What is Quality?

QUALITY

IOM def

- Safe
- Effective
- Timely
- Equitable
- Efficient

History of Quality
Jordan Messler, MD, SFHM
jordan.messler@baycare.org

The IHI Triple Aim

Population Health

Experience of Care

Per Capita Cost
Quality couldn't be independently related with either the subject or the object but could be found only in the relationship of the two with each other. It is the point at which subject and object meet.

Robert Pirsig

Zen and the art of motorcycle maintenance

Quality Dimensions: OSCE

- Outcomes
- Satisfaction
- Compliance
- Efficiency

OTHERS
1. SOC: service/clinical/cost
2. Value and costs
3. Triple Aim
Quality: subjective/objective

QUALITY
- Technical dimensions: experiential dimension
- Patient satisfaction vs Measurement

QUALITY IMPROVEMENT
- Intrinsic Motivator vs Extrinsic Motivators
- Perception of quality
  - Pt satisfaction
  - Compliance
  - Efficiency
  - Outcomes: severity adjusted

TO ERR IS HUMAN
1999 IOM
44K-98K deaths per year in the hospital, preventable errors

Jumbo Jet Per day

How hazardous is healthcare? Leape

The Quality of Health Care Delivered to Adults in the United States

QUALITY

Medical Inquiry
Public Health
Patient Safety
Measurement
Physician Heal Thyself
Codman

MEDICAL INQUIRY

I swear by Apollo, the physician, and Asclepius, and Hygeia, and Panacea—and all the gods and goddesses—that, according to my ability and judgment, I will keep this Oath and this stipulation to reckon him who taught me this art...
Let us then suppose the mind to be, as we say, white paper void of all characters, without any ideas. How comes it to be furnished? ....? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from EXPERIENCE.

John Locke
paris school of medicine
Diderot in 1765, "The Hotel-Dieu is the most extensive, populated, rich and frightful of our hospitals."

Chartran, Laennec a l’Opital Necker, Auscultate un Physique (1816)
Improving the quality of health care is a public health emergency
Nash: The quality solution
Public health

- Preventing epidemics and the spread of disease
- Protecting against environmental hazards
- Preventing injuries
- Promoting and encouraging healthy behaviors
- Responding to disasters, assisting communities in recovery
- Assuring the quality and accessibility of health services
PATIENT SAFETY

It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm.

—Florence Nightingale
Hospitalism

The Lady with the Lamp

Nightingale Wards
MEASUREMENT

Miasma: cholera bad air, wikimedia
BEECHER
1904-1976
Placebo
Informed Consent
Anesthesia Safety

- Professional consensus as basis for medicine between 1847 to 1948
- RCT
  - 1948: BMJ published first RCT
- Meta Analysis
- Cochrane

Model for Improvement
Flexner Report

• The Johns Hopkins Hospital
• 1910 Flexner: medical education changes
• Peterson
• “the first major investigation of the quality of medical care as practiced in physicians’ office.”

<table>
<thead>
<tr>
<th>Tier</th>
<th>Examples</th>
<th>Quality of clinical instruction</th>
<th>University affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Johns Hopkins</td>
<td>excellent</td>
<td>yes</td>
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<tr>
<td>Tier 2</td>
<td>Columbia, Harvard, Michigan</td>
<td>good</td>
<td>yes</td>
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<tr>
<td>Tier 3</td>
<td>Cincinnati, NYU, Yale</td>
<td>acceptable</td>
<td>yes</td>
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<tr>
<td>Tier 4</td>
<td>Colorado, Drake, Tufts</td>
<td>less acceptable</td>
<td>many</td>
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<td>Tier 5</td>
<td>Georgetown, Washburn</td>
<td>weak</td>
<td>some</td>
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<tr>
<td>Tier 6</td>
<td>Atlantic Medical College, Toledo Medical College</td>
<td>unacceptable</td>
<td>none</td>
</tr>
</tbody>
</table>

Sargent. The Four Doctors. 1906

Ludmerer. Learning to Heal. 1985
What distinguished Johns Hopkins from the rest, was that Johns Hopkins already possessed a first-rate hospital for clinical teaching.

Ludmerer. Learning to Heal. 1985

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CODMAN

Medical Inquiry: End Result Idea, EBM
Public Health: Codman Hospital
Patient Safety: Standardization, Transparency
Measurement: Ether chart, Registry
Physician Heal Thyself: Regulation, ACS
Donabedian Codman article

p 243

"I claim," Codman declared, "that the adoption of the End Result System by the hospitals of this country will at the same time render our work more scientific and our practice more efficient and honorable." By using the end result system, Codman hoped to propel the practice of medicine from "humbug," masquerading as "art," to a science, and from a craft to almost an industry- in short, from obscurantism to rationality; hence the diverse uses of the end result system.

Codman classification of Errors for Adverse Outcomes

- All results of surgical treatment that lack perfection may be explained by one or more of the following causes
  - Errors due to lack of technical knowledge, skill
  - Errors due to lack of care or equipment
  - Errors due to lack of diagnostic skill
- These are partially controllable by organization
  - Pt's unconquerable disease
  - Pt's refusal of treatment
- These are partially controllable by public education
  - The calamites of surgery or those accidents and complications over which we have no control
Committee for hospital standardization: Codman

We believe it is the duty of the very hospital to establish a follow-up system, so that as far as possible the result of every case will be available at all times for investigation by members of the staff, the trustees, or administration, or by other authorized investigators or statisticians.

HOSPITAL STANDARDS
5 simple guidelines

• Each hospital should have medical staff
• Members of the medical staff chosen based on graduation from med school, competency and character
• Regular staff meetings to review cases: end results, M and M precursor
• Medical records should be written and filed for all cases. Each hospital with lab and radiology section

Codman

• “there is a difference between interest and professional duty. You do your duty if the work comes to you, but you do not go out of your way to get the work unless it is for your interest.” Codman
Codman’s accomplishments

- Develops anesthesia record
- First fluoro study of the gut
- Describes subacromial bursa
- Describes fx of carpal scaphoid
- Management of perf and obstructing duodenal ulcers
- Publishes book THE SHOULDER
- Starts first ped radiology dept
- Develops concepts of end result, treatment outcomes, accountability
- Starts registry of bone sarcoma: first tumor registry

the key is learning; learning from our own well-intentioned experience

EACodman

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Medical Inquiry: comparative effectiveness, EBM, IT solutions, Big Data
Public Health: preparedness, patient centered, Patient Safety: HAIs, preventable illness
Measurement: Reliable outcomes, accountability measures
Physician Heal Thyself: self regulation, reporting
Codman: transparency, standardization, registries, accountability