Quality of Care

M6920
November 27, 2001

What is quality?

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

*Institute of Medicine

Error is a leading cause of death

- Medical Errors
- Motor Vehicle Crashes
- Breast Cancer
- AIDS

1997 estimates; IOM report To Err is Human: Building a Better Health System
Observations

- 1,000-2,000 new articles each day (Lundberg estimate)
- 120 pairs of drugs that sound alike or are spelled similarly
- 3/4 of physicians are in solo or small, single-specialty groups
- commercial airline fatalities have dropped 80% over 50 years

Quality includes

- both individual benefit AND keeping all groups up to the desired scale
- both professional/technical and interpersonal aspects of care

Physician perception of quality decline

2000 International Survey of Physicians Commonwealth/Harvard/Harris
Consumer ratings of health plans*

![Bar chart showing consumer ratings of health plans.]  
*Kaiser Family Foundation

Views* are influenced by

![Pie chart showing the percentage of influence on views of health plans.]  
* among those who think plans do a bad job

Quality of care and IPR

- Higher technical quality of care for depression associated with
  - higher ratings of patient-provider relationship
  - higher satisfaction
- Causal link not established

Meredith et al Medical Care 39$ (349-360)
Quality concerns

- over-use (e.g., doses of wasted antibiotics)
- under-use (e.g., lack of diabetic retinopathic exams)
- mis-use (18,000 deaths due to practitioner error)

Quality requires

- the right thing
  - technologically/personal values
- done at the right time
  - diagnostically/personal choice
- done in the right way
  - cost effective process
- leading to a desirable outcome
  - by professional & community standard

Ethical model

- value and quality of care defined by
  - Beneficence,
  - Prudence and
  - Justice
**Donabedian framework**

- **Structure or input**
  - the right staff/‘stuff’
- **Process**
  - going about care correctly
- **Outcome**
  - yielding the result desired

**Structure**

- **physical setting attributes**
  - construction standards
- **institutional organization and resources**
- **professional licensure**
  - entry to practice
  - continuing education
  - specialty certification

**Process**

- **Technical actions**
- **Interpersonal interactions**
- **Errors of either omission and commission**
Outcome

- Efficacy: how well it works under perfect conditions
- Effectiveness: how well does it work in routine practice compared to gold standard
- Efficiency: how much benefit in comparison to cost

Outcome timelines

- immediate (survive surgery)
- short term (leave the hospital)
- long term (5 year survival rate)
- population (length of healthy life)

Assessing quality
Cascade of voltage drops*

Potential to receive good care
- Insurance available
- Enrolled in insurance
- Providers and services covered
- Informed choice available
- Consistent source of primary care
- Referral services accessible
- Care delivered

Quality of care received

*Eisenberg & Power, JAMA 284:16

Domains of quality improvement efforts

- Professional and private sector
  - professional associations
  - JCAHO
- Market-driven
  - use of quality data by purchasers-HEDIS

- Public sector
  - Policy developer
  - Program manager
    - own programs/set example
  - Purchaser
  - Regulator
    - FDA
    - Medicare
    - state licensing
    - OSHA

FDA device oversight

- outright failure
- manufacturer defect
- malfunction
- improper/inadequate design
- improper/inadequate labeling
- user error
Process oversight

- could be perspective of either patient or practitioner
- access
- evaluation
- diagnosis
- treatment
- referral or follow-up

State laws on errors

- Reporting
  - California
  - Colorado
  - Florida
  - Kansas
  - Kentucky
  - Massachusetts
  - N. Carolina
  - Pennsylvania
  - South Carolina
  - Texas

- Pharmacy
  - California
  - Indiana
  - Illinois
  - Louisiana
  - Montana
  - Virginia

- Hospitals
  - Colorado
  - Florida
  - Massachusetts
  - New York
  - Rhode Island
  - South Dakota
  - Washington

Contrasting views

- find and eliminate the "bad apples"
  - disciplinary action
  - role models/diffusion approaches
- continuous quality improvement
  - raise the mean
  - change the culture
Current efforts

- Increasingly, are based in a systems approach/total quality improvement
- Must measure what matters to people
- Must relate to a modifiable process

Specific issues

- underuse
  - 4 treatments post MI lead to 80/1000 treated lives saved
  - less than 2% of eligible population treated or 18,000 preventable deaths
- overuse
  - 20% of ambulatory Rx for antibiotics for ‘colds’
  - “money, fun and angioplasty”

Why don't clinicians follow guidelines?*

- knowledge
- attitude
- behavior
- external factors
<table>
<thead>
<tr>
<th>Knowledge deficit: lack of familiarity with</th>
</tr>
</thead>
<tbody>
<tr>
<td>• volume of information</td>
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<tr>
<td>• time needed to stay informed</td>
</tr>
<tr>
<td>• guideline accessibility</td>
</tr>
<tr>
<td>• interpretation of evidence</td>
</tr>
<tr>
<td>• applicability to patient</td>
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<tr>
<td>• not cost-beneficial</td>
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<tr>
<td>• lack of confidence in developer</td>
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<table>
<thead>
<tr>
<th>Attitudes</th>
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<tbody>
<tr>
<td>• disagreement with specific guideline</td>
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<tr>
<td>• not cost-beneficial</td>
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<tr>
<td>• lack of confidence in guideline developer</td>
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<tr>
<td>• disagreement with guidelines in general</td>
</tr>
<tr>
<td>• too cookbook</td>
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<tr>
<td>• too rigid to apply</td>
</tr>
<tr>
<td>• biased synthesis</td>
</tr>
<tr>
<td>• challenge to autonomy</td>
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<tr>
<td>• not practical</td>
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<table>
<thead>
<tr>
<th>and more attitude...</th>
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<tbody>
<tr>
<td>• no outcome expectancy</td>
</tr>
<tr>
<td>• believes recommendation will not lead to desired outcome</td>
</tr>
<tr>
<td>• no self-efficacy</td>
</tr>
<tr>
<td>• believes cannot perform guideline recommendation</td>
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<tr>
<td>• no motivation/inertia</td>
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<tr>
<td>• inertia</td>
</tr>
<tr>
<td>• routines</td>
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External factors

- Patient factors
  - inability to reconcile patient preference with guideline recommendation
- Guideline factors
  - guideline characteristics
  - presence of contradictory guidelines

Environmental factors

- lack of time
- lack of resources
- organizational constraints
- lack of reimbursement
- perceived increase in malpractice liability

Health Insurance Employer Data & Information System

- HEDIS is managed care self-evaluation
- 48% of HMO's requested accreditation (1998)
- basis for measures:
  - relevance
  - scientific soundness
  - feasibility
**HEDIS Measures**

- Effectiveness of care
  - Advising smokers to quit
  - Testing smokers who quit
- Accessibility and availability of care
- Satisfaction with experience of care
- Cost of care
- Stability of plan
- Informed choices
  - Translation services
  - Testing-counseling women about hormone replacement therapy
- Use of services
- Descriptive info
  - Range of services
  - Quality assessment and improvement

**The HEDIS Report Card**

- Accreditation status
  - Excellent
  - Commendable
  - Accredited
  - Provisional
  - Denied
- And from zero to four stars in
  - Access and service
  - Qualified providers
  - Staying healthy
  - Getting better
  - Living with illness

**Components of score**

- Access & service: 40%
- Staying healthy: 15%
- Getting better: 10%
- Living with illness: 15%
- Qualified providers: 20%
## Samples from report card

<table>
<thead>
<tr>
<th>Plan</th>
<th>Access</th>
<th>Providers Stay Healthy</th>
<th>Get Better</th>
<th>Live w. Illness</th>
<th>Outcome</th>
</tr>
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<tbody>
<tr>
<td>CIGNA</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>Commendable</td>
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<tr>
<td>Empire BC/BS</td>
<td>****</td>
<td>****</td>
<td>****</td>
<td>****</td>
<td>Excellent</td>
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<tr>
<td>Univer sal</td>
<td>***</td>
<td>**</td>
<td>***</td>
<td>**</td>
<td>Accredited</td>
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## Other approaches

- HCFA Quality Improvement System for Managed Care
  - Medicare HMO monitoring. PRO oversight--
- Foundation for Quality
  - FACCT consumer/purchaser
- Individual HMO

## and more . .

- Presidential Committee on Quality
- Institute for Healthcare Improvement, Boston
- National Patient Safety Foundation, AMA
- Consumer Coalition for Quality Health Care -AARP
- Nursing Report Card--ANA
Magnet Hospitals (ANA) recognize excellence in

- management and philosophy of nursing services
- adherence to standards for quality improvement
- leadership of chief nurse executive
- attention to cultural/ethnic diversity of patients and providers

Perverse incentives

- Many disciplined practitioners have been top money-makers
- Drop in admissions only temporary
- Example
  - Month of suspension 5 admissions/<$40K billings
  - 4 months later 27 admis./$200K

Closing *The Quality Chasm* (IOM)

- 24/7 access
- customized
- patient control
- shared knowledge
- evidence-based
- safety = systems
- information available
- anticipate needs
- decrease waste
- cooperative & collaborative
Other resources

- Guide to clinical preventive services
- Guide to community preventive services