


**AHRQ**  
Agency for Healthcare Research and Quality  
Advancing Excellence in Health Care [www.ahrq.gov](http://www.ahrq.gov)

## 2007 State Snapshots: State-based Information from the National Healthcare Quality Report

Jeffrey Brady, MD, MPH  
Center for Quality Improvement and Patient Safety (CQIPS)

Rosanna M. Coffey, PhD  
Thomson Reuters Healthcare


Center for Quality Improvement and Patient Safety (CQIPS)  
Quality Tools Workshop Follow-up Audio Conference  
April 26, 2008



## Plan for Today


- NHQR/DR overview
- State Snapshots – overview / what’s new?
- Open to general questions
- 
- Address specific end-user questions received to date
- Invite more user feedback
- Invite suggestions for future technical assistance

2




## AHRQ Mission and Niche

- Mission: Improve the efficiency, effectiveness, quality, safety, and equity of *health care*
- Niche:
  - Developing knowledge through research
  - Disseminating the evidence
  - Measuring quality
  - **Facilitating change**




3




## 2007 National Healthcare Quality and Disparities Reports

Released March 3, 2008




4



## Measure Types 2007 NHQR / NHDR

- Setting of Care
  - Hospital
  - Ambulatory
  - Nursing Home/Home Health
- Stages of Care
  1. Staying healthy
  2. Getting better
  3. Living with illness or disability
  4. Coping with the end of life

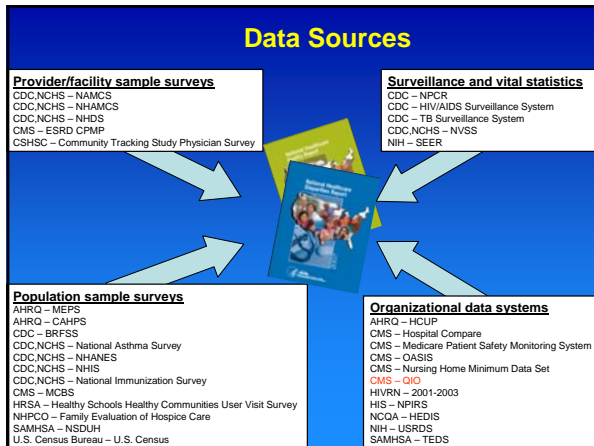
5



## Content and Organization 2007 NHQR/NHDR

- Effectiveness
  - Cancer
  - Diabetes
  - End Stage Renal Disease (ESRD)
  - Heart Disease
  - HIV and AIDS
  - Maternal and Child Health
  - Mental Health and Substance Abuse
  - Nursing Home, Home Health, and Hospice Care
- Patient Safety
- Timeliness
- Patient Centeredness
- Access to Health Care
- Priority Populations

6



### State Snapshots – Overview

<http://statesnapshots.ahrq.gov>

Web tool for State policymakers to view NHQR/NHDR health care quality, State-by-State:

- Summary performance meters
- Individual measures
- Focus on clinical issues
- State context
- Methods & Interpretation Guides

### State Snapshots: How have they been used?

- Arkansas Center for Health Improvement:
  - View of system, tracking baseline, analysis ideas
  - Stakeholders united – “Things were as bad as we thought.”
  - Quality improvement “jump started” (EBD)
- Maine:
  - Adapted Snapshots IT for hospital transparency
- FL Sentinel:
  - Florida’s hospital care falls below U.S. norm, studies show
- AP Wire Service:
  - Nursing homes cut back on restraints

### State Snapshots: Summary Performance Meters

- Summary meters – a State’s performance compared to its region and the nation for:
  - All Available Measures
  - Care by Clinical Area
    - Cancer
    - Diabetes
    - Heart Disease
    - Maternal and Child Health
    - Respiratory Disease
    - Clinical preventive services
  - Types of Care
    - Preventive
    - Acute
    - Chronic
  - Settings of Care
    - Hospital
    - Ambulatory
    - Nursing Home
    - Home Health

### State Snapshots: What’s behind each meter?

- A State’s relative performance compared to a group – region or nation
  - A subset of NHQR measures (e.g., hospital measures)
  - Classify each state’s performance for each measure:
    - First, calculate all-state and regional averages
    - Then, determine if state is statistically better than average, average, or worse than average
  - Score state for results across all NHQR measures in subset
    - Each better than average measure = 1 point
    - Each average measure = 0.5 point
    - Each worse than average = 0 points
  - Sum points and divide by the number of measures

### State Snapshots: Individual Measures

- Strongest and Weakest Measures for a State compared to all States reporting
- State Rankings for 15 Measures
  - Ordinal rank on individual measures of each State’s performance out of 51 States + DC
- Table of all measures for a State and all measures for all States

## State Snapshots: Strongest & Weakest Measures

**California's Strongest Measures**

Measure Name	Definition	Score
Adult Health Care - Preventive Services	Percent of total health care patients who get preventive services	87.0
Adult Health Care - Preventive Services - Colorectal Cancer	Percent of colorectal cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - Cervical Cancer	Percent of cervical cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - Mammography	Percent of breast cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - Pap Smear	Percent of cervical cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - PSA Test	Percent of prostate cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - Skin Cancer	Percent of skin cancer patients who get preventive services	87.0
Adult Health Care - Preventive Services - Tobacco Use	Percent of tobacco use patients who get preventive services	87.0
Adult Health Care - Preventive Services - Vision	Percent of vision patients who get preventive services	87.0

**California's Weakest Measures**

Measure Name	Definition	Score
Adult Health Care - Preventive Services - Diabetes	Percent of diabetes patients who get preventive services	47.0
Adult Health Care - Preventive Services - High Blood Pressure	Percent of high blood pressure patients who get preventive services	47.0
Adult Health Care - Preventive Services - Lipid	Percent of lipid patients who get preventive services	47.0
Adult Health Care - Preventive Services - Asthma	Percent of asthma patients who get preventive services	47.0
Adult Health Care - Preventive Services - COPD	Percent of COPD patients who get preventive services	47.0
Adult Health Care - Preventive Services - Heart Disease	Percent of heart disease patients who get preventive services	47.0
Adult Health Care - Preventive Services - Stroke	Percent of stroke patients who get preventive services	47.0

## State Snapshots: State Rankings on Core Measures

**2007 National Healthcare Quality Report**

Ranking on Selected Measures

Measure	Definition	All States	California
Adult Health Care - Preventive Services	Percent of total health care patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Colorectal Cancer	Percent of colorectal cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Cervical Cancer	Percent of cervical cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Mammography	Percent of breast cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Pap Smear	Percent of cervical cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - PSA Test	Percent of prostate cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Skin Cancer	Percent of skin cancer patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Tobacco Use	Percent of tobacco use patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Vision	Percent of vision patients who get preventive services	75.0	87.0
Adult Health Care - Preventive Services - Diabetes	Percent of diabetes patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - High Blood Pressure	Percent of high blood pressure patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - Lipid	Percent of lipid patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - Asthma	Percent of asthma patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - COPD	Percent of COPD patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - Heart Disease	Percent of heart disease patients who get preventive services	47.0	47.0
Adult Health Care - Preventive Services - Stroke	Percent of stroke patients who get preventive services	47.0	47.0

## State Snapshots: Focus on Diabetes

- Process of care measures
- Outcome of care measures
- Disparities (by income & race/ethnicity)
- Saving costs (for State government employees)

## Snapshot Focus on Diabetes: Disparities

**Focus on Diabetes: Disparities in Treatment: By Income**

For 2004-2006, the gap in HRA (i.e. testing for people with diabetes and low income (under \$15,000) compared to high income (\$50,000 or more).

The gap between low- and high-income groups for each State:

- Worse than the all-State gap
- Similar to the all-State gap
- Better than the all-State gap
- Unknown or data insufficient

## Snapshots Focus on Diabetes: Lives & \$ – State Gov't Employees

**California: Focus on Diabetes: Lives and Expenses**

2004 Estimated Share of Health Expenditures on State Government Employees that Relates to Diabetes Care, Compared to Public Workers and All Insured

Group	Share of Health Expenditures
State Gov't Employees	~1.5%
Public Workers	~1.0%
All Insured	~0.5%

## Snapshots Focus on Diabetes: Excess \$ – State Gov't Employees

**California: Focus on Diabetes: Excess Costs Associated with Diabetes for State Government Employees**

HRA is a marker of broad quality levels and is used as an indicator of the quality of diabetes care. Diabetes quality improvement programs have produced reductions in HRA as a result of a combination of activities. The best results, a reduction of 1%, were when intensive diabetes management programs (intensive assessment, treatment, and referral with primary care).

For 2004-2006, the gap in HRA (i.e. testing for people with diabetes and low income (under \$15,000) compared to high income (\$50,000 or more).

For 2004-2006, the gap in HRA (i.e. testing for people with diabetes and low income (under \$15,000) compared to high income (\$50,000 or more).

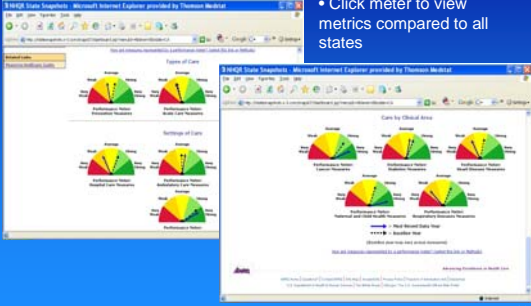
For 2004-2006, the gap in HRA (i.e. testing for people with diabetes and low income (under \$15,000) compared to high income (\$50,000 or more).

## State Snapshots: What's New for 2007

- State Dashboards
  - All of a State's summary meters
- Focus on Healthy People 2010 Table
  - State's performance on goals
- Focus on Clinical Preventive Services Meter
  - State's performance on recommended services
- Contextual Dials of State's environment:
  - Demographics
  - Population health status
  - Health care

19

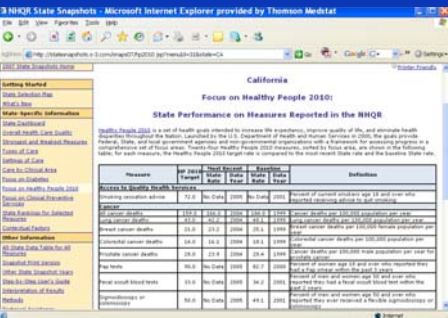
## State Dashboard: Performance Meters all in one Place



- Click meter to view metrics compared to all states

20

## State Performance on Healthy People 2010 Goals




**California**  
Focus on Healthy People 2010!

State Performance on Measures Reported in the NHQR

Measure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Behavioral risk factors	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8
Chronic disease	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8
Disability	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8
Healthcare access	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8
Healthcare quality	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8
Healthcare utilization	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8
Healthcare workforce	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8
Healthcare system	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8
Healthcare financing	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8
Healthcare delivery	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8
Healthcare equity	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8
Healthcare innovation	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	49.0	49.1	49.2	49.3	49.4	49.5	49.6	49.7	49.8
Healthcare leadership	51.1	51.2	51.3	51.4	51.5	51.6	51.7	51.8	51.9	52.0	52.1	52.2	52.3	52.4	52.5	52.6	52.7	52.8
Healthcare research	54.1	54.2	54.3	54.4	54.5	54.6	54.7	54.8	54.9	55.0	55.1	55.2	55.3	55.4	55.5	55.6	55.7	55.8
Healthcare education	57.1	57.2	57.3	57.4	57.5	57.6	57.7	57.8	57.9	58.0	58.1	58.2	58.3	58.4	58.5	58.6	58.7	58.8
Healthcare workforce	60.1	60.2	60.3	60.4	60.5	60.6	60.7	60.8	60.9	61.0	61.1	61.2	61.3	61.4	61.5	61.6	61.7	61.8
Healthcare system	63.1	63.2	63.3	63.4	63.5	63.6	63.7	63.8	63.9	64.0	64.1	64.2	64.3	64.4	64.5	64.6	64.7	64.8
Healthcare financing	66.1	66.2	66.3	66.4	66.5	66.6	66.7	66.8	66.9	67.0	67.1	67.2	67.3	67.4	67.5	67.6	67.7	67.8
Healthcare delivery	69.1	69.2	69.3	69.4	69.5	69.6	69.7	69.8	69.9	70.0	70.1	70.2	70.3	70.4	70.5	70.6	70.7	70.8
Healthcare equity	72.1	72.2	72.3	72.4	72.5	72.6	72.7	72.8	72.9	73.0	73.1	73.2	73.3	73.4	73.5	73.6	73.7	73.8
Healthcare innovation	75.1	75.2	75.3	75.4	75.5	75.6	75.7	75.8	75.9	76.0	76.1	76.2	76.3	76.4	76.5	76.6	76.7	76.8
Healthcare leadership	78.1	78.2	78.3	78.4	78.5	78.6	78.7	78.8	78.9	79.0	79.1	79.2	79.3	79.4	79.5	79.6	79.7	79.8
Healthcare research	81.1	81.2	81.3	81.4	81.5	81.6	81.7	81.8	81.9	82.0	82.1	82.2	82.3	82.4	82.5	82.6	82.7	82.8
Healthcare education	84.1	84.2	84.3	84.4	84.5	84.6	84.7	84.8	84.9	85.0	85.1	85.2	85.3	85.4	85.5	85.6	85.7	85.8
Healthcare workforce	87.1	87.2	87.3	87.4	87.5	87.6	87.7	87.8	87.9	88.0	88.1	88.2	88.3	88.4	88.5	88.6	88.7	88.8
Healthcare system	90.1	90.2	90.3	90.4	90.5	90.6	90.7	90.8	90.9	91.0	91.1	91.2	91.3	91.4	91.5	91.6	91.7	91.8
Healthcare financing	93.1	93.2	93.3	93.4	93.5	93.6	93.7	93.8	93.9	94.0	94.1	94.2	94.3	94.4	94.5	94.6	94.7	94.8
Healthcare delivery	96.1	96.2	96.3	96.4	96.5	96.6	96.7	96.8	96.9	97.0	97.1	97.2	97.3	97.4	97.5	97.6	97.7	97.8
Healthcare equity	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	99.9	100.0	100.1	100.2	100.3	100.4	100.5	100.6	100.7	100.8

21

## State Performance in Clinical Preventive Services



**California**  
What is the Clinical Preventive Services Quality Performance Compared to All States?

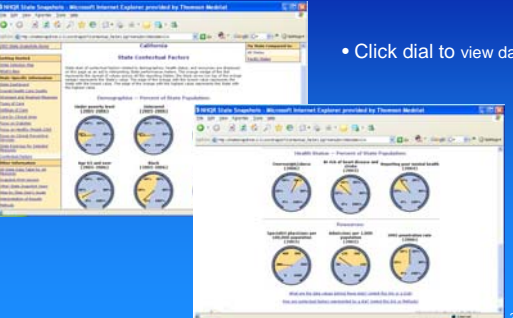
How Has That Performance Changed?

Performance Meter:  
Clinical Preventive Services

Very Weak    Weak    Average    Strong    Very Strong

22

## State Contextual Factors



State Contextual Factors


Demographics - Percent of State Population

• Click dial to view data

23

## General Questions about Snapshots?


24



## Questions about Snapshots (Workshop, Special Request)

- Can the Snapshots help states set priorities? -- which measures are most important?
- Can Snapshots be redesigned:
  - Users define own state-group comparison?
  - Data by payer type?
  - Data by sub-state geography?
- Could severity adjustments be made for state environments (e.g., LTC patient acuity)?


25



## Snapshots & Priority Setting? -- Yes

- View the dashboard
  - Which settings/areas strongest? Which weakest?
  - Do the sniff test: Do they confirm what you know about healthcare in your state?
- Examine measures behind the meters to determine:
  - What is being measured?
  - Are some particularly problematic?
- Vet the results:
  - Contact subject area experts in your state
  - Convene a group to discuss Snapshot results
  - Are current priorities supported? Are new ones apparent?
  - Next steps for your State?
- Let AHRQ know what transpires, esp. data problems


26



## Snapshots Redesign?

- Users define own state-group comparison?
  - Complicates design of Web site, considerably
  - Need to evaluate feasibility and cost
  - One approach: Specify types of comparisons:
    - Low-population-density-states comparison
    - High-poverty-states comparison
    - Magnet-for-tertiary-care-states comparison
    - Others?
- Do you have comments on the value of this?


27



## Snapshots Redesign?

- Report data by payer type?
  - We think it's feasible within state only for HCUP:
    - HCUP hospital quality indicators by Medicaid, Medicare, Private Insurance, Uninsured
  - Need to assess two things:
    - Which data sources are all-payer?
      - Then recalculate rates by payer
      - Then examine cell sizes
    - Which single payers (e.g.: Medicare, Medicaid) collect the same indicators?
      - Then assess whether enough measures to combine them
- Do you have comments on the value of this?


28



## Snapshots Redesign?

- Report data by sub-state geography?
  - Depends on detail in data source:
    - HCUP has ZipCode but may not identify hospitals
    - BRFSS may report by county in future
  - Need to assess:
    - Data sets for confidentiality issues
    - Meaningful groupings of counties in each state
  - Major undertaking
- Do you have comments on the value of this?

29



## Snapshots & Severity Adjustment

- Could severity adjustments be made for state environments (e.g., LTC patient acuity)?
  - Suggest data runs to estimate/compare MDS estimates for nursing home patients by acuity level
  - Beyond Snapshots
- On severity & NHQR, generally:
  - Some NHQR measures incorporate severity-adjustment (e.g., AHRQ hospital quality measures)
  - Typically, underlying data or methods not available for severity adjustment
  - Need specialized data and research methods

30



Questions?  
Feedback?

Future Technical  
Assistance Needs?

31



## Additional Resources

### NHQR/NHDR Resources:

- NHQR/NHDR reports: <http://www.ahrq.gov/qual/measurix.htm>
- Request Reports: 1-800-358-9295 [ahrqpubs@ahrq.gov](mailto:ahrqpubs@ahrq.gov)
- State Snapshots: <http://statesnapshots.ahrq.gov>
- Summary version of individual State Snapshots: [http://statesnapshots.ahrq.gov/snaps07/snapshot\\_print.jsp?menuid=36&state=CA](http://statesnapshots.ahrq.gov/snaps07/snapshot_print.jsp?menuid=36&state=CA)

### Contact:

- Margie Shofer, [Marjorie.Shofer@ahrq.hhs.gov](mailto:Marjorie.Shofer@ahrq.hhs.gov)  
Senior Program Analyst, Office of Communications and  
Knowledge Transfer

### For further details about additional follow-on technical assistance:

- <http://www.academvhealth.org/ahrq/qualitytools/index.htm>

32