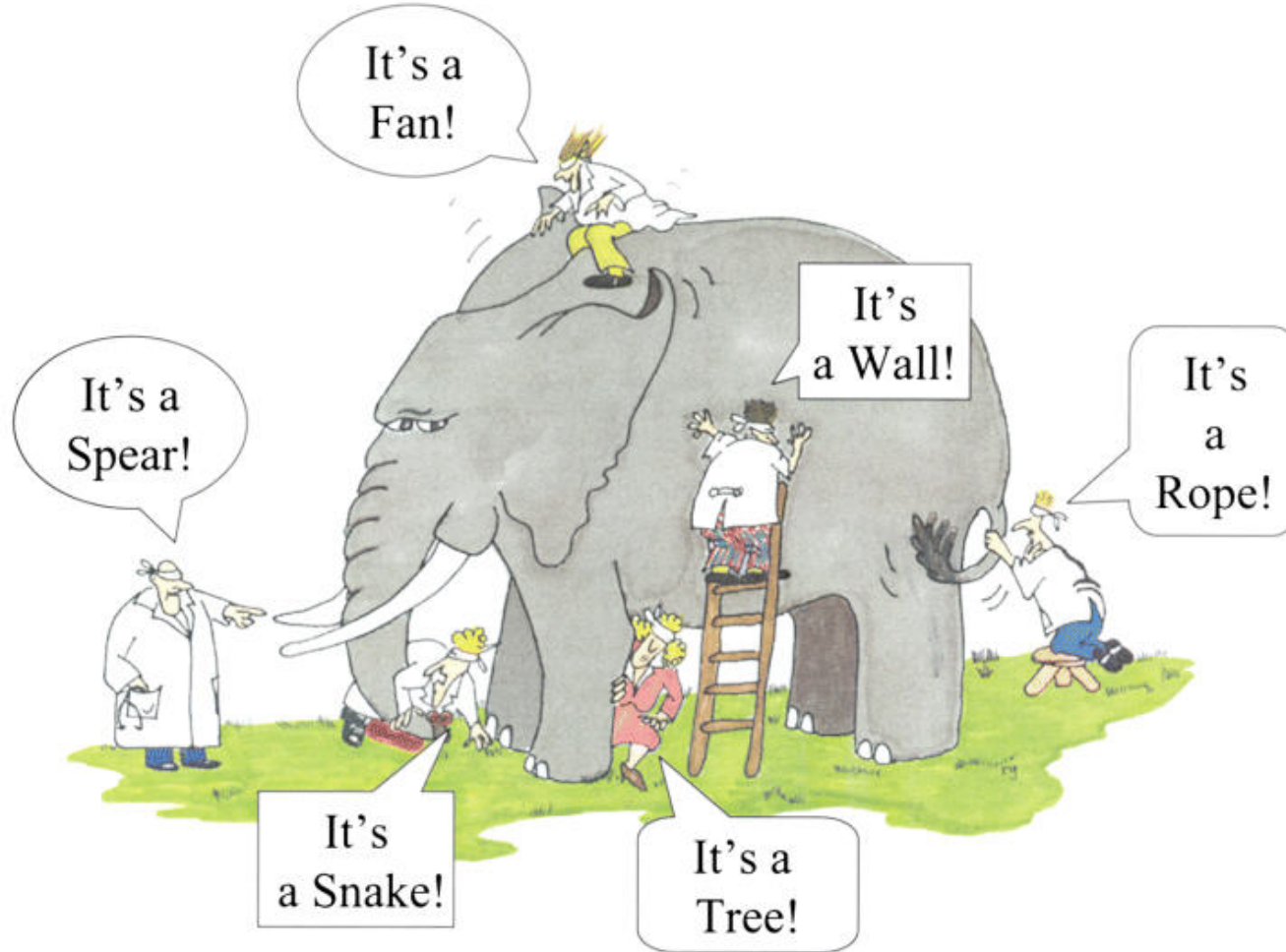
# Quality Efforts in Healthcare

Quality pioneers have different opinions:

- Dr. Joseph Juran – “fitness for use”
- Philip Crosby – “zero defects”
- Dr. Edwards Deming – “never-ending cycle of continuous improvement”



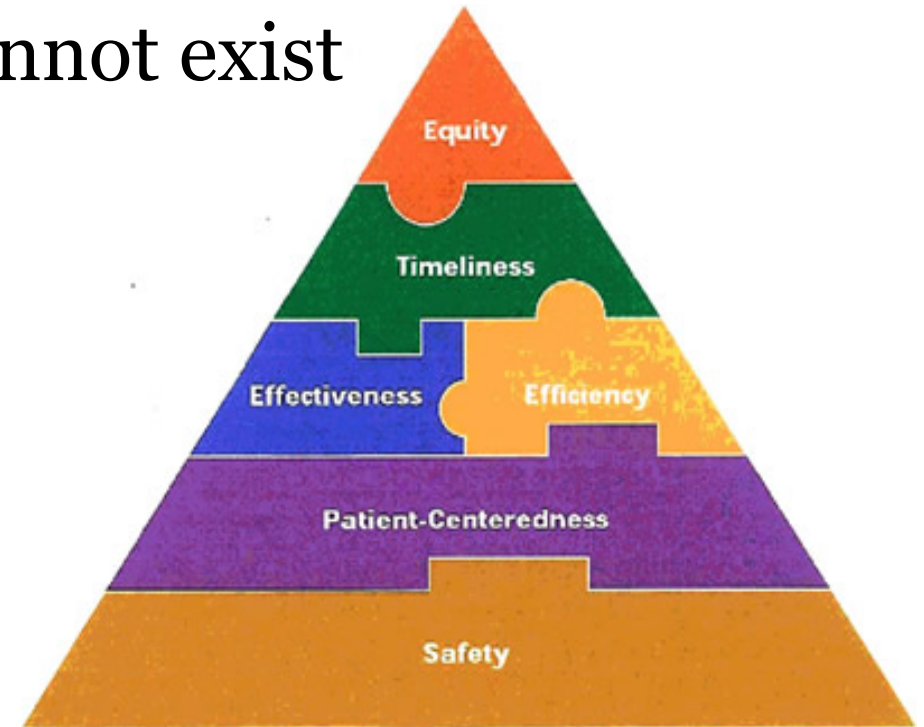
# Quality Efforts in Healthcare



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# Quality and Patient Safety

If the patient is not safe from accidental harm, then  
high-quality healthcare cannot exist



# What do we mean by Patient Safety?

A culture that embraces the reduction of medical errors, complications, and other unanticipated adverse events which contributes to improved clinical outcomes through the adoption and management of evidence-based **practices, processes, and systems**



# What do we mean by Patient Safety?

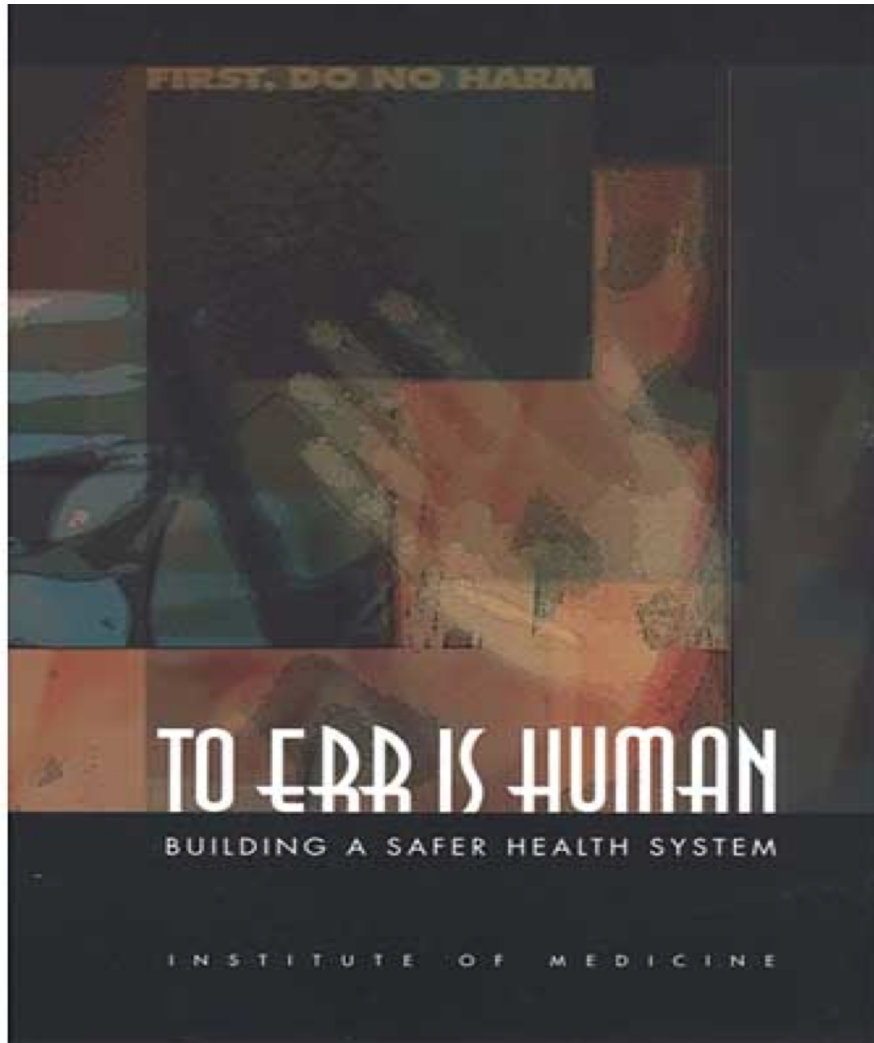
Distinction between patient safety issues (errors) and quality concerns

- ~ ***Operating on the wrong knee (error)** vs. not using the proper surgical approach (quality)*
- ~ ***Overdosing a diabetic patient on insulin (error)** vs. failing to properly control a patient's diabetes (quality)*
- ~ ***Illegible prescription order (error)** vs. not prescribing the most effective antibiotic (quality)*





# To Err is Human



- » Financial Cost of Medical Errors: \$29 **billion** each year in the United States alone
- » Doctors, patients, insurers and hospital systems play a role in eradicating errors





# Institute of Medicine (IOM) Roundtable

*“ Serious and widespread quality problems exist throughout American medicine. These problems occur in small and large communities alike, in all parts of the country, and with approximately equal frequency in managed care and fee-for-service systems of care. Very large numbers of Americans are harmed as a result .”*



## What IOM Said:

- » The patient safety problem is large.
- » It (usually) isn't the fault of health care workers.
- » Most patient injuries are due to system failures.



# Roundtable Categories

» **Overuse** (of procedures that cannot help)

» **Underuse** (of procedures that can help)

» **Misuse** (errors of execution)



# Health Care Examples of Overuse

- » 30% of children receive excessive antibiotics for ear infections
- » 20% to 50% of many surgical operations are unnecessary
- » 50% of X-rays in back pain patients are unnecessary



# Health Care Examples of Underuse

- » 50% of elderly fail to receive pneumococcal vaccine
- » 50% of heart attack victims fail to receive beta-blockers

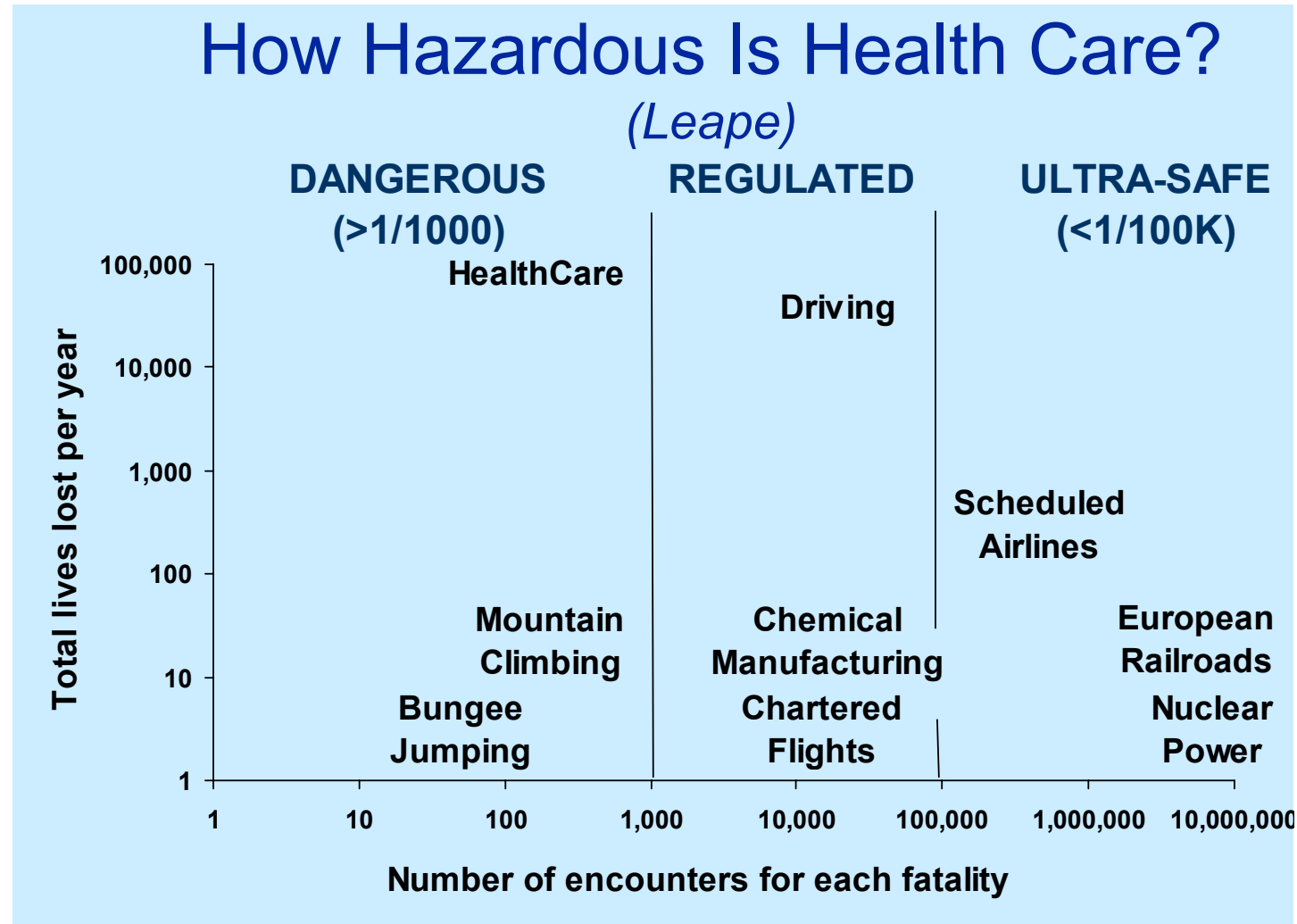


# Misuse of Healthcare Safety

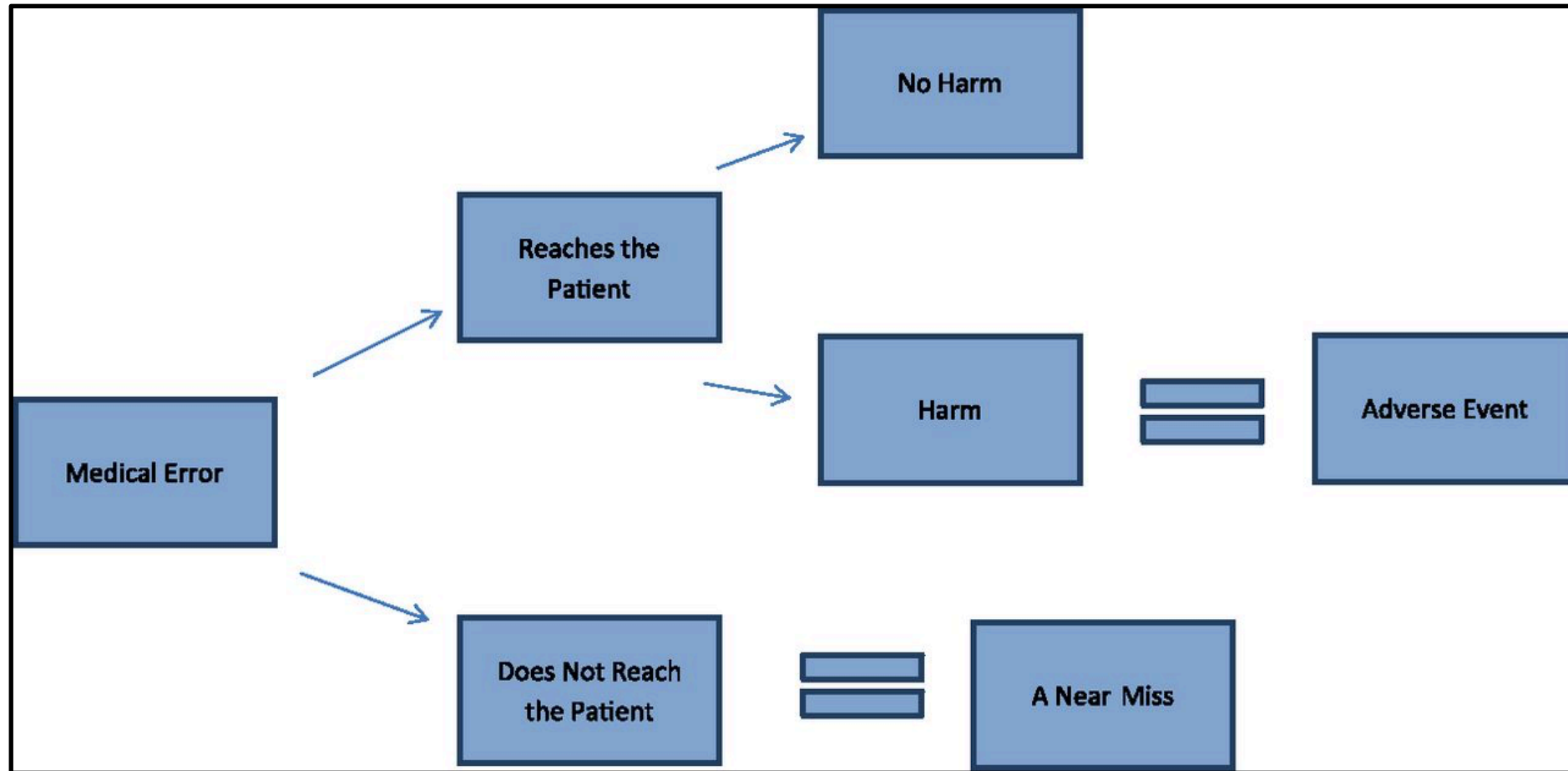
- » 7% of hospital patients experience a serious medication error
- » 1 out of every 5 people says that they or a family member experienced a medical mistake
- » 51% reported the error as serious
- » 28-35% of admissions experience an event that causes **HARM**



# Health Care Safety

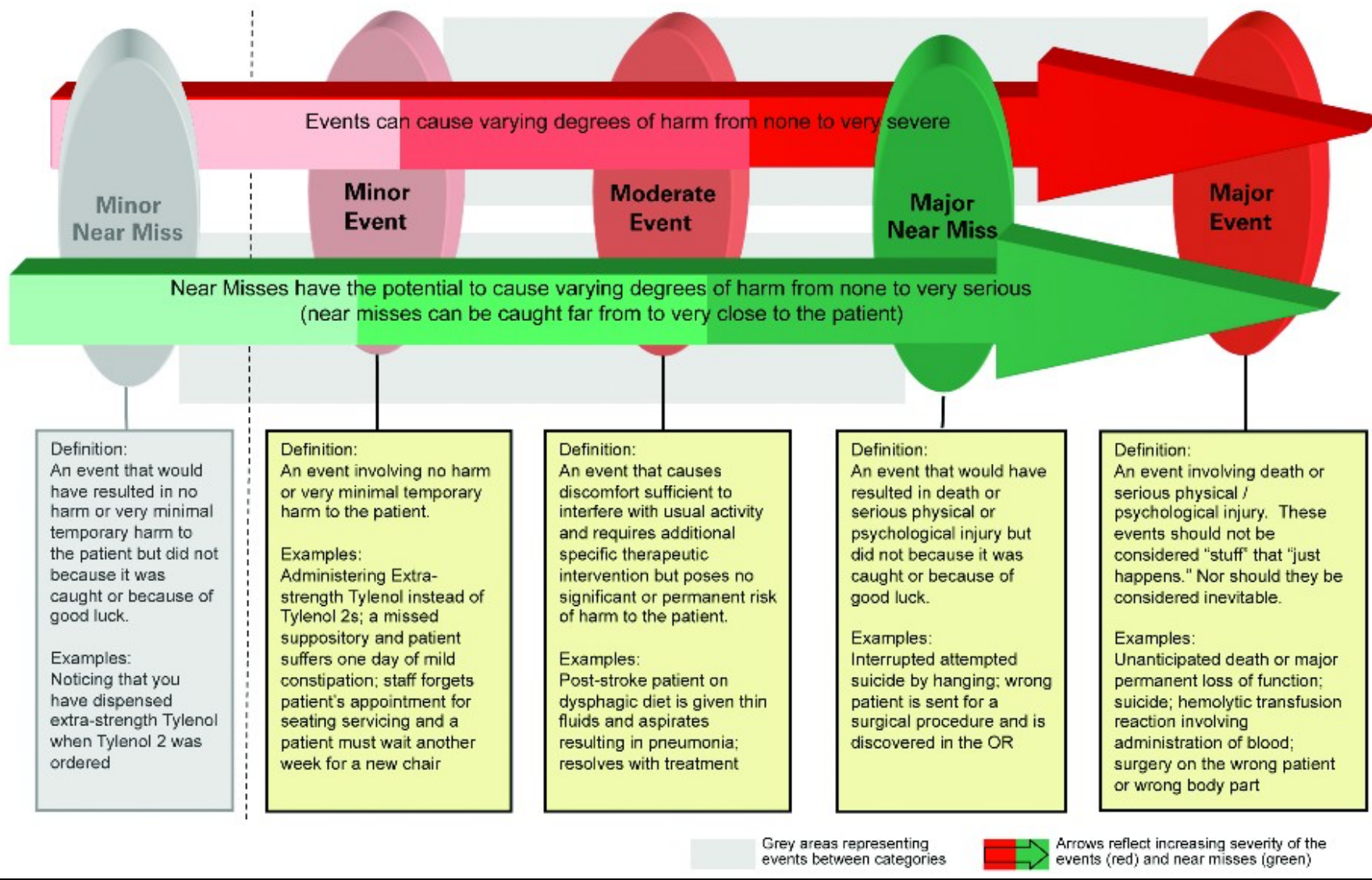


# Types of Patient Safety Events





# Typology of Patient Safety Events



## Patient safety incident reporting: a qualitative study of thoughts and perceptions of experts 15 years after 'To Err is Human'

Imogen Mitchell,<sup>1</sup> Anne Schuster,<sup>2</sup> Katherine Smith,<sup>3</sup> Peter Pronovost,<sup>4</sup>  
Albert Wu<sup>2</sup>

### **Inadequate report processes**

The overwhelming sentiment from all the participants was the unexpected large volume of reports generated in all incident reporting systems. There were often insufficient resources to deal with this volume of reports, leaving reports inadequately triaged, clustered, analysed or acted upon.

### **Lack of adequate medical engagement**

A consistent theme was the lack of engaging doctors to report, own or lead the incident reporting process. This lack of engagement resulted in reporting bias frequently from the nurses and skewing the data. The key incidents, which would reflect medical decision-making, included diagnostic errors and hand offs.

### **Insufficient action**

A key message from many participants that reporting could not be considered without linking it to action. In the years following the Institute of Medicine's (IOM) report, much attention had focused on reporting, but not the action or feedback loop to the reporter. Many participants believed that the lack of visible action led to under-reporting of meaningful incidents.

### **Inadequate funding and institutional support**

It was acknowledged by many participants that there had been an under-resourcing of incident reporting systems whether nationally, state or at the local level. The lack of fiscal support had unintended consequences such as not being able to deal with the volume of reports, which inevitably led to a delay in analysing the reports and distilling recommendations for dissemination. There were also concerns raised over accountability of the incident reporting systems and their ensuing actions.

### **Failure to capture evolving health information technology developments**

A repeated theme for the future of incident reporting systems was the use of technology to improve the reporting of incidents, to analyse the incidents and disseminate the results. In the USA, concern was raised that there had been inadequate resourcing or thought of linking the electronic health record to incident reporting.

\*Illustrative quotes are embedded in the text.

*Inadequate report processes*

*Lack of adequate medical engagement*

*Insufficient action*

*Inadequate funding and institutional support*

*Failure to capture evolving health information technology developments*



# How to Create a Safety Culture



**A complimentary publication of The Joint Commission  
Issue 57, March 1, 2017**

**The essential role of leadership in developing a safety culture**



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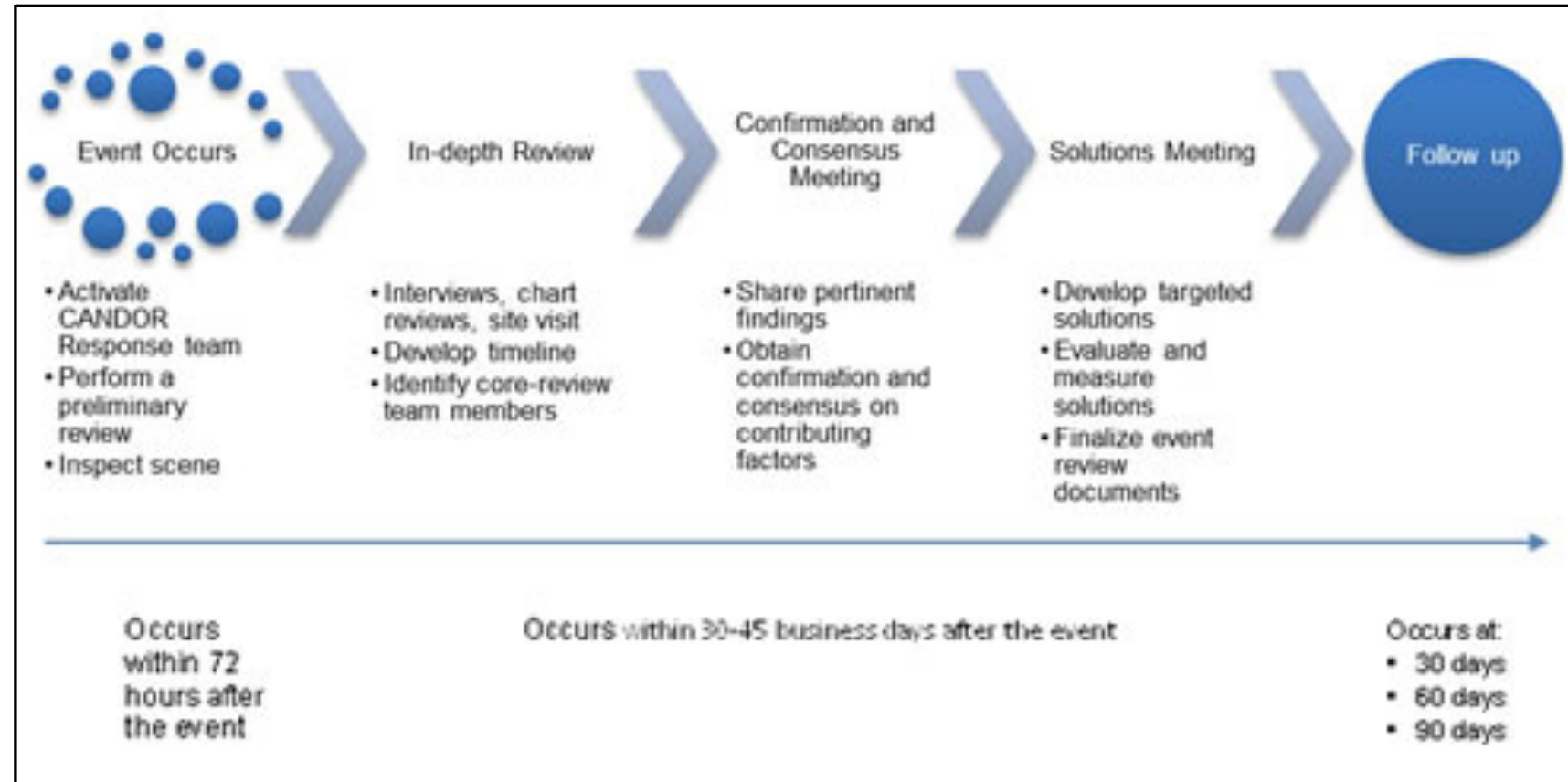
# Inadequate Leadership

- » Insufficient support of patient safety event reporting
- » Lack of feedback or response to staff and others who report safety vulnerabilities
- » Allowing intimidation of staff who report events
- » Refusing to consistently prioritize and implement safety recommendations
- » Not addressing staff burnout



# JC Recommendations

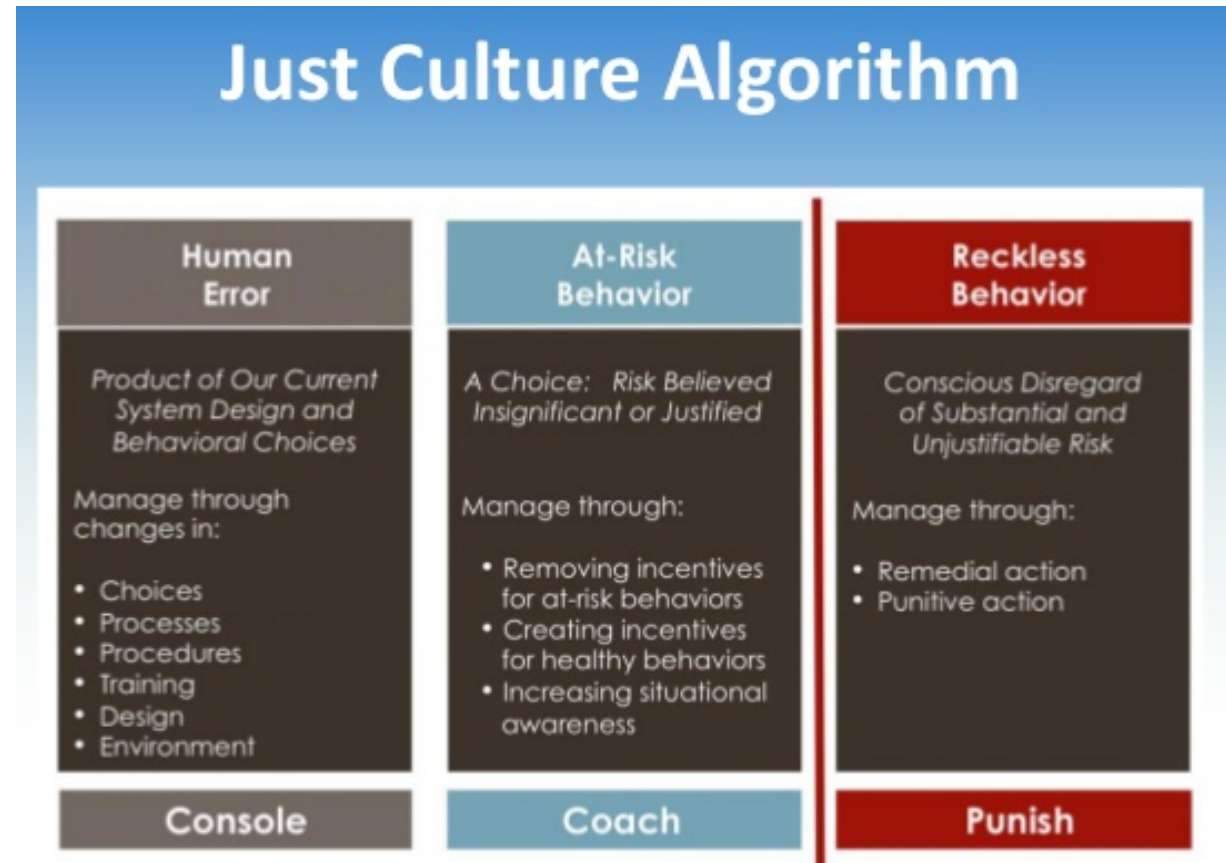
Absolutely crucial is a transparent, non- punitive approach to reporting and learning from adverse events, close calls and unsafe conditions.





# JC Recommendations

Establish clear, just, and transparent risk- based processes for recognizing and separating human error and error arising from poorly designed systems from unsafe or reckless actions that are blameworthy.



# JC Recommendations

Recognize care team members who report adverse events and close calls, who identify unsafe conditions, or who have good suggestions for safety improvements.

**The key to improving safety lies not in changing the human condition, but in changing the conditions under which humans work.**



# Free from Harm – December 2015



Download the full PDF report  
for free at:

[www.npsf.org/free-from-harm](http://www.npsf.org/free-from-harm)



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# Current State of Patient Safety

- » Evidence mixed but panel overall felt that health care is safer but there is more work to be done
  
- » While limited, progress notable
  - Young field
  - Still developing scientific foundations
  - Received limited investment
  
- » Improving patient safety is a complex problem
  - Requires work by diverse disciplines to solve



# Total Systems Approach Needed

- » Advancing patient safety requires an overarching shift from reactive, piecemeal interventions to a **total systems approach**
- » Need to embrace wider approach beyond specific, circumscribed initiatives to generate change
- » Fundamental finding: Initiatives can advance only with a key focus on **teamwork, culture and patient engagement**



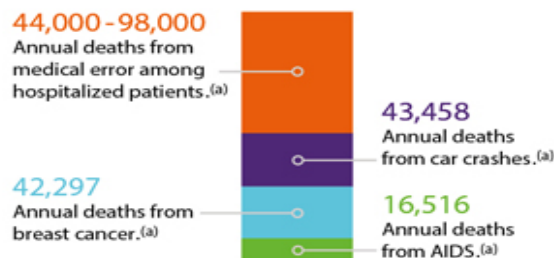
# FREE FROM HARM:

## ACCELERATING PATIENT SAFETY IMPROVEMENT FIFTEEN YEARS AFTER *TO ERR IS HUMAN*

Report of an expert panel convened by the National Patient Safety Foundation argues for looking at morbidity as well as mortality caused by medical errors and going beyond hospitals to improve safety across the continuum of care.



### TO ERR IS HUMAN FRAMED PATIENT SAFETY AS A SERIOUS PUBLIC HEALTH ISSUE (1999 ESTIMATES)



### TO UNDERSTAND THE FULL IMPACT OF PATIENT SAFETY PROBLEMS, WE MUST LOOK AT BOTH MORTALITY AND MORBIDITY



### BY SOME MEASURES, HEALTH CARE HAS GOTTEN SAFER SINCE *TO ERR IS HUMAN*



**1.3 Million**

Estimated reduction in hospital-acquired conditions (2011-2013) as a result of the federal Partnership for Patients initiative.<sup>(b)</sup>

### BUT WE MUST LOOK BEYOND HOSPITALS TO THE FULL CARE CONTINUUM



Roughly 1 billion ambulatory visits occur in the US each year.<sup>(c)</sup>



About 35 million hospital admissions occur annually.<sup>(c)</sup>

### ADVANCEMENT IN PATIENT SAFETY REQUIRES AN OVERARCHING SHIFT FROM REACTIVE, PIECEMEAL INTERVENTIONS TO A TOTAL SYSTEMS APPROACH TO SAFETY<sup>(d)</sup>

- 1 Ensure that leaders establish and sustain a safety culture.
- 2 Create centralized and coordinated oversight of patient safety.
- 3 Create a common set of safety metrics that reflect meaningful outcomes.
- 4 Increase funding for research in patient safety and implementation science.
- 5 Address safety across the entire care continuum.
- 6 Support the health care workforce.
- 7 Partner with patients and families for the safest care.
- 8 Ensure that technology is safe and optimized to improve patient safety.



To read the full report and detailed set of recommendations, visit [www.npsf.org/free-from-harm](http://www.npsf.org/free-from-harm)



This project was made possible in part through a generous grant from AIG in support of the advancement of the patient safety mission. AIG had no influence whatsoever on report direction or its content. The views and opinions expressed herein are those of the author(s) and do not necessarily reflect those of American International Group, Inc. (AIG) or its subsidiaries, business units or affiliates. Sources: (a) Institute of Medicine, *To Err Is Human: Building a Safer Health System*, Washington, DC: The National Academies Press, 2000. (b) 2013 Annual Hospital-Acquired Condition Rate and Estimates of Cost Savings and Deaths Averted From 2010 to 2013. Rockville, MD: Agency for Healthcare Research and Quality; October 2015. AHRQ Publication No. 16-0006-EF. <http://www.ahrq.gov/professionals/quality-patient-safety/pqp/index.html>. (c) National Center for Health Statistics, *FastStats A-Z: Ambulatory Care and Hospital Utilization*. Available at: <http://www.cdc.gov/nchs/fastats/>. (d) National Patient Safety Foundation. *Free from Harm: Accelerating Patient Safety Improvement Fifteen Years after To Err Is Human*. Boston, MA: National Patient Safety Foundation; 2015. Available at: <http://www.npsf.org/free-from-harm>.



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# Eight Recommendations for Achieving Total Systems Safety



## 1. ENSURE THAT LEADERS ESTABLISH AND SUSTAIN A SAFETY CULTURE

Improving safety requires an organizational culture that enables and prioritizes safety. The importance of culture change needs to be brought to the forefront, rather than taking a backseat to other safety activities.



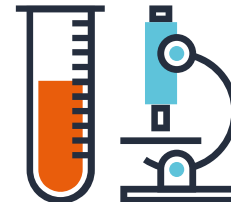
## 2. CREATE CENTRALIZED AND COORDINATED OVERSIGHT OF PATIENT SAFETY

Optimization of patient safety efforts requires the involvement, coordination, and oversight of national governing bodies and other safety organizations.



## 3. CREATE A COMMON SET OF SAFETY METRICS THAT REFLECT MEANINGFUL OUTCOMES

Measurement is foundational to advancing improvement. To advance safety, we need to establish standard metrics across the care continuum and create ways to identify and measure risks and hazards proactively.



## 4. INCREASE FUNDING FOR RESEARCH IN PATIENT SAFETY AND IMPLEMENTATION SCIENCE

To make substantial advances in patient safety, both safety science and implementation science should be advanced, to more completely understand safety hazards and the best ways to prevent them.



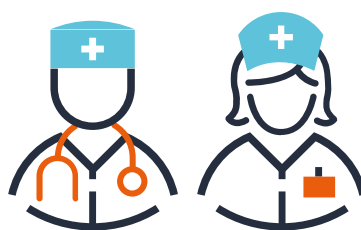
# Eight Recommendations for Achieving Total Systems Safety



## 5. ADDRESS SAFETY ACROSS THE ENTIRE CARE CONTINUUM

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Patients deserve safe care in and across every setting. Health care organizations need better tools, processes, and structures to deliver care safely and to evaluate the safety of care in various settings.



## 6. SUPPORT THE HEALTH CARE WORKFORCE

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Workforce safety, morale, and wellness are absolutely necessary to providing safe care. Nurses, physicians, medical assistants, pharmacists, technicians, and others need support to fulfill their highest potential as healers.



## 7. PARTNER WITH PATIENTS AND FAMILIES FOR THE SAFEST CARE

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Patients and families need to be actively engaged at all levels of health care. At its core, patient engagement is about the free flow of information to and from the patient.



## 8. ENSURE THAT TECHNOLOGY IS SAFE AND OPTIMIZED TO IMPROVE PATIENT SAFETY

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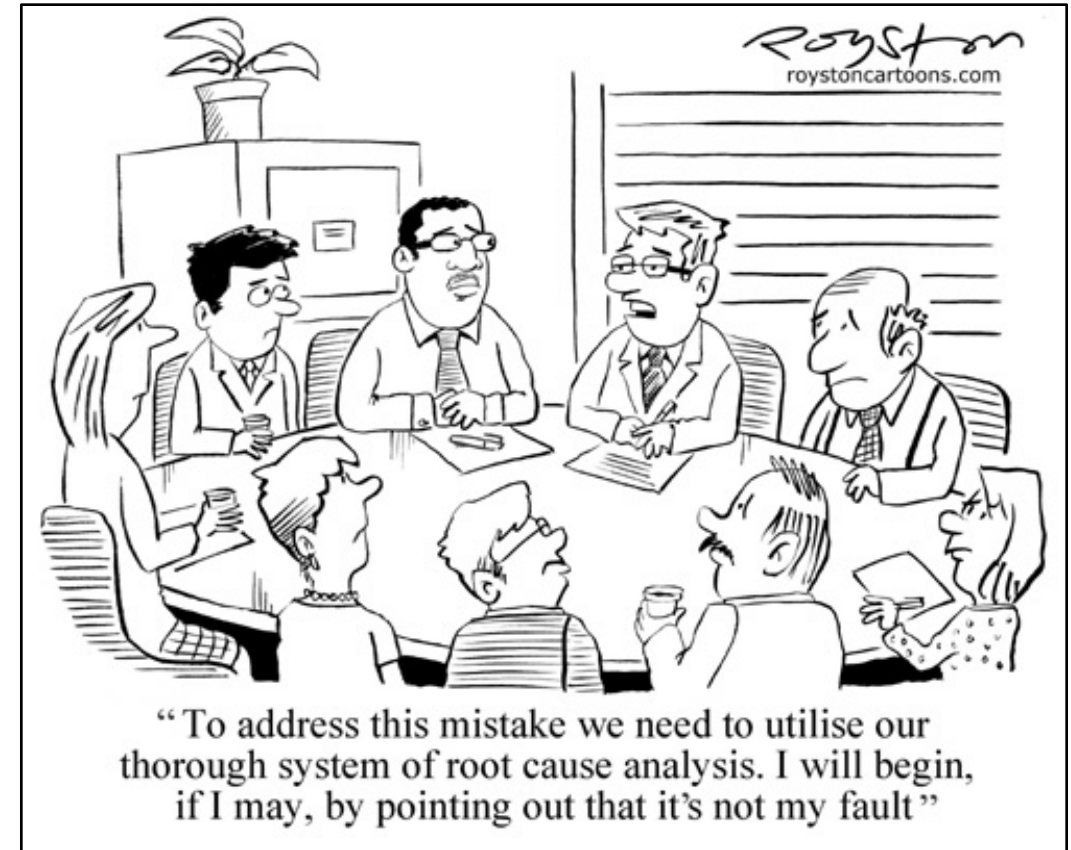
Optimizing the safety benefits and minimizing the unintended consequences of health IT is critical.



# 1- ENSURE THAT LEADERS ESTABLISH AND SUSTAIN A SAFETY CULTURE

Refocus the boards of organizations to guide and be accountable for patient safety through governance, goal setting, and ensuring that executives and all levels of management value and prioritize safety (e.g., ensure that safety data and stories are presented at every board meeting).

Ensure that leadership and governance bodies develop and implement robust processes to initiate and sustain transformation to a culture of safety and respect, specifically one that encourages honesty, fosters learning, and balances individual and organizational accountability.



# 1- ENSURE THAT LEADERS ESTABLISH AND SUSTAIN A SAFETY CULTURE

## Recommendations

- ~ PS/Q plan developed and shared with Leadership
- ~ Board has an agenda item and discussion related to PS at ALL board meetings
- ~ PS & Q dashboard at every board meeting
- ~ PS events that result in harm are discussed at all board meetings
- ~ Workforce safety dashboard at every board meeting





# 2- CREATE CENTRALIZED AND COORDINATED OVERSIGHT OF PATIENT SAFETY

Align and harmonize national safety activities by designating or creating a central coordinating body.

Expand and accelerate collaborative improvement efforts (e.g., regional or specialty-specific coalitions) in patient safety across the care continuum.

## » Federal Government

- QIOs
- Medicare Compare
- Joint Commission “deemed status”

## » State Governments

- Increased licensing requirements
- State review boards
- Public report cards

## » Corporations

- Leapfrog
- Business health coalitions

## » Private Insurers

- Pay for performance
- Patient Centered Medical Homes

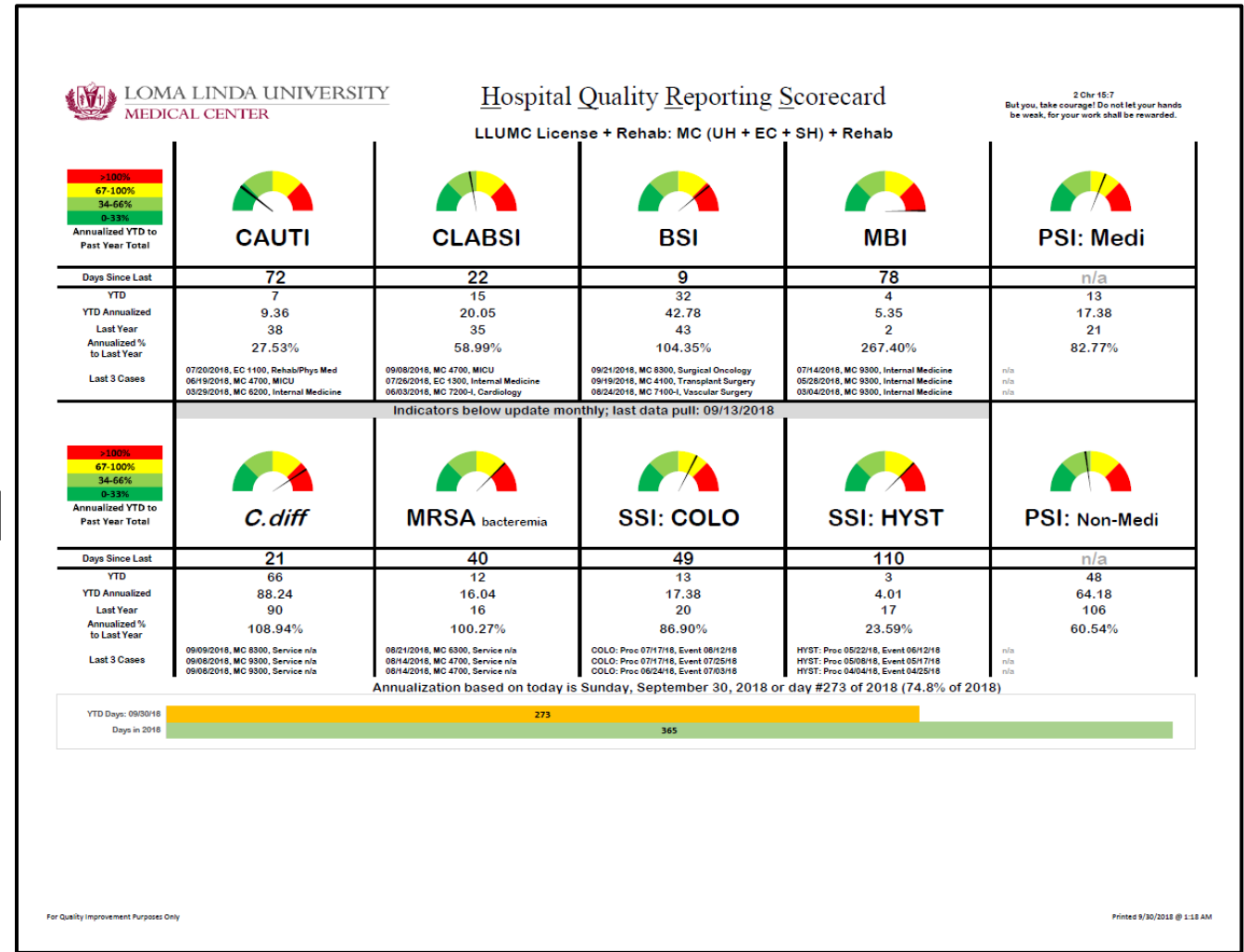
## » Consumer Groups

- Rankings and advisory groups
- HealthGrades.com
- Angie’s List



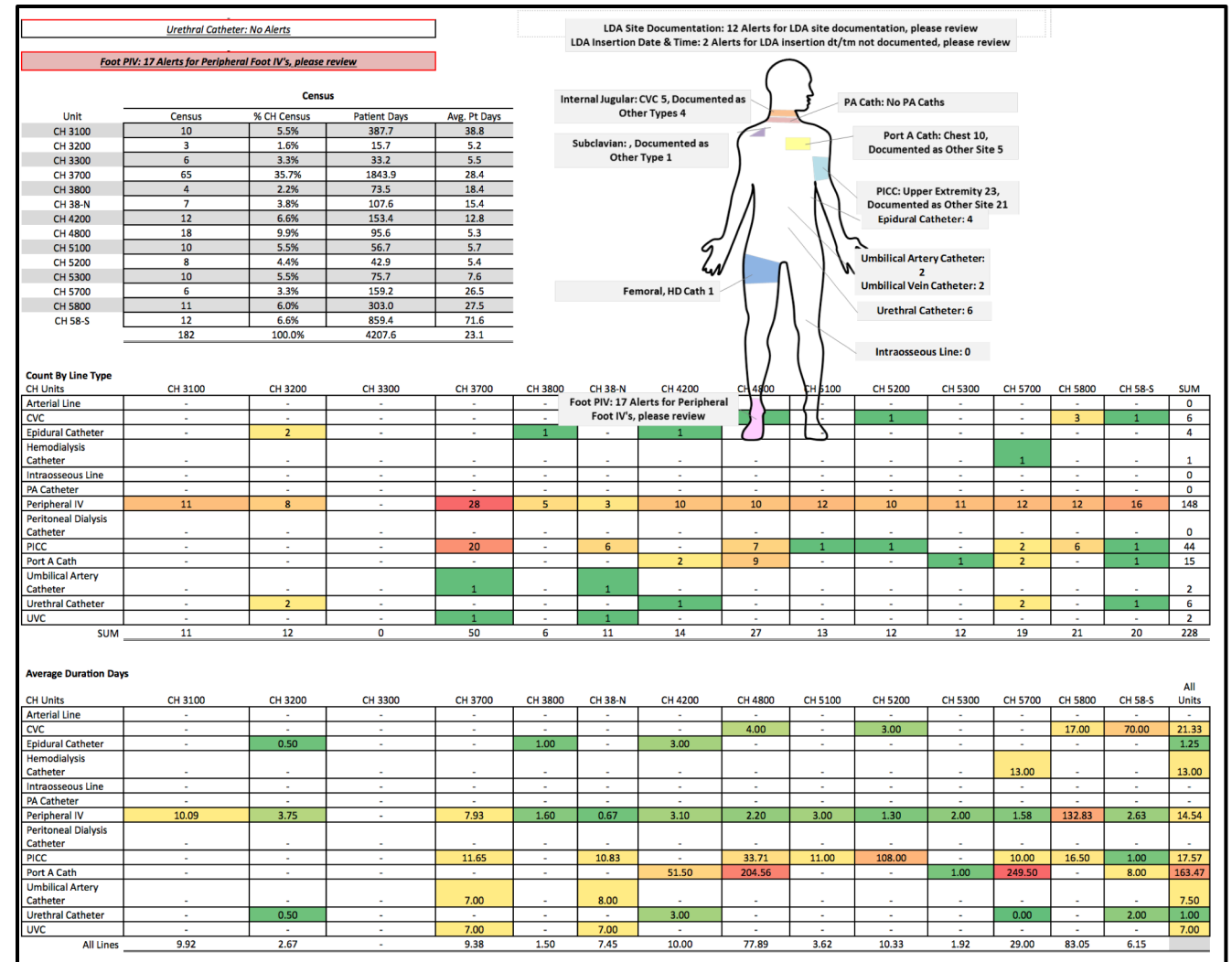
# 3- CREATE A COMMON SET OF SAFETY METRICS THAT REFLECT MEANINGFUL OUTCOMES

Create a portfolio of national standard patient safety process and outcome metrics across the care continuum and retire invalid measures.



# 3- CREATE A COMMON SET OF SAFETY METRICS THAT REFLECT MEANINGFUL OUTCOMES

Develop processes and tools to identify and measure risks in real time to proactively manage hazards (e.g., identify the early signs of clinical deterioration).



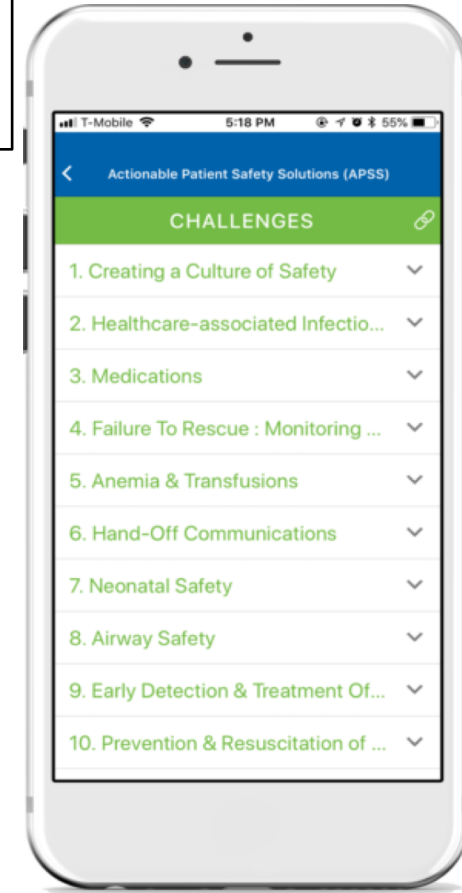
# 4- INCREASE FUNDING FOR RESEARCH IN PATIENT SAFETY AND IMPLEMENTATION SCIENCE

Support collaboration between researchers in patient safety and researchers in safety sciences within other industries and sectors.

Identify and make available sustainable funding sources for safety and implementation research, including federal funding and public-private partnerships.

Expand health care safety scholar programs to train researchers with safety science expertise and to train operational and implementation leaders.

Encourage organizations that have successfully implemented safety innovations to establish learning labs and collaboratives to spread them to other organizations.



# 5- ADDRESS SAFETY ACROSS THE ENTIRE CARE CONTINUUM

## Recommendations

- ~ **Understand** the role of board in overseeing events of harm
- ~ Disclosure and apology
- ~ The process for/evaluation of RCAs for errors/harm
- ~ Just culture
  - Transparency/communication of errors and harm with patients/families
- ~ High Reliability Organizations (HRO)
  - Transparency/communication of errors and harm with public



# 6- SUPPORT THE HEALTH CARE WORKFORCE

## Recommendations

- ~ Employee satisfaction surveys
- ~ Culture of safety surveys
- ~ Workforce safety challenges (physical and emotional)
- ~ Employee turnover
- ~ Employee injury rates and safety reports (physical/emotional)
- ~ Workforce safety dashboards
- ~ Workmen's compensation rates



# 7- PARTNER WITH PATIENTS AND FAMILIES FOR THE SAFEST CARE

## Recommendations

- ~Regularly evaluates/discusses Pt/Fam satisfaction surveys
- ~Regularly uses Pt/Fam stories
- ~Regularly evaluates and discusses Pt/Fam engagement surveys
- ~Engages with PFAC
- ~Has representation by Pt/Fam on committees
- ~Has at least 1 Pt/Fam member on its Board



# 8- ENSURE THAT TECHNOLOGY IS SAFE AND OPTIMIZED TO IMPROVE PATIENT SAFETY

Establish mechanisms for vendors and users to be transparent about health IT safety hazards and best practices.

Transparency about safety issues is the key to improvement.

Identify and measure the adverse effects and unintended consequences of health IT and implement best practices for risk mitigation.

Health IT has the potential to improve patient safety, but to date poor design and implementation limit that potential.

Establish expectations for health IT safety performance, such as routine testing for unsafe orders.

Much work remains to optimize existing systems.

Design health IT to facilitate communication and coordination with the patient and family.

Health IT can facilitate patient engagement.



# The Importance of Regular Quality Reports

- » Quality improvement is the use of a **deliberate** and defined improvement process & the **continuous** and ongoing effort to achieve **measurable** improvements.
- » What gets measured gets done
- » Good plans lead to implementation
- » Schedule for implementing QI efforts
- » Schedule for reporting QI efforts to all stakeholders





# Why Report to the Board?

- » **Screen** for potential quality and safety problems using easily accessible data.
- » **Compare** themselves with other hospitals using national standardized measures to assess quality of hospital care



# Examples

## External sources

### »Pros:

- ~ Allow benchmarking
- ~ Publicly available

### »Cons:

- ~ Often reflect older data
- ~ Not representative of all your patients
- ~ Susceptible to changes in definitions

## Internal sources

### »Pros:

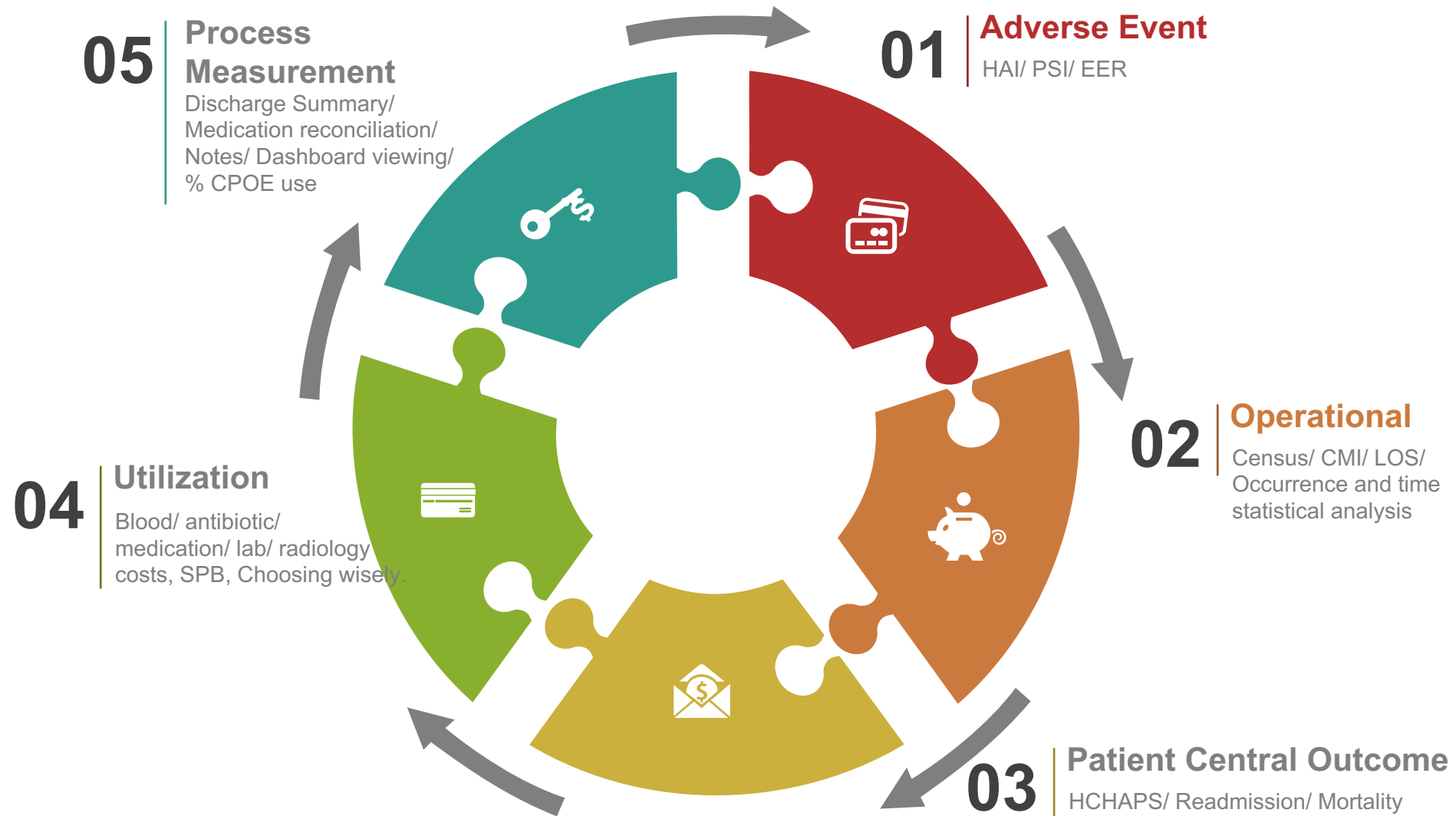
- ~ Real time data
- ~ Your own definition

### »Cons:

- ~ Inability to benchmark or compare to other hospitals in real time



# Dashboards



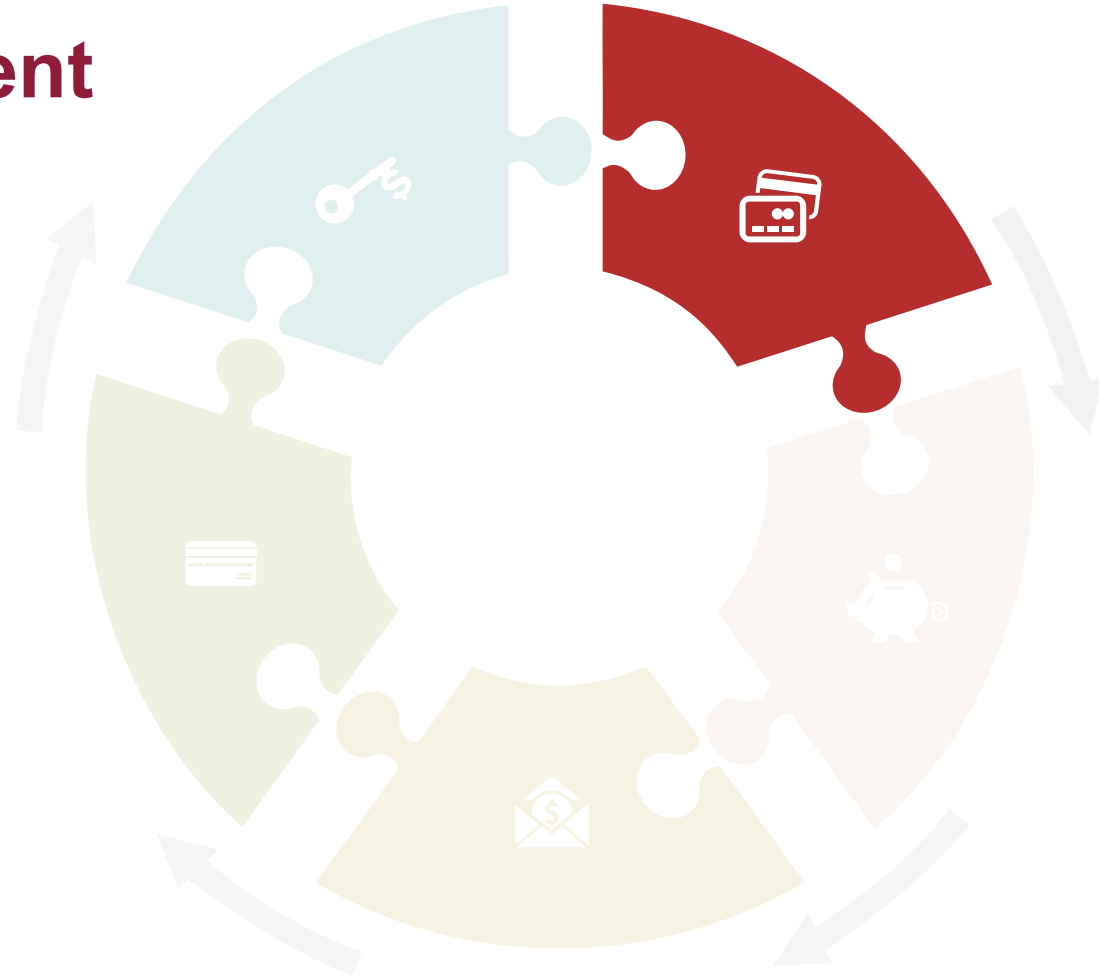
## 01 | Adverse Event

### » HAI

- CLABSI
- CAUTI
- SSI
- CDI
- MRSA

### » PSI

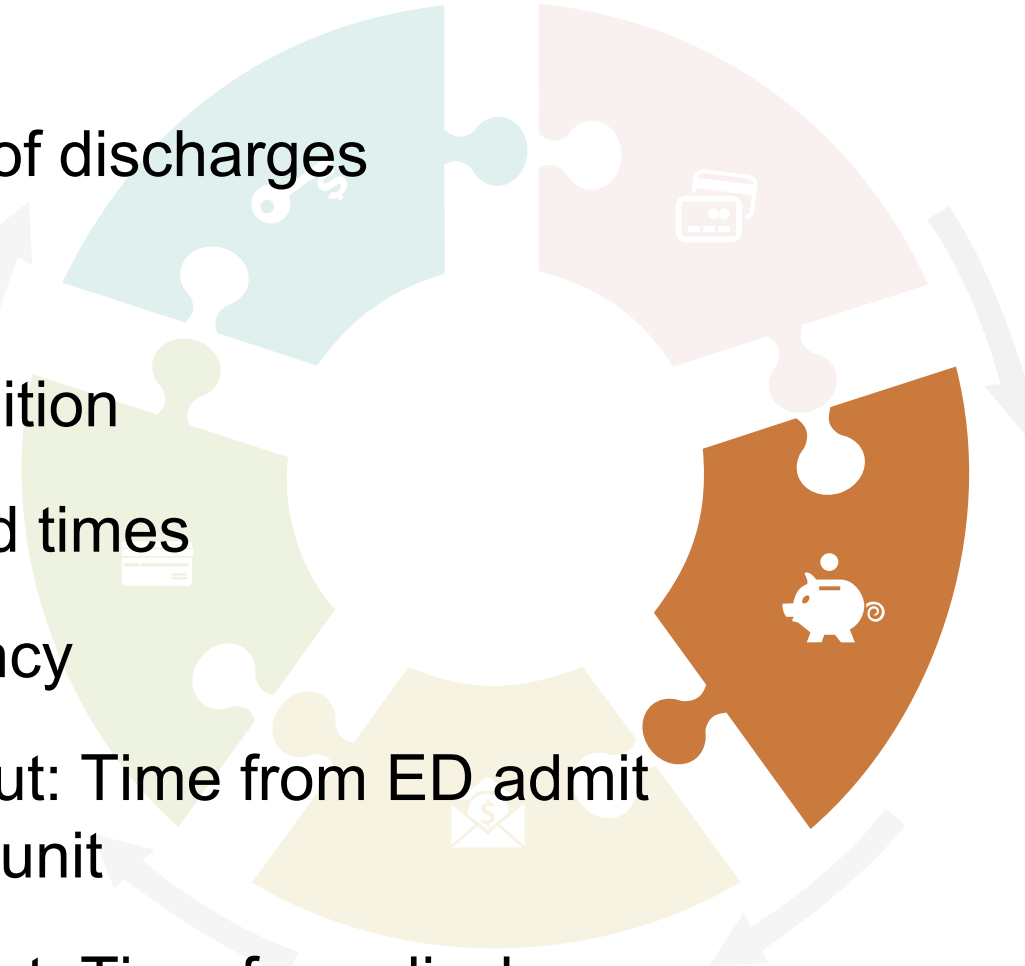
### » EER



02

## Operational

- » Census/ number of discharges
- » CMI /LOS
- » Discharge Disposition
- » Room turn-around times
- » Discharge efficiency
- » Patient through-put: Time from ED admit order to arrival on unit
- » Patient through-put: Time from discharge order to actual departure



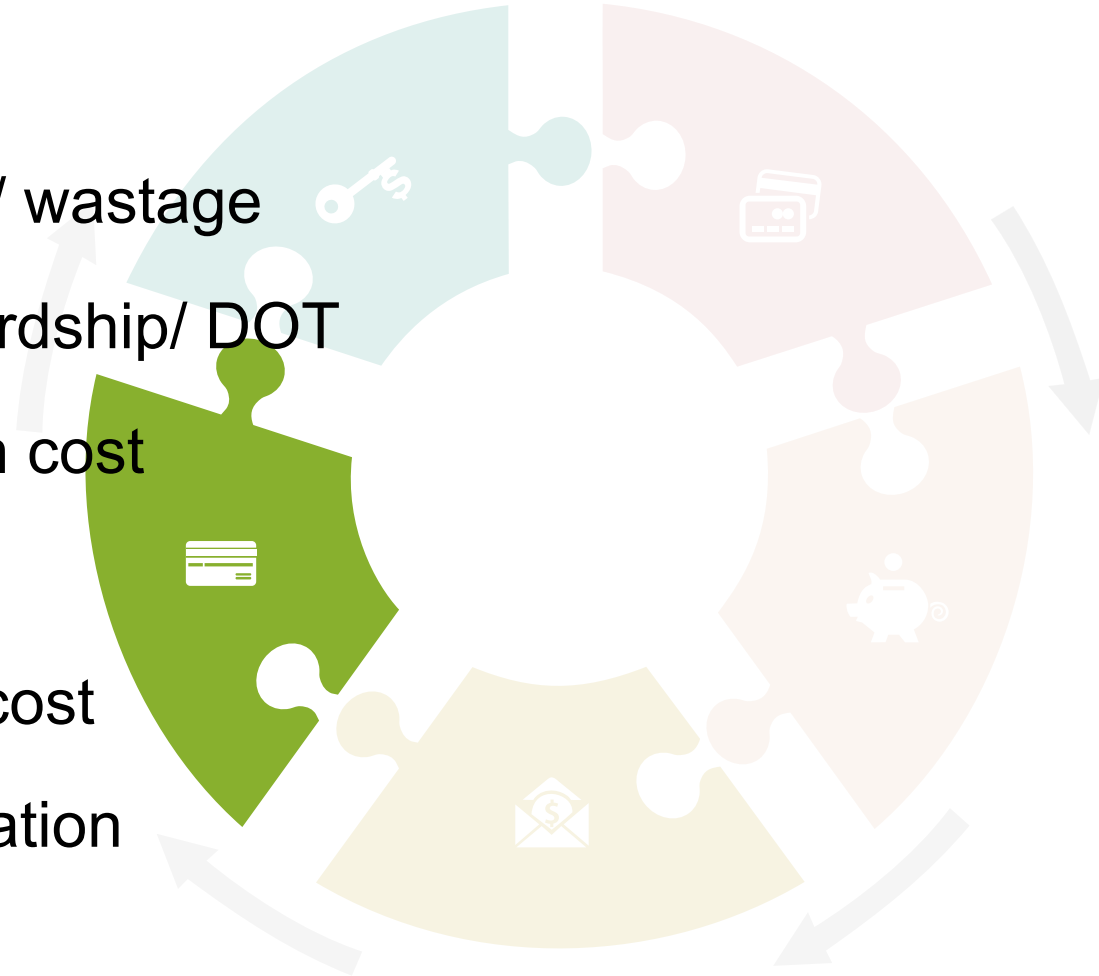
## 03 | Patient Central Outcome

- » HCHAPS
- » Readmission
- » Mortality
- » Length of stay



## 04 | Utilization

- » Blood utilization/ wastage
- » Antibiotic Stewardship/ DOT
- » Total medication cost
- » Total lab cost
- » Total radiology cost
- » Order sets utilization



## 05

### Process Measures

- » Discharge summary within 24 hours
- » Medication reconciliation on admission
- » Medication reconciliation upon discharge
- » % copied notes
- » % problem list updated upon discharge
- » % patients with a post discharge clinic appointment within 7 days
- » % CPOE use





# References

1. [www.npsf.org/free-from-harm](http://www.npsf.org/free-from-harm) 2015
2. *Sentinel event alert*. A complimentary publication of The Joint Commission Issue 57, March 1, 2017
3. To Err is human November 1999



# Questions