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Quality of Care and Its Measurement in the HSRE Context

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This Lecture Will Address the Following:

- Definitions
- Paradigms and frameworks
- Policy context
- Applications within HSR&E
- Approaches to measurement
- Sources of benchmarks
- Data sources
- Practical issues (related to “individual exercise” case study)
Section A

Definitions, Paradigms, and Frameworks
“Quality” Defined

- The degree to which health services for individuals and populations increase the likelihood of desired health outcomes
- And the degree to which health services are consistent with current professional knowledge
“Quality” Defined

- The quality “performance” of a provider or organization can be assessed by measuring . . .
  - Their patients’ outcomes (end-results), or;
  - The degree to which they adhere to an accepted care process
“Quality” Defined

- Everything that’s not money
  - Weiner, 1982
The Theoretical Cost/Quality “Plateau” Relationship

The diagram illustrates a relationship between cost and quality, marked by points A and B. The x-axis represents cost, the y-axis represents quality, with point A marking an initial quality increase with cost, followed by a plateau, and then a decrease as cost continues to rise.
Two Recent Institute of Medicine Reports Have Been Influential:

- “To Err is Human”
- “Crossing the Quality Chasm”
  - Though as much political as scientific in nature, we can learn much from these IOM reports
  - See www.iom.edu
IOM’s Framework for Quality Improvement:

- Quality problems may relate to the following:
  - Underuse
  - Overuse
  - Misuse

- The IOM effectively used the issue of “patient safety” to capture the public’s attention and the media’s attention
IOM’s Suggestions for Future

- It is not acceptable to have a wide “quality chasm” between actual and best possible performance
- Quality and safety must be designed into a system and must not be the responsibility of just individual providers
Quality of care is central to several domains:

- Basic research and development
- Research to set policy agenda
- Program management/improvement
- Program impact evaluation
A Schema for Categorizing Health Services Research, Evaluation, and Related Activities

New Knowledge for Society
Research

Science base

Methods development
Outcomes/tech assessment

Non-policy

Social policy research
Health system
improvement and
development

Policy

Policy research /
analysis

Provider/Program Focus
Evaluation

CQI
OR/efficiency
Disease/outcome
management

Program management

Performance monitoring
Program effectiveness

Program Assessment / Development

Policy Makers (public and private)
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Some Specific QOC Applications Include . . .

- Clinical quality improvement / TQM
- Performance monitoring
- Evidence-based outcomes research
- Health system improvement
The “Continuous Quality Improvement” (CQI) Cycle

- Problem Identification and Prioritization
- Determination of Quality Criteria
- Measurement of Degree to which Criteria is Attained
- Design of System Improvement
- Implementation of System Change
Section B

Measurement
Approaches to Measuring Quality

1. Structure of care
   - Facilities
   - Provider qualifications and credentialing
   - Availability / resource adequacy
Approaches to Measuring Quality

2. Process of care
   - Provider adherence to practice standards
   - Appropriateness of care
Process Measures

- Adequacy of patient/population utilization
- Ease of access to care/case finding rates
Approaches to Measuring Quality

3. Outcomes of care
   ‒ Patient function/health status/quality of life
   ‒ Adverse/sentinel events
   ‒ Mortality/longevity
Outcome Measures

- Prevention/avoiding disease/morbidity
- Patient satisfaction/patient-centeredness
# Data Sources for Quality

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Structure</th>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Visit</td>
<td>X</td>
<td></td>
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<tr>
<td>Administrative Files</td>
<td>X</td>
<td>X</td>
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<td>Claims/Encounter</td>
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<table>
<thead>
<tr>
<th>Data Source</th>
<th>Type of Measure</th>
</tr>
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<tr>
<td></td>
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<tbody>
<tr>
<td>Medical Record (paper or electronic)</td>
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<tr>
<td>Patient Interview</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Population Survey</td>
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<td>X</td>
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Remember Your “Denominators”:
Populations of Interest for QOC Research

- Insured beneficiary/enrollee group
- Persons living in a geographic area
- A selected vulnerable population group
- Provider organization/institution
- An individual provider
Process or structure of care:

- Normative—based on peer judgment and literature
- Empirical—based on observations of actual practices
  (http://www.ahrq.gov/qual/)
Outcomes of care:

- Accepted standards with face validity (e.g., infant mortality, disability)
- Constructed standards (e.g., functional health status, satisfaction)
QOC Case Study (See Individual Exercise)

1. CABG in Western MD
2. Prenatal care “gray-area” women
   - Meeting national standards of care
   - Improved quality for target population
A. Intent and implications for design
B. Measures
C. Sources of data