The Foundation

- IOM Roundtable
- President’s Advisory Commission
- National Cancer Policy Board
- IOM Program on Quality of Health Care in America
- IOM Committee on Quality of Health Care in America
  - Subcommittee on 21st Century Health System
  - Subcommittee on Environment

The IOM Roundtable

“...Serious and widespread quality problems exist throughout American medicine. These problems...occur in small and large communities alike, in all parts of the country, and with approximately equal frequency in managed care and fee-for-service systems of care. Very large numbers of Americans are harmed as a result....”

Health Care Examples

Overuse

- 30% of children receive excessive antibiotics for ear infections
- 20% to 50% of many surgical operations are unnecessary
- 50% of X-rays in back pain patients are unnecessary

Underuse

- 50% of elderly fail to receive pneumococcal vaccine
- 50% of heart attack victims fail to receive beta-blockers

Misuse

- 7% of hospital patients experience a serious medication error
- 44,000-98,000 Americans die in hospitals each year due to injuries from care
PERCENT OF "IDEAL CANDIDATES" WHO RECEIVED THERAPY
(D'Amico, et al. JAMA 2000; 284:1280)

"Admission to a teaching hospital was associated with better quality of care…"

The Overarching Aim

- The purpose of the health care system is to reduce continually the burden of illness, injury, and disability, and to improve the health status and function of the people of the United States.

Aims

- Safety
- Effectiveness
- Patient-centeredness
- Timeliness
- Efficiency
- Equity

The Chain of Effect in Improving Health Care Quality

Quality is a system property
“The First Law of Improvement”

Every system is perfectly designed to achieve exactly the results it gets.

The Chain of Effect in Improving Health Care Quality

I Patient and the Community
Experience
Aims (e.g., safe, effective, individualized, prompt, affordable)

II Micro-system
Process
Simple rules/Design Concepts (e.g., science-based action, systems customization)

III Organizational context
Facilitator of Process
Design Concepts (e.g., managerial compensation)

IV Environmental Context
Facilitator of Facilitators
Design Concepts (e.g., financing, regulation)

Zone of Complexity

Low

Chaos

High

Professional/Social Agreement about Outcomes

Low

Certainty about Outcomes

Three Guiding Frameworks

• Knowledge-based
• Patient-centered
• System-minded

Rules for Micro-systems

<table>
<thead>
<tr>
<th>Old Rule</th>
<th>New Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide care based on visits</td>
<td>Provide care based on healing relationships</td>
</tr>
<tr>
<td>2. Professional autonomy drives variability</td>
<td>Patient values drive variability</td>
</tr>
<tr>
<td>3. Professionals control care</td>
<td>The patient is the source of control</td>
</tr>
<tr>
<td>4. Information is a record</td>
<td>Information is a key to relationship</td>
</tr>
</tbody>
</table>

Rules for Micro-systems

<table>
<thead>
<tr>
<th>Old Rule</th>
<th>New Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Base decisions on experience</td>
<td>Base decisions on systematically acquired knowledge</td>
</tr>
<tr>
<td>6. Safety is an individual responsibility</td>
<td>Safety is a system capability</td>
</tr>
<tr>
<td>7. Secrecy is necessary</td>
<td>Transparency is necessary</td>
</tr>
<tr>
<td>8. React to needs</td>
<td>Anticipate needs</td>
</tr>
</tbody>
</table>
## Rules for Micro-systems

<table>
<thead>
<tr>
<th>Old Rule</th>
<th>New Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Increase value through cost reduction</td>
<td>Increase value through waste reduction</td>
</tr>
<tr>
<td>10. Professional roles trump teamwork</td>
<td>Cooperative work trumps professional roles</td>
</tr>
</tbody>
</table>

Revised 10/00

## To Help...

- Face reality
- Commit to change
- Link to professional education
- Research on systems