Measurement: Examples

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Section A

Access to Care
**Definitions of Access to Care**

- “The timely use of personal health services to achieve the best possible health outcomes” (IOM, 1993)
- “Those dimensions which describe the potential and actual entry of a given population group to the health care delivery system” (Aday, 1980)
Environment

- Health care system
  A. Availability of services
     1. Volume (number of personnel, facilities)
     2. Distribution (resources per population)
  B. Organization of services
     1. Ease of entry (e.g., distance)
     2. Structure (e.g., type of health insurance system)

- External environment
  A. Physical (e.g., level of violence in neighborhood)
  B. Economic
Population Characteristics

- Predisposing characteristics
  A. Demographics (e.g., age, sex, race)
  B. Beliefs, attitudes, knowledge
  C. Education, occupation

- Enabling resources
  A. Health insurance status
  B. Income
  C. Regular source of care
  D. Residence
Population Characteristics

- Need
  - A. Perceived need
    1. Perceived health status
    2. Symptoms and episodes
    3. Disability
  - B. Professionally evaluated need
Health Behavior

- Personal health practices
  A. Diet, exercise
  B. Self-care
- Use of health services
  A. Type of care used (e.g., MD, hospital)
  B. Location of care (e.g., clinic, office)
Health Behavior

- Use of health services
  C. Purpose of seeking care
    1. Preventive care
    2. Illness
    3. Chronic/custodial
  D. Time interval of care
    1. Contact
    2. Volume (e.g., number of visits)
    3. Continuity
Outcomes

- Perceived health status
  - Health as reported by the individual
- Evaluated health status
  - Health as evaluated by professionals and through systematic assessment
- Consumer satisfaction
  - Based on standardized surveys
If promoting access is the goal, a variable must be considered mutable, or point to policy changes that might bring about behavioral change.
## Emerging Model

<table>
<thead>
<tr>
<th>Model Variable</th>
<th>Degree of Mutability</th>
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<tbody>
<tr>
<td>Predisposing beliefs, knowledge</td>
<td>HIGH</td>
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<tr>
<td>Demographics</td>
<td>NONE</td>
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<tr>
<td>Enabling</td>
<td>HIGH</td>
</tr>
<tr>
<td>Personal health practices</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Outcomes</td>
<td>MEDIUM</td>
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</tbody>
</table>
Percentage of people in 1989 who were in poor or fair health (by their own report) and who did not contact a physician. The figure, which is based on data from the 1989 National Health Interview Survey, shows the percentages by insurance status. Adapted from IOM, *Access to Health Care in America*. National Academy Press, Washington, DC (1993)
## Percentage Reporting No Visits to a Physician during One Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Uninsured</th>
<th>Medicaid</th>
<th>Private/Other</th>
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<tbody>
<tr>
<td>1997 NMCES</td>
<td></td>
<td></td>
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<tr>
<td>1983</td>
<td>50</td>
<td>30</td>
<td>36</td>
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<tr>
<td>1980 NMCUES</td>
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<tr>
<td>Kaiper, 1986</td>
<td>43.7</td>
<td>21.1</td>
<td>24.4</td>
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<tr>
<td>Roenbach, 1985</td>
<td>36.3</td>
<td>24.8</td>
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<td>1981 RWJF</td>
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<tr>
<td>Anderson, 1987</td>
<td>30</td>
<td>15</td>
<td>18</td>
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<tr>
<td>1984 NHIS</td>
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<td>Rowland and Lyons, 1989</td>
<td>40.8</td>
<td>17.1</td>
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<td>1986 RWJF</td>
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<tr>
<td>Freeman, 1990</td>
<td>44</td>
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<td>35.7</td>
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<td>1987–1988 Orange County Survey</td>
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<td>Hubbell, 1989</td>
<td>32</td>
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<td>11</td>
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Notes Available
Section B

The Measurement and Instrument Approaches
Summary of Ware’s Approach to Patient Satisfaction Measurement

- Identification of content areas
  1. Access
  2. Availability
  3. Finances
  4. Continuity
  5. Interpersonal manner
  6. Quality

- 900-item questionnaire field tested over four years
Ware’s Approach

- Eventual form tested in three regions
- Likert scale used
- Acquiescence response effects (bias due to favorable wording)
- Multi-item scales using factor analysis techniques
- Reliability assessed by internal consistency (Cronbach’s Alpha) and test retest
- (Note—indexes did better than items on retest)
Ware’s Approach

- Validation difficult—no criteria, however, the following were done:
  1. Content validity
  2. Factor analysis—construct validity
  3. “Convergent” validity by comparing with other questionnaires
  4. Predictive validity was assessed by comparing the questionnaire with other health behaviors