



Emergency Department Continuous Quality Management

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Definitions

◆ What is Quality Improvement?

- *Combined and unceasing effort*
- *Everyone involved*
 - *Healthcare professionals*
 - *Patients*
 - *Family*
 - *Payers, Educators, Planners*
- *Changes that lead to better:*
 - *Outcomes*
 - *System performance*
 - *Professional development*



Definitions

◆ Why Improve Quality?

– Safety

- Freedom from accidental injury

– Error

- Failure of a planned action to be completed as intended (error of execution)

or

- Use of a wrong plan to achieve an aim (error of planning)
- *May or may not result in adverse outcome*

Hippocratic Oath





PRIMUM NON NOCERE

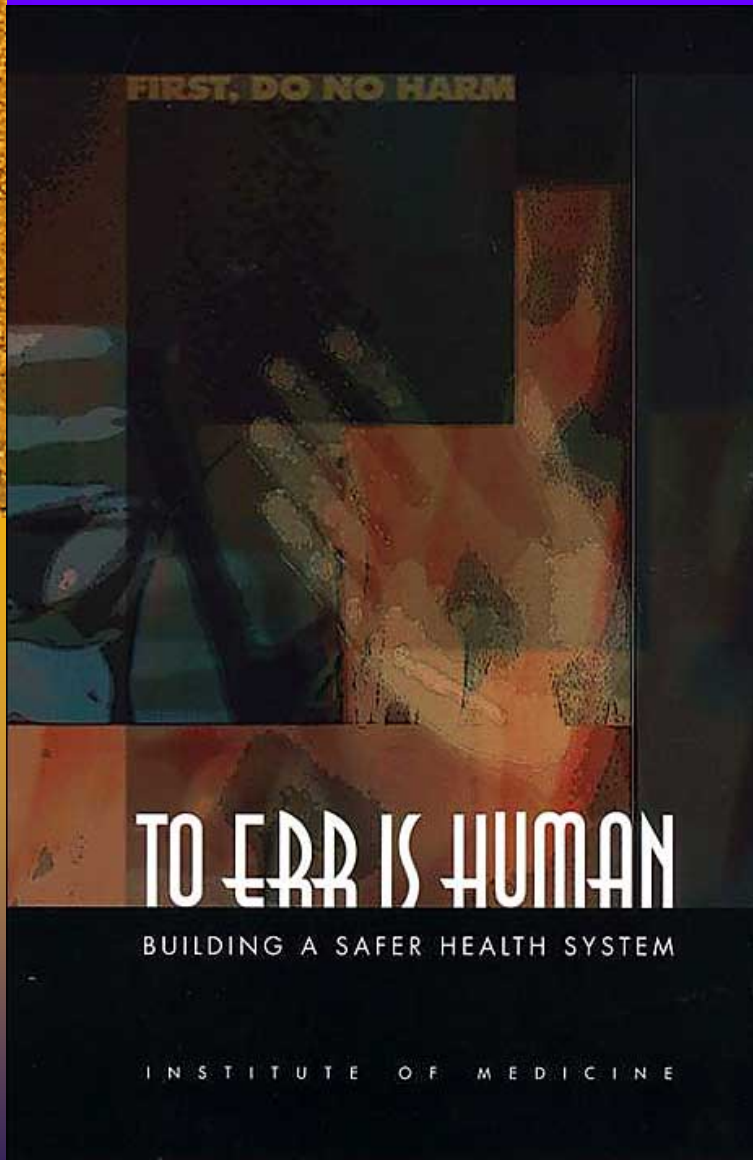
First Do No Harm

"I will follow that *system* of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous."

"I will give no deadly medicine to any one if asked, nor suggest any such counsel"

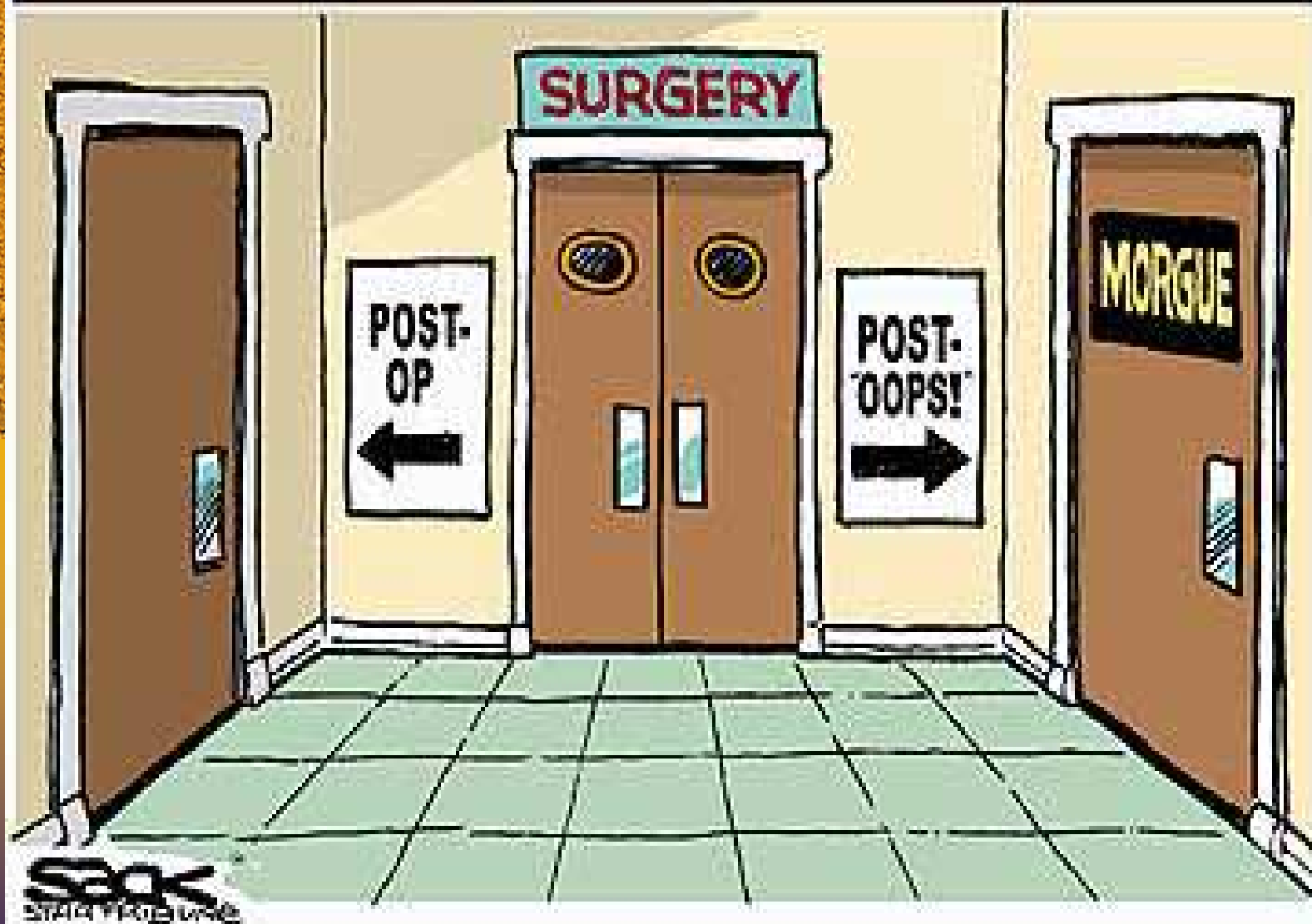
"I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work."

IOM 1999



- Health care in the US is not as safe as it should be--and can be.
- At least 44,000 people, and perhaps as many as 98,000 people, die each year in hospitals as a result of medical errors that could have been prevented

REPORT: MEDICAL MISTAKES A LEADING CAUSE OF DEATH





Even Elite Hospitals Aren't Immune to Errors

by LAWRENCE K. ALTMAN, February 23, 2003

Medical errors are thought to be responsible for as many as 98,000 deaths in US every year, **many of them preventable** through greater attention to basic quality checks and ordinary standards of patient care

IS US HEALTH REALLY THE BEST IN THE WORLD?

Starfield *JAMA*.2000; 284: 483-485.

HOSPITAL DEATHS PER YEAR

12,000	Unnecessary surgery
7,000	Medication errors in hospitals
20,000	Other errors in hospitals
80,000	Infections in hospitals
106,000	Non-error, negative drugs effects



4% - 18% of Patients Experience Negative Effects in Outpatient Settings

116 M	Extra physician visits
77 M	Extra prescriptions
17 M	ED visits
8 M	Hospitalizations
3 M	Long-term admissions
199 K	Additional deaths
\$77 B	Extra costs



4 Major Categories of Errors

1. Avoidable errors (Misuse)
2. Underutilization of services
3. Overuse of services
4. Errors associated with wide variations in health care practices
 - including regional and small-area variations.



Avoidable Errors

- ◆ Injuries sustained by patients during the course of their care.



Underutilization

- ◆ Patients fail to receive an intervention whose benefits outweigh its risks.



Overuse

- ◆ Delivery of a health care intervention with a higher likelihood of risk than potential benefit to patients.



Errors associated with *Variations* in health care practices

- ◆ Noted for different patient populations, health care providers, and health care delivery systems.



Types of Errors

- ◆ Adverse drug events
 - ◆ Improper transfusions
 - ◆ Restraint-related injuries
 - ◆ Falls
 - ◆ Death
 - ◆ Mistaken patient identities
-
- ◆ High error rates with serious consequences are most likely to occur in intensive care units, operating rooms, and emergency departments.

NUMBER OF MEDICAL MISTAKES SHAKES UP COUNTRY

DON'T WORRY...
WE'VE DOUBLE-CHECKED
EVERYTHING ABOUT YOUR
OPERATION. THERE'LL BE
NO MISTAKES TODAY,
MR. COLLINS.

MY
NAME'S
SMITH!

STAYSKAL
99 TAMPA
TRIBUNE





Diagnostic Errors

- ◆ Error or delay in diagnosis
- ◆ Failure to employ indicated tests
- ◆ Use of outmoded tests or therapy
- ◆ Failure to act on results of monitoring or testing



Treatment Errors

- ◆ Error in the performance of an operation, test or procedure
- ◆ Error in administering the treatment
- ◆ Error in the dose or method of using a drug
- ◆ Avoidable delay in treatment or in responding to an abnormal result
- ◆ Inappropriate (not indicated) care



Other

- ◆ Failure of communication
- ◆ Equipment failure
- ◆ Other process failure



"SAVE the patient you idiot! I said we've got to do whatever we can to SAVE the patient!"



To Err is Human - Conclusions

- ◆ Most patient injuries not due to blameworthy clinicians
- ◆ Rather to systemic factors such as
 - unrealistic reliance on human memory,
 - poor communication systems,
 - unrealistic demands on human vigilance,
 - too little respect for the consequences of fatigue,
 - reliance on handwriting in a computer age, etc.
- ◆ Exhortation, blaming, and “trying harder” are not acceptable plans for improving patient safety
- ◆ We should be pursuing the much more scientifically valid plan of substituting new, reliable system designs for old, unreliable ones.



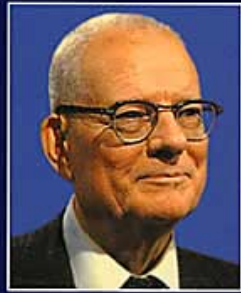
finished files are the result of
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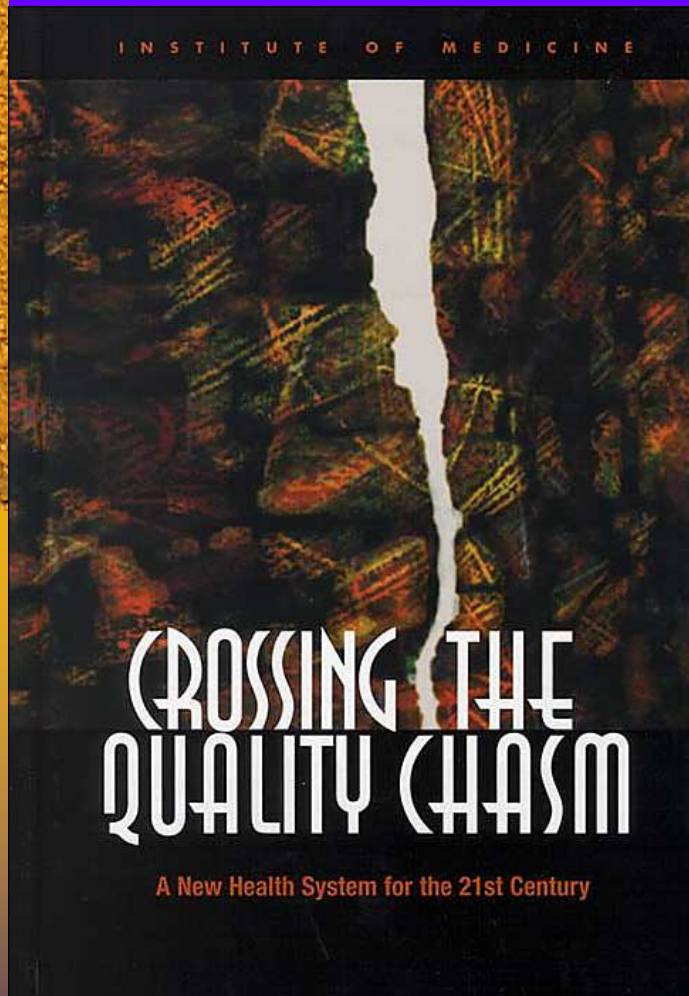
W. EDWARDS DEMING



OUT OF THE CRISIS

- ◆ A central TQM idea is that it's not people who make most mistakes - it's the process they are working within.
- ◆ Harassing the workforce without improving the processes they use is counter-productive.

IOM 2001




Faced with rapid changes, the nation's health care delivery system has fallen far short in its ability to translate knowledge into practice and to apply new technology appropriately and safely.

THE FUTURE OF MEDICINE

Our biggest
challenge is to
translate
knowledge
into action





CQM in the ED: Start at the beginning

- ◆ Due to the potential for a higher level and frequency of involvement with the health care delivery system, persons with serious and complex conditions presenting to the ED should be considered at particular risk for errors in the care delivery process



6 Aims for Improvement

Safe

Timely

Effective

Efficient

Equitable

Patient-centered



STEEEP

1. *Safe*: avoiding injuries to patients from the care that is intended to help them.
 - Patients ought to be as safe in health care facilities as they are in their own homes.
2. *Timely*: reducing waits and sometimes harmful delays for both those who receive and those who give care.



STEEEP

3. *Efficient*: avoiding waste, including waste of equipment, supplies, ideas, and energy.
4. *Effective*: providing services *based on scientific knowledge* to all who could benefit, and refraining from providing services to those not likely to benefit.



STEEEP

5. *Equitable*: providing care that does not vary in quality because of personal characteristics
6. *Patient-centered*: providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.



Achieving the 6 Aims: 3 Comprehensive Redesign Principles

- ◆ Care should be
 - Knowledge-based
 - Patient-centered
 - Systems-minded

Ten Simple Rules

- 
- ◆ Now: Care is based primarily on visits.
 - ◆ New: **Care is based on continuous healing relationships.**

 - ◆ Now: Professional autonomy drives variability
 - ◆ New: **Care is customized according to patients' needs and values**

 - ◆ Now: Professionals control care.
 - ◆ New: **The patient is the source of control.**



4

- ◆ Now: Information is a record.
- ◆ New: **Knowledge is shared freely.**

5

- ◆ Now: Decision making is based on training and experience
- ◆ New: **Decision making is based on evidence**

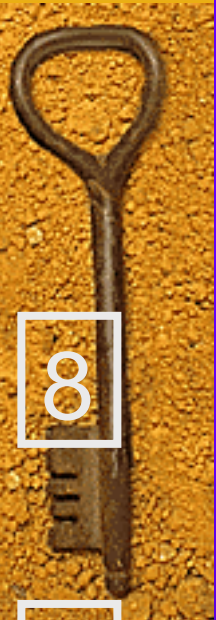
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- ◆ Now: “Do no harm” - individual responsibility
- ◆ New: **Safety is a system property.**

7

- ◆ Now: Secrecy is necessary.
- ◆ New: **Transparency is necessary**

A User's Manual For The IOM's 'Quality Chasm' Report



◆ Now: The system reacts to needs.

◆ New: **Needs are anticipated.**

◆ Now: Cost reduction is sought.

◆ New: **Waste is continuously decreased.**

◆ Now: Preference is given to professional roles over the system.

◆ New: **Cooperation among clinicians is a priority.**



Redesign Imperatives

- ◆ Root Cause Analyses
- ◆ Reengineering care processes
- ◆ Effective use of IT
- ◆ Knowledge and skills management
- ◆ Development of Effective Teams
- ◆ Improved measurement of performance and outcomes



Root Cause Analyses

- ◆ A problem has occurred
 - What caused the problem?
 - Was it caused by personnel or process/systems issues?
 - How did the cause lead to the effect?
 - How do we correct the root cause and/or break the linkage to the problem?



Reengineering Care Processes

- ◆ More robust and persistent systems for finding best practices and assuring that these best-known clinical models, rather than historically protected or habitual ones, become organizational standards.
- ◆ Performance Improvement Projects (PIP)



Effective Use of IT

- ◆ Better use of information technology to improve access to information and to support clinical decision making.
- ◆ Microsystems, without organizational support, lack the capacity to arrange ideal information technologies.



Knowledge and Skills

- ◆ Investment and persistence in improving workforce knowledge and skills.
- ◆ The committee noted the lack in health care of a deep and well-supported human resource development strategy.




Development of Effective Teams

- ◆ More consistent development of effective teams and teamwork



Improved Measurement

- ◆ More sophisticated, extensive, and informative measurement of performance and outcomes, especially with respect to the six aims for improvement.



Accurately and Completely Reconcile Medications: Across the Continuum of Care

- ◆ *Polypharmacy is here to stay!*
- ◆ Process for obtaining and documenting a complete list current medications upon admission.
- ◆ A complete list of the patient's medications is communicated to the next provider of service
 - when a patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization.

Patient Safety Is Not Enough: Targeting Quality Improvements To Optimize the Health of the Population

Steven H. Woolf, MD, MPH

Ensuring patient safety is essential for better health care, but preoccupation with niches of medicine, such as patient safety, can inadvertently compromise outcomes if it distracts from other problems that pose a greater threat to health. The greatest benefit for the population comes from a comprehensive view of population needs and making improvements in proportion with their potential effect on public health; anything less subjects an excess of people to morbidity and death. Patient safety, in context, is a subset of health problems affecting Americans. Safety is a subcategory of medical errors, which also includes mistakes in health promotion and chronic disease management that cost lives but do not affect "safety." These errors are a subset of lapses in quality, which result not only from errors but also from systemic problems, such as lack of access, inequity, and flawed system designs. Lapses in

quality are a subset of deficient caring, which encompasses gaps in therapeutics, respect, and compassion that are undetected by normative quality indicators. These larger problems arguably cost hundreds of thousands more lives than do lapses in safety, and the system redesigns to correct them should receive proportionately greater emphasis. Ensuring such rational prioritization requires policy and medical leaders to eschew parochialism and take a global perspective in gauging health problems. The public's well-being requires policymakers to view the system as a whole and consider the potential effect on overall population health when prioritizing care improvements and system redesigns.

Ann Intern Med. 2004;140:33-36.

For author affiliation, see end of text.

www.ama-assn.org



CQM in the ED

- ◆ Degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge



Clinical Quality Improvement

- ◆ Interdisciplinary process designed to raise the standards of the delivery ofmeasures in order to maintain, restore and improve health outcomes of individuals and populations.



Remember

- ◆ Safety is no accident
- ◆ Quality is Job 1
- ◆ Right Treatment for the Right Patient at the Right Time, Every Time!

Thanks for Listening

