Leading Change:
A New Outlook for Humanity

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The Urgent Need to Improve Health Care Quality

"Serious and widespread quality problems exist throughout American medicine"

Overuse, underuse, and misuse

November 30, 1999:

The Institute of Medicine

Committee on Quality of Health Care in America

announces its first report:

To Err is Human: Building a Safer Health System
March 1, 2001:

The Institute of Medicine
Committee on Quality of Health Care in America

announces its second report:

Crossing the Quality Chasm:
A New Health System for the 21st Century

"Between the health care we have and the care we could have lies not just a gap, but a chasm."
November 20, 2003:

The Institute of Medicine

Committee on Patient Safety Data Standards

announces a major follow-on report:

Patient Safety: Achieving a New Standard for Care

Injuries of commission

versus

Injuries of omission
Massive variation; inappropriate care common

Unacceptable rates of preventable patient injury

A striking inability to "do what we know works"
Supply-sensitive care

Days in hospital per decedant during last 6 months of life among 77 "best" U.S. hospitals (from US News & World Report annual rankings)

- NYU Medical Center: 27.1 days
- Mount Sinai Hospital: 22.8 days
- NY Presbyterian Hospital: 21.6 days
- Cedars-Sinai Medical Center: 21.3 days
- Mass. General Hospital: 16.5 days
- UCLA Medical Center: 16.1 days
- Boston Medical Center: 15.6 days
- Brigham & Women’s Hospital: 13.9 days
- Beth Israel Deaconess: 12.2 days
- UCSF Medical Center: 11.5 days
- Stanford University Hospital: 10.1 days
- LDS Hospital: 9.0 days
• Massive variation; inappropriate care common

• Unacceptable rates of preventable patient injury

• A striking inability to "do what we know works"
Medical injuries

Account for

44,000 - 98,000 deaths per year in the United States

More people die from medical errors than from breast cancer or AIDS or motor vehicle accidents

Thomas et al.  1999

Direct health care costs totaling

$9-15 billion per year

Thomas et al.  1999
Johnson et al.  1992
Massive variation; inappropriate care common

Unacceptable rates of preventable patient injury

A striking inability to "do what we know works"
American health care "gets it right" 54.9% of the time.

"We routinely achieve miracles"

Since 1960, 6.97 years gained over 4 decades = 1.74 years / decade
(from 1900-1960, 20.9 years gained over 6 decades = 3.48 years / decade)

Current health care

**is the best the world has ever seen**

A few simple examples:

- **From 1900 to 2000, average life expectancy at birth increased from only 49 years to almost 80 years.**
- **Since 1960, age-adjusted mortality from heart disease (#1) has decreased by 56%; and** (from 307.4 to 134.6 deaths / 100,000)
- **Since 1950, age-adjusted mortality from stroke (#3) has decreased by 70%.** (from 88.8 to 26.5 deaths / 100,000)

*Initial life expectancy gains almost all resulted from public health initiatives -- clean water, safe food, and (especially) widespread control of epidemic infectious disease. But since about 1960, direct disease treatment has made increasingly large contributions.*

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The healing professions are changing

From *craft-based practice*

- *individual physicians, working alone* (housestaff ::= apprentices)
- *handcraft a customized solution for each patient*
- *based on a core ethical commitment to the patient and*
- *vast personal knowledge gained from training and experience*

To *profession-based practice (a systems approach)*

- *groups of peers, treating similar patients in a shared setting*
- *plan coordinated care delivery processes* (e.g., standing order sets)
- *which individual clinicians adapt to specific patient needs*
- *early experience shows*
  - *less expensive* (facility can staff, train, supply an organize to a single core process)
  - *less complex* (which means fewer mistakes and dropped handoffs, less conflict)
  - *better patient outcomes*
Organize everything around value-added (front line) work processes

(Quality improvement is the science of process management)
Lean production

- standardized processes with
- "smart cogs" that
- adapt to individual needs

That is, "mass customization:"

efficient processes that can deal with complexity
A multidisciplinary team of health professionals -

1. Select a high priority care process

2. Generate an evidence-based "best practice" guideline

3. Blend the guideline into the flow of clinical work
   - staffing
   - training
   - supplies
   - physical layout
   - educational materials
   - measurement / information flow

4. Use the guideline as a shared baseline, with clinicians free to vary based on individual patient needs

5. Measure, learn from, and (over time) eliminate variation arising from professionals; retain variation arising from patients ("mass customization")
Why "profession-based" practice?

1. *It produces better outcomes for our patients*

2. *It eliminates waste, reduces costs, and increases available resources for patient care*

3. *It puts the caring professions back in control of care delivery*

4. *It is the foundation for useful shared electronic data -- an important next step in care delivery improvement*
"I am sorry for you, young men (and women) of this generation. You will do great things. You will have great victories, and standing on our shoulders, you will see far, but you can never have our sensations. To have lived through a revolution, to have seen a new birth of science, a new dispensation of health, reorganized medical schools, remodeled hospitals, a new outlook for humanity, is not given to every generation."

-- Sir William Osler