# The Role of Leadership in Implementing a Quality Improvement and Patient Safety Program 实施质量改进和病人安全的领导角色

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#### **Embrace Change:**

**Building today's leaders** 拥抱改变: 打造今天 的领导者

Friday, October 19, 2018

### Disclosure of Conflict of Interest

利益冲突声明

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

与任何商业利益没有任何相关的经济来往。

# Learning Objectives学习目标

1. Describe leadership's responsibility for quality improvement and patient safety programs.

描述领导对质量改进和病人安全计划的责任。

2. Describe the importance of regular quality reports to the governing board and to staff.

描述定期向董事会和员工提交质量报告的重要性。

3. Describe how to develop a hospital culture that encourages reporting and discussing sentinel events or near misses without fear of repercussion.

描述如何发展一种医院文化,鼓励上报和讨论不良事件或差点失误

,而不用担心后果。

## Paradox of Plenty 丰富的悖论

- ~Most advanced healthcare system in the world
  - 世界上最先进的医疗系统
- ~High Cost, Low Quality 高成本,低质量
- ~For the money the United States spends on healthcare, about \$3.2 trillion a year (2015)— the quality of care is unacceptably low
  - 对于美国医疗保健支出的资金,每年约3.2万亿美元(2015年) 质量低得令人无法接受
- ~Each year as many as 15 million patients harmed in some manner by America's healthcare system

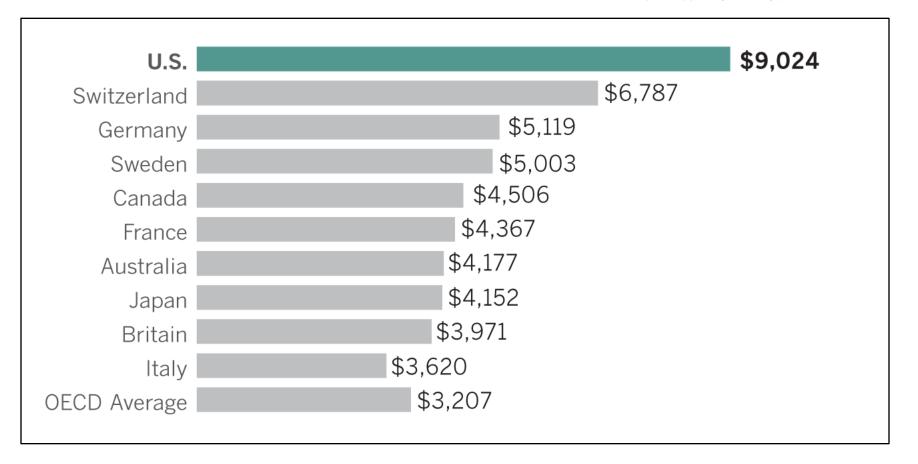
每年有多达1500万患者以某种方式受到美国医疗保健系统的伤害



# Health Care Spending per Capita 人均医疗保健支出 Adjusted for Differences in

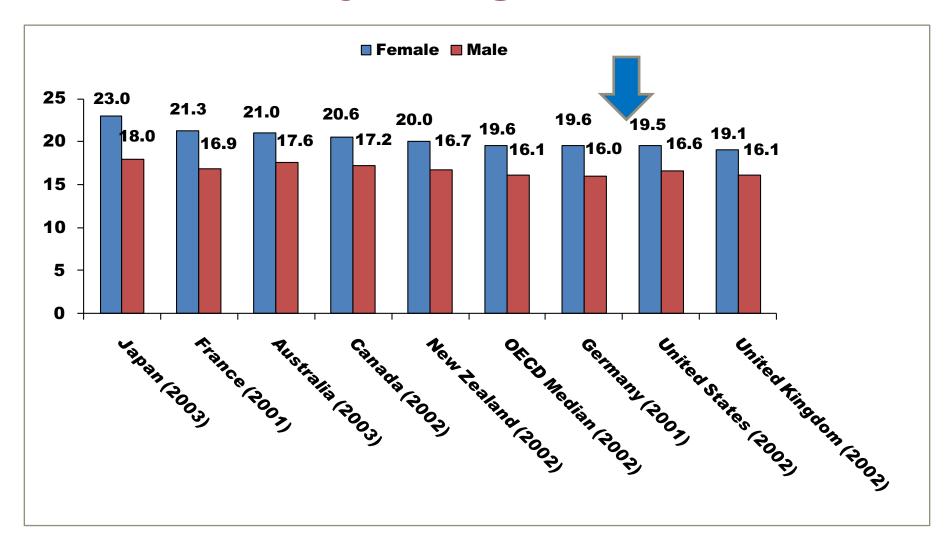
**Adjusted for Differences in Cost of Living** 

调整了生活成本的差异



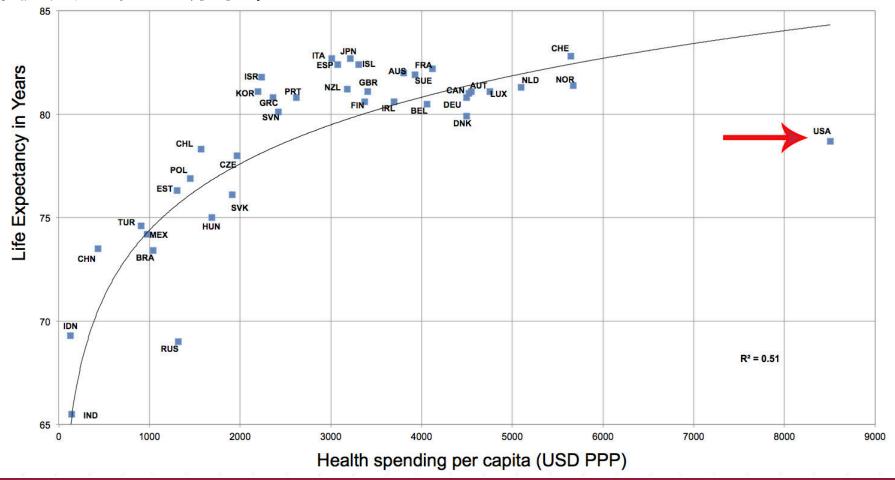


# Life Expectancy at Age 65岁时的预期寿命





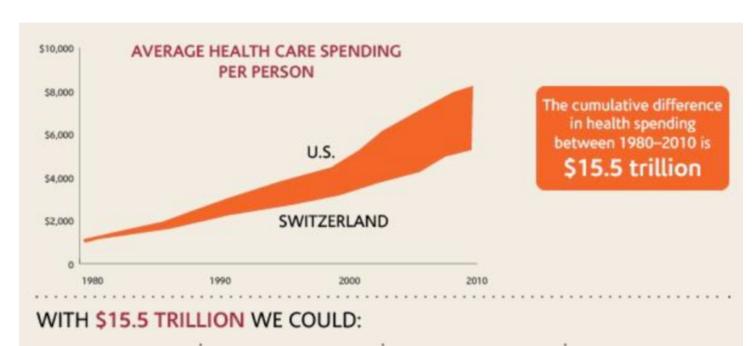
# Healthcare expenditure and life expectancy 医疗保健支出和预期寿命





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

(Switzerland) 回顾:如果我们与下一个最高的国家相比,我们可以节省多少(瑞士)



Transform our \$11.6 trillion federal debt into a \$3.9 trillion surplus





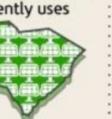




Send 175,401,721

the size of
South Carolina
with solar panels,
generating more
power than the U.S.
currently uses

Cover an area



Buy everyone in the world 4 iPads



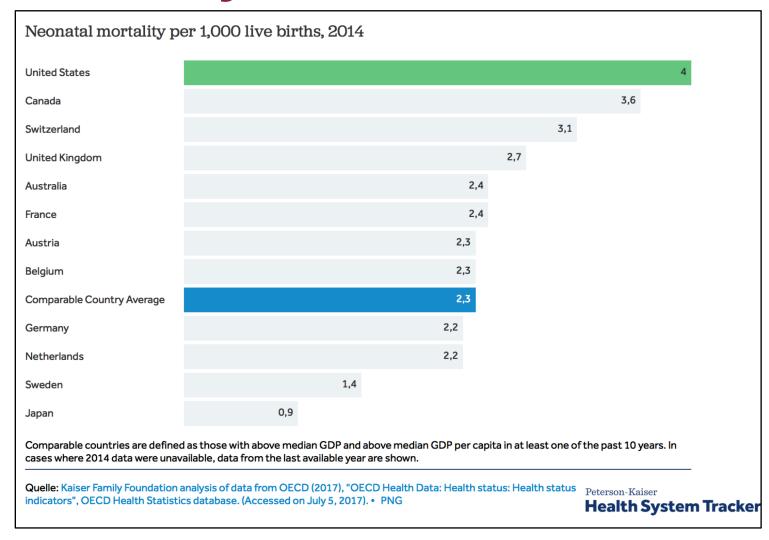






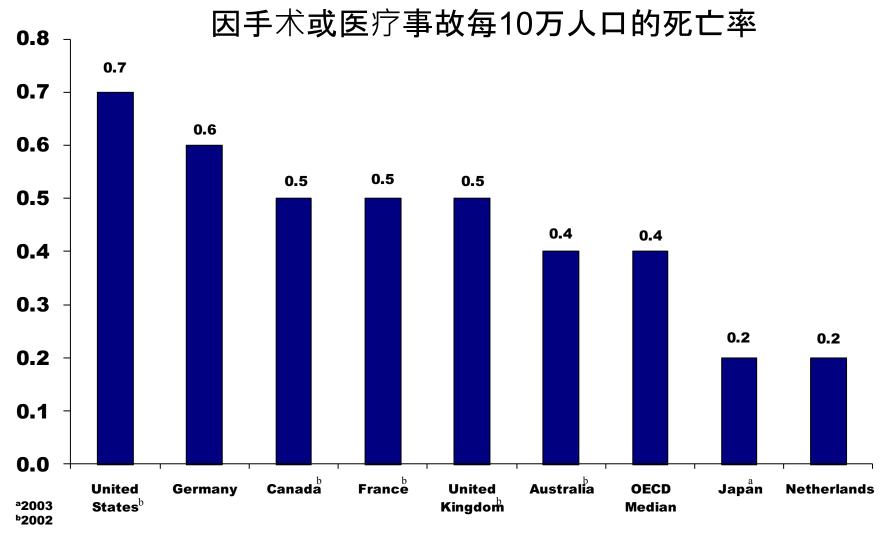


# Infant Mortality Rate婴儿死亡率





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





# Waste Category Annual estimates 资金浪费的年度评估

Category	
Category	ノフマルリ

Overtreatment过度治疗

Failures to coordinate care

未正确治疗

Failures in care Delivery 未能转运治疗 Excess administrative costs

Excessive Health care prices

医疗保健价格过高 Fraud and Abuse 欺诈和滥用

2011 Total waste 资金浪费总额

% of Total Spending

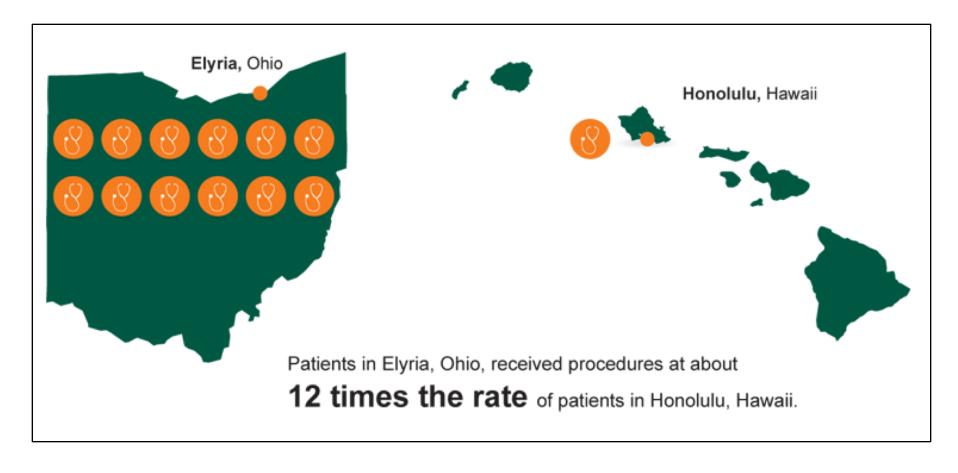
总支出的百分比

Cost to US Healthcare (2011 \$B) 花费
\$158 to \$226
\$25 to \$45
\$102 to \$154
\$107 to \$389
\$84 to \$178
\$82 to \$272
\$558 to \$1263
21% to 47% (MED =34%)



#### Variation in Cardiac Care from State to State

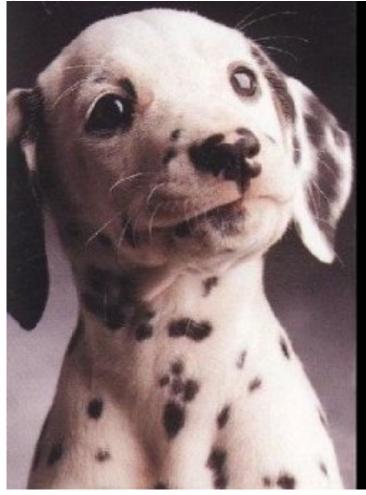
各州心脏病治疗的不同





### **Quality Efforts in Healthcare**

医疗保健领域质量工作



But, But It's Not A Bad Report Card. Think Of It As A Wide Open Road To Improvement!



## **Quality Efforts in Healthcare**

医疗保健领域质量工作

Quality in healthcare...

医疗保健质量

...what is it?

是什么?

It depends

它取决于



## **Quality Efforts in Healthcare**

医疗保健领域质量工作

Quality pioneers have different opinions:

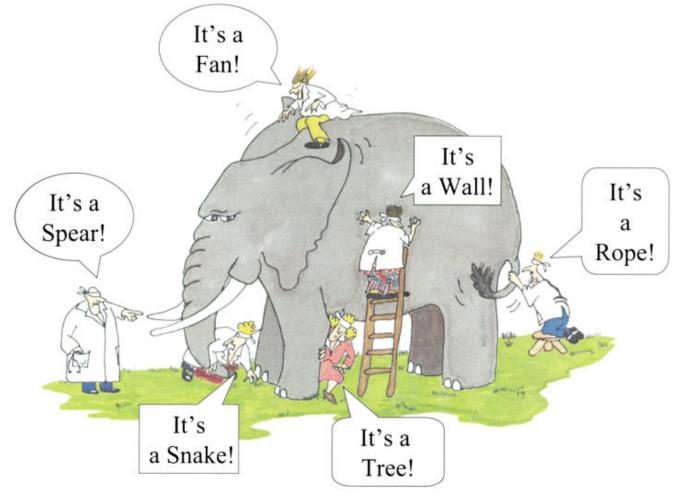
前辈们有不同的观点

- Dr. Joseph Juran "fitness for use" 适合使用
- Philip Crosby "zero defects" 零缺陷
- Dr. Edwards Deming "never-ending cycle of continuous improvement"
   持续改进无限循环





# Quality Efforts in Healthcare 医疗保健领域质量工作





# Quality and Patient Safety质量与病人安全

If the patient is not safe from accidental harm, then

high-quality healthcare cannot exist

如果患者不能避免意外伤害,那么

Equity

**Timeliness** 

Patient-Centeredness

Safety

Efficiency

Effectiveness







### What do we mean by Patient Safety?

我们所说的病人安全是什么意思?

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** 

通过采用和管理循证实践、过程和系统,减少医疗错误、并发症和其他不良事件,有助于改善临床结局。



## What do we mean by Patient Safety? 我们所说的病人安全是什么意思?

Distinction between patient safety issues (errors) and quality concerns

区分病人安全问题(错误)和质量问题

~ Operating on the wrong knee (error) vs. not using the proper surgical approach (quality)

在错误的膝盖上手术(错误)和使用不正确的手术方法(质量)

~ Overdosing a diabetic patient on insulin (error) vs. failing to properly control a patient's diabetes (quality)

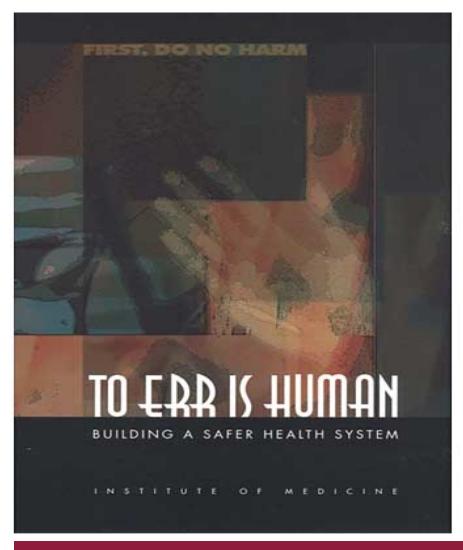
糖尿病患者使用胰岛素过量(错误)vs未能正确控制糖尿病患者血糖(质量)

~ Illegible prescription order (error) vs. not prescribing the most effective antibiotic (quality)

难以辨认的医嘱(错误)与未开出最有效的抗生素(质量)



### To Err is Human人非圣贤孰能无过



»Financial Cost of Medical Errors: \$29 billion each year in the United States alone

医疗事故造成的经济损失:仅在美国每年就有290亿美元

»Doctors, patients, insurers and hospital systems play a role in eradicating errors

医生、病人、保险公司和医院在减少错 误方面发挥着重要作用



### Institute of Medicine (IOM) Roundtable

医学研究所(IOM)圆桌会议

"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."

美国医学存在着严重而广泛的质量相关问题。这些问题在全国各地的大小社区都存在,在医疗管理和服务收费的照护系统中发生的频率几乎相同。大量美国人因此受到伤害。



#### What IOM Said:会议指出

- »The patient safety problem is large. 病人的安全问题关系重大。
- »It (usually) isn't the fault of health care workers. 这(通常)不是医疗工作者的错。
- »Most patient injuries are due to system failures.

大多数病人受到上海是由于系统故障造成的。



## Roundtable Categories圆桌会议类别

- »Overuse (of procedures that cannot help) 过度使用(无法使用的流程)
- »Underuse (of procedures that can help) (可提供帮助的程序)使用不足
- »Misuse (errors of execution) 错误使用(执行错误)



#### Health Care Examples of Overuse 过度使用的例子

- »30% of children receive excessive antibiotics for ear infections 30%的儿童因耳朵感染而服用过量抗生素
- »20% to 50% of many surgical operations are unnecessary 在许多外科手术中, 20%到50%是没有必要做的
- »50% of X-rays in back pain patients are unnecessary 50%的X线检查在背痛患者中是没有必要做的



# Health Care Examples of Underuse 使用不足的例子

- »50% of elderly fail to receive pneumococcal vaccine 50%的老年人未接种肺炎球菌疫苗
- »50% of heart attack victims fail to receive beta-blockers 50%的心脏病患者未给予β-受体阻滞剂

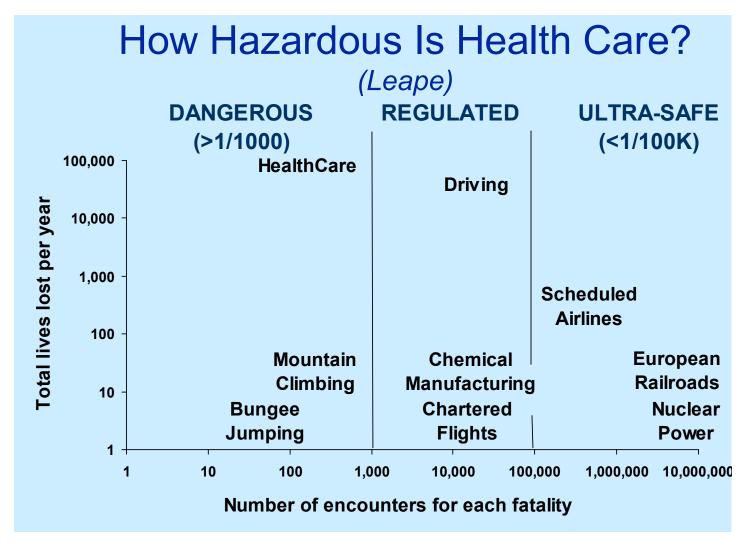


#### Misuse of Healthcare Safety 错误使用的例子

- **»7% of hospital patients experience a serious medication error** 7%的住院病人出现严重的药物错误
- »1 out of every 5 people says that they or a family member experienced a medical mistake 五分之一的人说他们或他们的家人经历过医疗事故
- **>>51%** reported the error as serious 51%的人认为错误严重
- »28-35% of admissions experience an event that causes **HARM** 有28-35%的学生曾经历过伤害事件

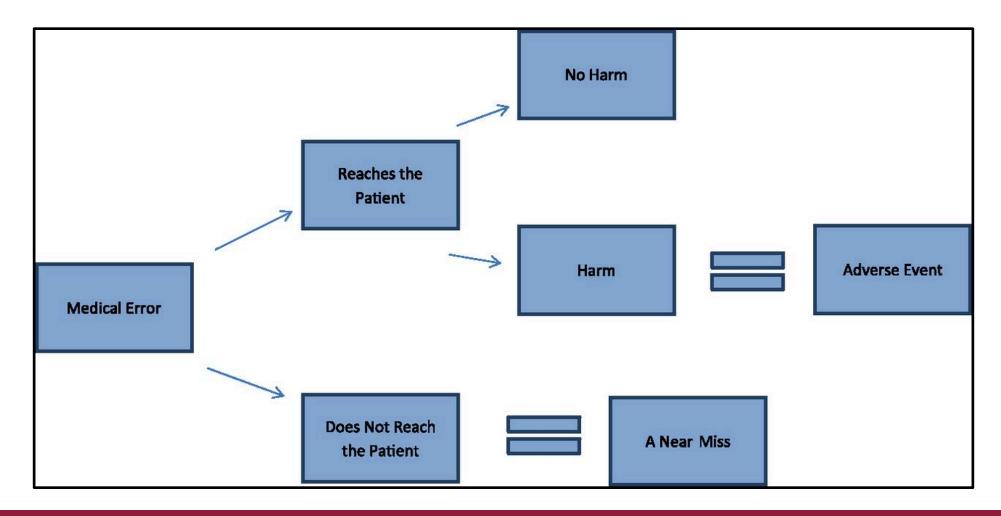


# Health Care Safety医疗安全

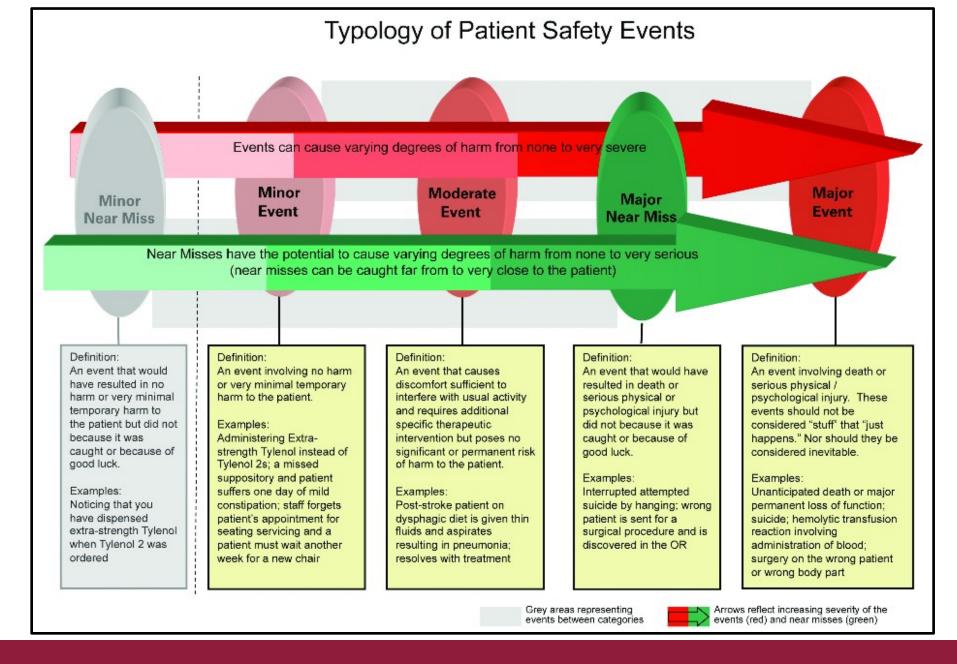




# Types of Patient Safety Events病人安全类别









#### 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 dictors 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 poticipants that reporting could not be considered without linking it to action. In the years following the Institute of Medicine's (iCM) 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 the 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

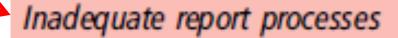
Failure to capture evolving health information technology developments

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.

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>



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 怎样建立安全文化



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

The essential role of leadership in developing a safety culture



## Inadequate Leadership领导能力不足

- »Insufficient support of patient safety event reporting
- 对病人安全事件报告的支持不足
  »Lack of feedback or response to staff and others who report safety vulnerabilities

对报告安全漏洞的员工和其他人缺乏反馈或回应

- »Allowing intimidation of staff who report events 允许恐吓报告事件的工作人员
- »Refusing to consistently prioritize and implement safety recommendations

拒绝优先考虑并执行安全的建议
»Not addressing staff burnout 没有解决员工的倦怠

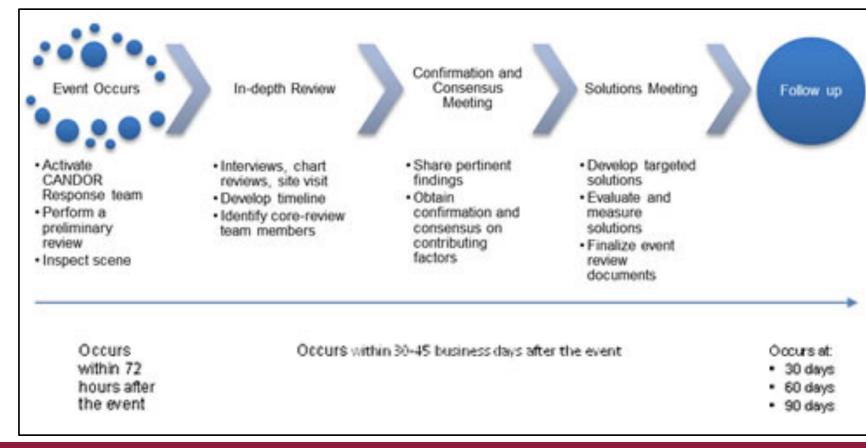


#### JC Recommendations 建议

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

unsafe conditions.

绝对关键的是透明的、非 惩罚性的方法来报告不良 事件、隐患和不安全情况 ,并从中学习。

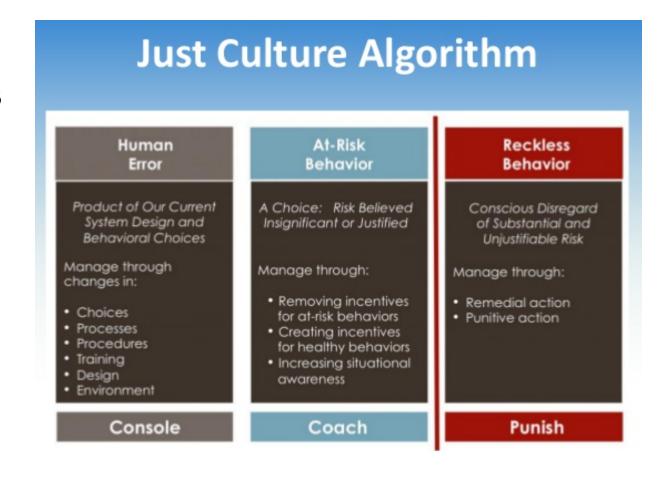




#### JC Recommendations建议

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.

建立清晰、公正、透明的基于风险的过程,以识别和区分人为错误和错误,这些错误是由于设计不良的系统和不安全或鲁莽的行为造成的,应该受到谴责。





#### JC Recommendations建议

Recognize care team members who report adverse events and close calls, who identify unsafe conditions, or who have good suggestions for safety improvements.识别报告不良事件和紧急呼叫的医疗小组成员,识别不安全的情况,或对安全改进有好的建议。

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 无伤害- 2015年12月



Download the full PDF report for free at:

www.npsf.org/free-from-harm



### **Current State of Patient Safety** 病人目前的安全状况

- » Evidence mixed but panel overall felt that health care is safer but there is more work to be done 循证有好有坏,但专家组总体认为医疗更安全,但还有更多工作要做
- » While limited, progress notable 虽然有限,但进展显著
  - o Young field 年轻的领域
  - Still developing scientific foundations仍在发展科学基础
  - o Received limited investment 收到有限的投资

- » Improving patient safety is a complex problem 提高病人的安全是一个复杂的问题
  - o Requires work by diverse disciplines to solve 需要通过不同学科的努力来解决



# Total Systems Approach Needed 所需的总体系统方法

»Advancing patient safety requires an overarching shift from reactive, piecemeal interventions to a total systems approach

提高患者的安全性需要从被动的、零碎的干预转向全面的系统方法

»Need to embrace wider approach beyond specific, circumscribed initiatives to generate change

需要采用更广泛的方法,而不仅仅是特定的、受限制的主动行动来产生变化

»Fundamental finding: Initiatives can advance only with a key focus on teamwork, culture and patient engagement

基本发现:主动性只能在团队合作、文化和耐心的参与上取得进展



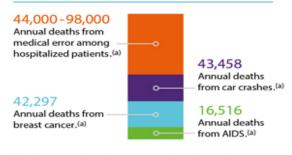
### **FREE FROM HARM:**

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)



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>

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



1in10

patients develops a health care acquired condition (such as infection, pressure ulcer, fall, adverse drug event) during hospitalization. (b)





Roughly 1 billion ambulatory visits occur in the US each year. (c)



About 35 million hospital admissions occur annually.(c)

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

- Ensure that leaders establish and sustain a safety culture.
- Create centralized and coordinated oversight of patient safety.
- 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.
- Partner with patients and families for the safest care.
- 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



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## **Eight Recommendations for Achieving Total Systems Safety**

## 八项实现系统安全的建议









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

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.

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

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**

### 八项实现系统安全的建议



## 5. ADDRESS SAFETY ACROSS THE ENTIRE CARE CONTINUUM

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

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

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

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



## 1- ENSURE THAT LEADERS ESTABLISH AND SUSTAIN A SAFETY CULTURE 确保领导建立并维持安全文化

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 CULTURE1-

## 确保领导建立并维持安全文化

Recommendations推荐

- ~ PS/Q plan developed and shared with Leadership
- 制定PS/Q计划并与领导分享 ~Board has an agenda item and discussion related to PS at ALL board meetings 董事会在所有董事会会议上都有一个与PS相关的项目和讨论
- ~ PS & Q dashboard at every board meeting
- 在每次董事会会议上使用PS & Q仪表盘~PS events that result in harm are discussed at all board meetings
- 在所有董事会会议上都会讨论导致伤害的PS事件~Workforce safety dashboard at every board meeting

在每次董事会会议上使用安全指示板



# 2- CREATE CENTRALIZED AND COORDINATED OVERSIGHT OF PATIENT SAFETY

建立病人安全的集中和协调监督

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

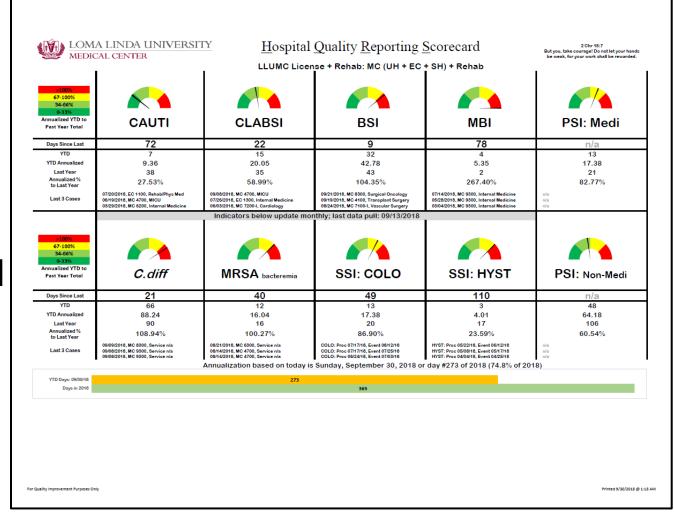
#### » Consumer Groups

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

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

创建一组共同的安全指标,反映有意义的结果

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

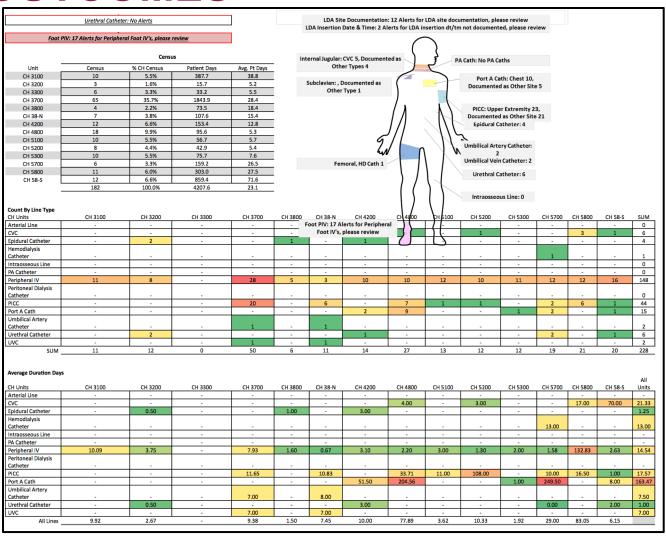




## 3- CREATE A COMMON SET OF SAFETY METRICS THAT REFLECT MEANINGFUL OUTCOMES

创建一组共同的安全指标,反映有意义的结果

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

增加对病人安全和实施科学研究的资助

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.

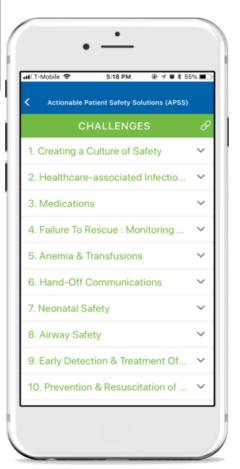
Expand health care safety scholar programs to train researchers with safety science expertise and to train operational and implementation leaders.

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**

在整个护理过程中解决安全问题 Recommendations推荐

- ~ Understand the role of board in overseeing events of harm 了解董事会在监督伤害事件中的角色
- ~ Disclosure and apology 信息公开和道歉
- ~ The process for/evaluation of RCAs for errors/harm RCAs的错误/危害评估过程~Just culture 公平的文化
- - Transparency/communication of errors and harm with patients/families 与病人/家属沟通错误和伤害
- ~ High Reliability Organizations (HRO)高可靠性组织
  - Transparency/communication of errors and harm with public 与公众沟通错误和伤害



## 6- SUPPORT THE HEALTH CARE WORKFORCE支持医疗工作者

### Recommendations建议

- ~ Employee satisfaction surveys
- 员工满意度调查 ~Culture of safety surveys 安全调查文化
- ~ Workforce safety challenges (physical and emotional) 员工安全挑战(身体及情绪)
- ~ Employee turnover
- → 吳工离职 ~ Employee injury rates and safety reports (physical/emotional) 员工受伤率及安全报告(身体/情绪)

- ~ Workforce safety dashboards
- ~ Workmen's compensation rates 工人的补偿率



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

病人和家属参与以获得最安全的治疗

Recommendations建议

- ~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

确保信息化安全, 以提高病人的安

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 定期质量报告的重要性

- »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? 为什么要报告给董事会

- »Screen for potential quality and safety problems using easily accessible data. 使用容易获取的数据筛选潜在的质量和安全问题。
- »Compare themselves with other hospitals using national standardized measures to assess quality of hospital care

与其他医院进行比较,采用国家标准化措施评估医院护理质量。



## Examples举例

### External sources 外部来源

#### »Pros:

- ~ Allow benchmarking
- ~ Publicly available

#### »Cons:

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

### Internal sources内部来源

#### »Pros:

- ~ Real time data
- ~ Your own definition

### »Cons:

 Inability to benchmark or compare to other hospitals in real time



## Dashboards 仪表盘





## 01 Adverse Event不良事件

- » HAI
  - CLABSI
  - CAUTI
  - SSI
  - CDI
  - MRSA
- » PSI
- » EER





## 02 Operational操作性的

- » 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



**Patient Central Outcome** 

病人结局

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





## 04 Utilization使用率

- » Blood utilization/ wastage
- » Antibiotic Stewardship/ DOT

- » Total medication cost
- » Total lab cost
- » Total radiology cost
- » Order sets utilization



### 05 Process Measures处理措施

- » 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参考

- 1. 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