Lesson Learned in Developing NHQR and NHDR

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Building Blocks of the National Healthcare Quality & Disparities Reports

Evolution of the Reports

Lessons from the Reports for Promoting Quality Improvement
Building Blocks

- Healthcare Research and Quality Act of 1999
- IOM guidance, 2001 & 2002
- Content Choices
- Format Choices
Beginning in fiscal year 2003, the Secretary, acting through the Director, shall submit to Congress an annual report on

- **National trends** in the **quality** of **health care** provided to the American people.

- Regarding prevailing **disparities** in **health care** delivery as it relates to **racial factors** and **socioeconomic factors** in **priority populations**.

**Priority populations**, which shall include —

(i) low-income groups; (ii) minority groups; (iii) women; (iv) children; (v) the elderly; and (vi) individuals with special health care needs, including individuals with disabilities and individuals who need chronic care or end-of-life health care.
Beginning in fiscal year **2003**, the **Secretary**, acting through the Director, **HHS perspective**

shall submit to **Congress** an **annual** report on … **Primary audience = Congress**

… **National** trends in the **Focus on Nation & trends**

**quality of health care** provided to the American people. **Focus on quality & not health or access**

… Regarding prevailing **disparities in health care delivery** **Focus on disparities in quality & access & not health**

as it relates to **racial factors** and **socioeconomic factors** **Focus on racial, ethnic, & socioeconomic disparities & not other disparities**

in **priority populations**. **Include disparities among each priority population**
IOM QR Guidance
Recommendations, 2001

1: Conceptual framework of effectiveness, safety, timeliness, patient-centeredness X stay healthy, get better, live with illness, end of life; excludes efficiency
   - Used but started to include efficiency

2: Pick measures based on importance, scientific soundness, feasibility
   - Pick best measures, then find data → dozens of sources

4: Use comprehensive measure set
   - Broad & shallow instead of Narrow & deep

5: Use summary measures
   - Summary measures for policymakers
   - Detailed tables for QI
6: Balance process & outcome, avoid structural measures
   - DR included workforce at behest of Sullivan Commission

7/9: Use good, nationally representative data that support trends & subgroup analyses

10: Different versions target key audiences
   - Highlights for policymakers
   - Print report for general users
   - Appendices & QRDRnet for QI
   - State Snapshots for State policymakers
1: Show racial / ethnic disparities accounting for SES
   - Stratified analyses / tables most of the time
   - Multivariate analyses when possible

3/4: Include access and utilization
   - DR adds access measures, including utilization

5: Show disparities across States & urban-rural continuum
   - Some disparities in State Snapshots
   - DR section on Rural Residents
Content Choices: What info goes into the Reports?

Choices

- Unified measure set instead of Separate
  - But DR adds access measures & priority pops data
- Consensus measures instead of Cutting edge
  - Favor NQF, HP2010, Health US, OMB race/ethnicity
- Standardized methods/tables instead of Different
  - Standard high but not too high, allow lower standards
- Account for patient need in measure specs (processes) OR adjust (outcomes)

Constraint: No New Money

- Use extant data & measures
- Use labor of federal Interagency Work Groups
Format Choices: How is info presented?

Choices

- Two Reports instead of One
  - Concern Disparities would be lost if imbedded in a Quality Report
- Unified conceptual framework
- Organized by quality domains
- Transparent methods instead of Complex
  - Disparities as differences instead of Something more

Constraints

- Just the facts instead of Interpretation
  - The facts speak for themselves
## QR/DR Conceptual Framework

### Access to Care
- **Facilitators & Barriers to Care**
- **Health Care Utilization**

### Quality of Care
- **Effective-ness**
- **Safety**
- **Timeliness**
- **Patient Centered-ness**

<table>
<thead>
<tr>
<th>Priority Population</th>
<th>Access to Care</th>
<th>Quality of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying Healthy</td>
<td>Facilitators &amp; Barriers to Care</td>
<td>Staying Healthy</td>
</tr>
<tr>
<td>Getting Better</td>
<td>Health Care Utilization</td>
<td>Getting Better</td>
</tr>
<tr>
<td>Living with Illness or Disability</td>
<td></td>
<td>Living with Illness or Disability</td>
</tr>
<tr>
<td>Coping with the End of Life</td>
<td></td>
<td>Coping with the End of Life</td>
</tr>
</tbody>
</table>

For each priority population Over time

Disparities
Surveys collected from samples of civilian, noninstitutionalized populations:
- AHRQ, Medical Expenditure Panel Survey (MEPS), 1998-2000
- California Health Interview Survey (CHIS), 2001
- CDC-NCHS, National Health and Nutrition Examination Survey (NHANES), 1999-2000
- CDC-NCHS, National Health Interview Survey (NHIS), 1998 and 2000
- CDC-NCHS, National Immunization Program, National Immunization Survey (NIS), 2001
- CMS, Medicare Current Beneficiary Survey (MCBS), 1999
- The Commonwealth Fund, Health Care Quality Survey, 2001
- NCHS, National Health and Nutrition Examination Survey (NHANES), 1999-2000
- NCHS, National Health Interview Survey (NHIS), 1998 and 2000
- NCHS, National Immunization Survey (NIS), 2001

Data collected from samples of health care facilities:
- CDC-NCHS, National Ambulatory Medical Care Survey (NAMCS), 1999-2000
- CDC-NCHS, National Home and Hospice Care Survey (NHHCs), 2000
- CDC-NCHS, National Hospital Ambulatory Medical Care Survey Outpatient Department (NHAMCS-OPD), 1999-2000
- CDC-NCHS, National Hospital Ambulatory Medical Care Survey-Emergency Department (NHAMCS-ED), 1999-2000
- CDC-NCHS, National Hospital Discharge Survey (NHDS), 1998-2003
- CDC-NCHS National Nursing Home Survey (NNHS), 1999
- CMS, End-Stage Renal Disease Clinical Performance Measurement Program, 2001
- CMS, Nursing Home Resident Profile Table, 2001
- NCHS, National Ambulatory Medical Care Survey (NAMCS), 1999-2000
- NCHS, National Home and Hospice Care Survey (NHHCs), 2000
- NCHS, National Hospital Ambulatory Medical Care Survey Outpatient Department (NHAMCS-OPD), 1999-2000
- NCHS, National Hospital Ambulatory Medical Care Survey-Emergency Department (NHAMCS-ED), 1999-2000
- NCHS, National Hospital Discharge Survey (NHDS), 1998-2000
- NCHS, National Nursing Home Survey (NNHS), 1999
- NIH, United States Renal Data System (USRDS), 2000
- SAMHSA, Client/Patient Survey Sample (CPSS), 1997.

Data extracted from administrative data systems of health care organizations:
- AHRQ, Healthcare Cost and Utilization Project State Inpatient Databases (HCUP-SD), 2000
- Medicare claim data from CMS

Data from surveillance and vital statistics systems:
- CDC-NCHS, National Vital Statistics System (NVSS), 2000
- NIH, Surveillance, Epidemiology, and End Results (SEER) program.
Annual reports to Congress from Secretary since 2003 mandated by 1999 Healthcare Research and Quality Act

Improve care for all Americans: Unified team, Interagency Work Group, framework, data, methods, quality measures

<table>
<thead>
<tr>
<th>Quality Report</th>
<th>Disparities Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapshot &amp; trends in quality of health care in America</td>
<td>Snapshot &amp; trends in disparities in health care</td>
</tr>
<tr>
<td>Quality: Safety, effectiveness, timeliness, patient centeredness</td>
<td>Quality + Access: Equity across race, ethnicity, &amp; SES</td>
</tr>
<tr>
<td>Variation across states</td>
<td>Variation across populations</td>
</tr>
</tbody>
</table>
Evolution of the Reports

2004: 2\textsuperscript{nd} Reports
+ Medicare Patient Safety Monitoring System
+ Community Health Center User Survey
+ Indian Health Service data
+ National Survey of CSHCN
+ Inpatient mortality measures

2005: 3\textsuperscript{rd} Reports, State Snapshots
+ Core report measures
+ National Program of Cancer Registries
+ HIV Research Network data
+ Substance abuse treatment adequacy measures
Evolution of the Reports

2006: 4\textsuperscript{th} Reports, NHQRnet, NHDRnet
- Hospital CAHPS measures
- Obesity measures
- Hospice measures
- Workforce measures

2007: 5\textsuperscript{th} Reports
- HIV testing measures
- Health literacy measures
- Efficiency measures
# Lesson 1 for QI: Reports ≠ Quality Improvement

<table>
<thead>
<tr>
<th>Know</th>
<th>Plan</th>
<th>Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>See it happen</td>
<td>Help it happen</td>
<td>Make it happen</td>
</tr>
<tr>
<td>Policy Makers</td>
<td>Provider Organizations</td>
<td>Providers</td>
</tr>
<tr>
<td>Screening</td>
<td>Diagnosis</td>
<td>Treatment</td>
</tr>
<tr>
<td>NHQR/DR</td>
<td>Local Benchmarks</td>
<td>QI</td>
</tr>
</tbody>
</table>

Better Health Care
Lesson 2:
Quality ≠ Disparities

Source: 2007 NHQR/DR
So, if you want to change disparities, focus on disparities.

Source: BRFSS, 2005
3: Quality and Disparities Data can be used together to target interventions.

Actual Care for the Disadvantaged
- Inequitable: Uninsurance, Poverty, Language, Culture, Bias

Actual Care for the advantaged
- Ineffective, Unsafe, Untimely, Not Patient Centered, Inefficient

Disparities Chasm + Quality Chasm = Quality Improvement for the Disadvantaged
- Ineffective, Unsafe, Untimely, Not Patient Centered, Inefficient, Inequitable

High Quality Care

3: Quality and Disparities Data can be used together to target interventions.
Lesson 4. Quality can be difficult to recognize unlike disparities ($\Delta = 0$).

Maryland

What Is the Overall Health Care Quality Performance Compared to All States?

How Has That Performance Changed?

Performance Meter: All Measures

- Very Weak
- Weak
- Average
- Strong
- Very Strong

= Most Recent Data Year
= Baseline Year

(Baseline year may vary across measures)

What performance measures make up this meter? (select this link or the Meter)

How are measures represented by a performance meter? (select this link or Methods)

What contextual factors might influence this State's performance? (select this link or Contextual Factors)

The meter represents the State's balance of below average, average, and above average measures compared to all States. The performance meter has five categories: very weak, weak, average, strong, and very strong. An arrow pointing to "very weak" means all or nearly all included measures for a State are below average within a given data year. An arrow pointing to "very strong" indicates that all or nearly all available measures for a State are above average within a given data year. A solid arrow describes results for the most recent data year; a dashed arrow describes the baseline year. A missing arrow means there were insufficient data to create the summary measure for this State. Compared to all States, for the most recent data year, the performance for Maryland for all measures is in the average range. For the baseline year, performance is in the average range.
Lesson 5: Expect data gaps.

Source: 2006 NHDR
Use 1: Raise Awareness & Make Case for Action

- Black vs. White: 73% Better, 32% Same, 9% Worse
- Asian vs. White: 32% Better, 36% Same, 18% Worse
- AI/AN vs. White: 41% Better, 14% Same, 5% Worse
- Hispanic vs. White: 77% Better, 18% Same, 5% Worse
- Poor vs. High Income: 71% Better, 24% Same, 6% Worse

Source: 2006 NHDR
Screening for Breast Cancer

Measure Title
Women age 40 and over who report they had a mammogram within the past 2 years.

Measure Source
Healthy People 2010, measure 3-13.

Tables
1. Women age 40 and over who reported they had a mammogram within the past 2 years, United States, 2003, by:
   - Race
   - Ethnicity
   - Family income

Data Source
Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey (NHIS).

Denominator
U.S. female resident population age 40 and over.

Numerator
Number of women age 40 and over who report receiving a mammogram within the past 2 years.

Comments
Data reported in Table 1 are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, Section 5 of Tracking Healthy People 2010.
<table>
<thead>
<tr>
<th>Group</th>
<th>Preventive services</th>
<th>Acute illness treatment</th>
<th>Chronic disease management</th>
<th>Timeliness</th>
<th>Patient centeredness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black vs. White</td>
<td></td>
<td></td>
<td>Hospital admissions for lower extremity amputations in patients with diabetes.</td>
<td>Adults with provider communication problems.</td>
<td>Children whose parents report provider communication problems.</td>
</tr>
<tr>
<td>Asian vs. White</td>
<td>Adults age 65 and over who ever received pneumococcal vaccination.</td>
<td></td>
<td>Hospital admissions for pediatric asthma.</td>
<td>Adults with provider communication problems.</td>
<td>Adults with provider communication problems.</td>
</tr>
<tr>
<td>American Indian/Alaska Native vs. White</td>
<td></td>
<td></td>
<td>Appropriate timing of antibiotics received by adult Medicare patients having surgery.</td>
<td>Illness/injury care as soon as wanted.</td>
<td></td>
</tr>
<tr>
<td>Hispanic vs. non-Hispanic White</td>
<td>Obese patients age 18 and over given advice about exercise. Adults age 65 and over who ever received pneumococcal vaccination.</td>
<td>Tuberculosis patients who complete a curative course of treatment.</td>
<td>Hemodialysis patients with appropriate urea reduction ratio. Long stay nursing home residents who were physically restrained. Home health care patients who had to be admitted to the hospital.</td>
<td>Adults with provider communication problems.</td>
<td>Children whose parents report provider communication problems.</td>
</tr>
<tr>
<td>Poor vs. high income</td>
<td></td>
<td>Hospital admissions for pediatric gastroenteritis.</td>
<td>Adults with diabetes who had 3 major exams in past year. Hospital admissions for lower extremity amputations in patients with diabetes. Hospital admissions for pediatric asthma.</td>
<td>Illness/injury care as soon as wanted.</td>
<td>Adults with provider communication problems.</td>
</tr>
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</table>
Use 4: Partner with Communities

Ex: Hispanic elders program

No eye exam among Hispanic elders with diabetes

Source: Medicare claims, 2002
Data Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), Texas State Inpatient Databases (SID) created from: Texas Hospital Inpatient Discharge Data Research File, 2005, Texas Health Care Information Collection, Austin, Texas.
Conclusions

- Old guidance on the Reports was very helpful but New guidance would be most welcome
- National Reports summarize much knowledge but ≠ Quality Improvement
- Reports can support planning for action
  - Make case for action
  - Identify QI opportunities: Which populations, services, communities
  - Help pick measures & methods
- Community partnerships do the improvement