National Health Policy Forum

Quality Measures for Children’s Health
A Place to Start

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Centers for Medicare & Medicaid Services

U.S. Department of Health and Human Services
U.S. Child Population Demographics

- 78.2 million ages 0-18 (27% of the total population)
- 38 million covered by Medicaid and CHIP (49% of the 0-18 child population)
- 4.3 million births/year; 2 million covered by Medicaid and CHIP
- 19.2% of the child population has special health care needs; 23.6% with special health care needs AMONG children covered by Medicaid and CHIP
The Centers for Medicare & Medicaid Services

The Centers for Medicare & Medicaid Services (CMS) was created in 1977, and brought together the two largest Federal health care programs, Medicare and Medicaid under a unified leadership.

In 1997, the State Children’s Health Insurance Program (SCHIP) was established to address the health care needs of uninsured children. That program was renewed in 2009 and is now known as “CHIP”.
Covering the Nation

Between June 2008 and June 2009, 2.6 million additional children received health care coverage under Medicaid and CHIP.

With a current budget of almost $293 billion and serving over 98 million total beneficiaries, CMS has become the largest purchaser of health care in the United States – with Medicaid & CHIP now leading public coverage over Medicare.
2009 - A Year of Major Transition in Public Policy

- Children’s Health Insurance Reauthorization Act
- American Recovery and Reinvestment Act
- Health Reform Proposals
- Broadening Partnerships across Federal agencies and National Organizations
The Children’s Health Insurance Program Reauthorization Act:

THE Opportunity to positively impact ALL children who deserve safe, patient-centered, effective, timely, efficient, and equitable health care
CHIPRA presents an unprecedented and comprehensive opportunity to measure quality of care in Medicaid and CHIP. A consistent, national approach has barely been tested for these programs.
The Challenges

Resources have been limited at both the State and Federal level, impacting the capacity and infrastructure to “develop” quality improvement efforts in public programs.
Opportunities in Quality Measurement for Improving Care for Medicaid and CHIP

Under CHIPRA – CMS has received the authority and unprecedented financial appropriations ($225 million dollars) to begin the process of developing a “System of High Quality Care for Children enrolled in Medicaid and CHIP”.
CHIPRA Quality – A New Infrastructure

- New Quality Measures Program-including an initial core set of quality measures for voluntary reporting
- State Annual Quality Reporting
- New Quality of Care & Obesity Demonstrations
- Pediatric EHR Program
- New Managed Care Quality Focus for CHIP
- Focused technical assistance for States on quality improvement data collection and reporting
Quality Measurement Efforts in 2009

- CMS aligned with expertise and infrastructure of the Agency for Healthcare Research Quality
- Development of a Federal CHIPRA Quality Workgroup to include expertise from other Federal agencies
- National health care and research experts were convened to provide recommendations to the Secretary of Health for an initial core set of quality measures for Medicaid and CHIP (SNAC)
Subcommittee Charge

• Identify initial core health care quality measurement set for Medicaid and CHIP programs and in doing this
  – Provide guidance on criteria for identification of initial core set
  – Provide guidance on a strategy for identifying additional measures in use for consideration
  – Review and apply criteria to compilation of measures currently in use
Categories Required in CHIPRA Statute

- Prevention and Health Promotion
- Management of Acute Conditions
- Management of Chronic Conditions
- Family Experience with Care
- Integrated Healthcare Setting
- Availability of Services
- Duration of Enrollment
From the CHIPRA Act

“TAKEN TOGETHER – USED TO ESTIMATE THE OVERALL NATIONAL QUALITY OF HEALTH CARE FOR CHILDREN”

• Including children with special health care needs and comparing disparate populations
Key Players for SNAC Work

SNAC Co-Chairs:
- Jeffrey Schiff, MD, MBA Minnesota Department of Human Services
- Rita Mangione-Smith, MD, MPH, University of Washington

AHRQ Staff:
- Denise Dougherty, PhD, Senior Advisor, Child Health and Quality Improvement

CMS Staff
- Barbara Dailey, RN, BSN, MS, CPHQ, Director, Division of Quality, Evaluation, and Health Outcomes, Center for Medicaid and State Operations

NAC Members:
- Timothy Brei, MD, FAAP
- Kathleen Lohr, PhD

Members:
- **Organizations Represented:**
  AAP, ABP, AAFP, March of Dimes, NASHP, NACRI, NASMD, NAPNAP
- **Individuals Experts:** dental care, mental health and chemical dependency, community health centers, children with special health needs, disparities, quality measurement
Timeline to January 1 Posting for Public Comment

- **2009 January**: Law passed, CMS-AHRQ partnership established
- **2009 April**: Subcommittee Meeting #1
- **2009 July**: First full draft of initial core set for Federal review
- **2009 October**: Revised draft to Secretary (November)
- **2009 December**: Final for posting (Dec. 29)
- **2010 January**: Revisions if needed (December)
SNAC Process to Identify the Proposed Core Set

- Identification of measures in use by AHRQ/CMS
- AHRQ, CMS, FQWG and Co-Chairs agree on measure evaluation criteria for Delphi I
  - Validity/Feasibility
- SNAC Delphi I
- SNAC consensus on measure evaluation criteria
  - Validity
  - Feasibility (with reliability)
  - Importance
- Broad measure nomination
- Delphi II – VFI
- Ranking process
- Final vote
Consensus on Criteria

Definitions

- **Validity**
  - The measure must be supported by scientific evidence or expert consensus
  - The measure must support a link between:
    - Structure and Outcomes
    - Structure and Processes
    - Processes and Outcomes
  - Aspect of care that is under the control of health care providers and systems
  - The measure truly assesses what it purports to measure
Consensus on Criteria

Definitions

• **Feasibility**
  – The data necessary to score the measure must be available to organizations
    • Administrative data, medical records data, survey data
    • Detailed specifications must be available for the measure that allow for reliable and unbiased scoring of the measure across states, programs, institutions
    • Measure should be in use
Consensus on Criteria Definitions

• **Importance**
  – The measure should be *actionable*
  – There should be clear steps a state, plan, or provider can take to improve on performance. Cost of the condition to the nation should be high.
  – Health care systems are clearly *accountable* for the quality problem assessed by the measure.
  – The extent of the quality *problem* should be *substantial*.
  – There should be documented *variation in performance* on the measure.
    • Racial/ethnic groups
    • Insurance type
Consensus on Criteria
Definitions

• Importance
  – The measures represents a class of quality problems: “sentinel measures” for preventive care, mental health care, or dental care, etc.
  – Goal: a balanced portfolio of measures consistent with the intent of the legislation
  – Improving on performance for the core set of measures should have the potential to transform care for our nation’s children
Other Important Decisions

• Transparency
  – For all measures recommended for inclusion in the core set:
  • The level of scientific evidence supporting the measure will be reported
    – Example: USPSTF grades A, B, C, or I; Level I, II, III
Conceptual Framework of Core Measurement Set

Grounded → Intermediate → Aspirational Measures

- Consensus of the subcommittee to focus on choosing grounded measures
  - **Grounded**: $N \approx 10-25$, currently feasible, many already in place
  - **Intermediate category**: $N = \?$, good specifications, some states already using them
  - **Aspirational**: needed measures to fill in the gaps
### 119 Nominated Measures: Missing Information

<table>
<thead>
<tr>
<th>Criteria</th>
<th># of Measures</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Specifications</td>
<td>26</td>
<td>22%</td>
</tr>
<tr>
<td>No Reliability Data</td>
<td>59</td>
<td>50%</td>
</tr>
<tr>
<td>Not in Use</td>
<td>29</td>
<td>24%</td>
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<tr>
<td>No Measure Validation</td>
<td>42</td>
<td>35%</td>
</tr>
<tr>
<td>Evidence Grade:</td>
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<td></td>
</tr>
<tr>
<td>- A</td>
<td>18</td>
<td>15%</td>
</tr>
<tr>
<td>- B</td>
<td>58</td>
<td>49%</td>
</tr>
<tr>
<td>- C</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>- D</td>
<td>26</td>
<td>22%</td>
</tr>
<tr>
<td>No evidence/Unable to grade</td>
<td>14</td>
<td>12%</td>
</tr>
<tr>
<td>No Information on Variation/Disparities</td>
<td>76</td>
<td>64%</td>
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</tbody>
</table>
Example Measures in Recommended Core Set

Entire set available in handout

• Preventive Services
  – % of live births weighing < 2500 grams
  – Developmental screening for social/emotional development using standardized tools
  – BMI measurement in 2-18 year-olds

• Acute illness
  – Dental treatment services
    • Total EPSDT eligibles receiving services
  – ER Utilization
    • Average number of emergency room visits per member per reporting period
  – Pediatric central line associated blood stream infection rates (CLABSI)
    • ICU and high risk nursery patients
Example Measures in Recommended Core Set

• Management of Chronic Conditions
  – Asthma
    • Annual number of asthma patients (≥ 1 year-old) with ≥1 asthma related ER visit
  – Mental health care hospitalization
    • Follow-up visit 7 or 30 days after discharge for children ≥ 6yrs

• Family Experiences with Care
  – HEDIS Consumer Assessments of Health Care Providers and Systems (CAHPS® 4.0)
    • Including:
      – Medicaid health plan supplement
      – Children with chronic conditions supplement
No Measures Recommended for 3 CHIPRA required topics

• Duration of enrollment (close but not recommended)
• Availability (other than 1 health care utilization measure)
• Most integrated healthcare settings
Synopsis / Balancing of measures
Most Measures: Prevention/Health Promotion

Source: AHRQ, based on SNAC report to NAC
Modal Evidence Grade was B

Source: AHRQ, based on SNAC report to NAC
Most Measures Cross All or Most Age Groups

Source: AHRQ, based on SNAC report to NAC
## Multiple conditions represented

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple conditions (ex vaccine-preventable)</td>
<td>5</td>
</tr>
<tr>
<td>Pregnancy/childbirth</td>
<td>4</td>
</tr>
<tr>
<td>Social/emotional/mental health</td>
<td>4</td>
</tr>
<tr>
<td>Dental</td>
<td>3</td>
</tr>
<tr>
<td>URI – antibiotics</td>
<td>2</td>
</tr>
<tr>
<td>Vaccine-preventable diseases (multiple)</td>
<td>2</td>
</tr>
<tr>
<td>Overweight</td>
<td>1</td>
</tr>
<tr>
<td>Asthma</td>
<td>1</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>1</td>
</tr>
<tr>
<td>Preventable infection (ex vaccine-preventable)</td>
<td>1</td>
</tr>
</tbody>
</table>
Number of Measures by Data Source

Source: AHRQ, based on SNAC report to NAC
Note: Hybrid = admin + chart; Birth + = Medicaid enrollment plus birth certificate data;
Major issues identified by the SNAC

• Enhancement of measures for use in the whole Medicaid/CHIP population
  – Standardization of duration of enrollment measures
  – Standardization of the denominator across measures

• Uniform, reliable methods to measure and identify disparities
Major Issues Identified by the SNAC

• “Empty Chairs”
  – Most integrated health care systems
    • Medical home
    • Integration with entities outside the traditional health care system
  – Duration of coverage - “churning”
  – Availability of services
  – Specialty care
  – Inpatient care
  – Care for substance abuse
  – Mental health treatment
  – Health outcomes, beyond structure or process measures
Other Important Decisions

• Must be realistic about staffing/funding needs for collecting/analyzing/reporting available data
• Include measures not currently used by Medicaid/CHIP
  – e.g. state and national measurement efforts
Our View of the Opportunity Presented by the Legislation

- Long term focus on health care quality for children beyond CHIP

- Opportunity to bring together efforts of disparate organizations/parts of government to create focus and move the child health quality agenda forward

- Opportunity to build the bridge toward our aspirational long term vision of being able to rigorously and comprehensively assess and improve on health care quality for our nation’s children
Measurement of quality is an essential step in a quality improvement system

How do we tell if the system is working (quality measurement)?

How do we improve the whole system (quality improvement)?

What is different about this work?

What is the accountable level at which to measure?
Measurement and Quality

• What is worthwhile and what is a waste of time?
• Who does system level quality improvement work well?
• Where does this work live? Where does the support of provider level improvement and measurement live?
  – Universities (clinical translation)
  – Community measurement organizations
  – All payer claims data bases
  – Data exchanges envisioned by meaningful use criteria
  – Medicaid agencies/ Medical directors
### A New Definition of Translational Research

<table>
<thead>
<tr>
<th>Types of Research</th>
<th>T1 Potential Application</th>
<th>T2 Efficacy</th>
<th>T3 Effectiveness</th>
<th>T4 Population-Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Science</td>
<td>Basic Knowledge</td>
<td>Evidence-Based Guidelines</td>
<td>Clinical Care or Intervention</td>
<td>Health of Community or Population</td>
</tr>
<tr>
<td>Discovery</td>
<td>Potential Clinical Application</td>
<td>Efficacy Knowledge</td>
<td>Applied Knowledge</td>
<td>Public Health Knowledge</td>
</tr>
<tr>
<td>Basic Knowledge</td>
<td>Theoretical Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Types of Research
- **Basic Science Discovery**
  - Phase 1, 2 trials
  - Observational
- **Potential Clinical Application**
  - Phase 3 trials
  - Systematic reviews
  - Health services studies
  - Observational studies
- **Efficacy**
  - Phase 4 clinical trials
  - Implementation
  - Communication
  - Dissemination
  - Diffusion
  - Systematic reviews
- **Effectiveness**
- **Population-Based**
  - T3 type studies in community
  - Population / outcome studies
  - Cost-benefits, policy impact
  - Studies beyond clinical care
Translational blocks

- Research is needed on how to best implement clinical care (T3) and population based (T4) interventions and then how to measure the results of the intervention T1, T2, T3, T4
  - Measurement is not the clean randomized controlled trial, but rather the results of multiple variable changes with the same goal to get to an aggregate result.
  - Should include both resources (financial incentives) and support (understanding how to improve)
  - Leadership and support
Federal efforts to boost translational research

1. Recent federal spending

2. Two major federal efforts
   - Clinical Translational Science Awards (CTSAs)
   - Comparative Effectiveness Research (CER)
Federal + Foundation Funding for Translational Research

T1
Potential Application
Basic Science Discovery ↔ Potential Clinical Application
Basic Knowledge ↔ Theoretical Knowledge

T2
Efficacy
Evidence-Based Guidelines ↔ Efficacy Knowledge

T3
Effectiveness
Clinical Care or Intervention ↔ Applied Knowledge

T4
Population-Based
Health of Community or Population ↔ Public Health Knowledge

Basic Science + T1 Research
98.5%

T2, T3, and T4 Research
Most of this is T2
1.5%

We will not overcome translational blocks until we invest in T2, T3, and T4 research

From Steven H Woolf, JAMA. 2008;299:211-213
New skill sets to do improvement work

- Teamwork- vertical and horizontal
  - Macro level support of micro level change
  - Social networking
- Model for improvement – teaching how to make changes
- Incremental performance improvement
- Ongoing feedback of data

- Powerful allies
  - Professional certifying boards “maintenance of certification”
  - Family Voices
  - Dr. Berwick
RADICAL INCREMENTALISM

– moving in a new direction deliberately in small steps with flexibility, but without retreating

• Need to make small changes and stay the course
• Change is slow, but can accelerate (COG, VCHIP)
• Opportunity to unleash the energy of providers and families
Opportunities in Quality Measurement for Improving Care for Medicaid and CHIP

- Initial Core Set of Quality Measures for Children published for public comment in December 2009
- A new Quality Measures Program will be announced in 2010
- An Annual Quality Reporting process is under development
Opportunities for States to Test Innovations in Quality Improvement

$100 million dollars for 10 Grants involving 18 States to test and evaluate:

- CHIPRA Quality measures
- HIT impact on care for children
- Provider delivery model impact on care for children
- New CHIPRA electronic health record format for children
- Special innovations related to medical home, EPSDT, promising practices in State partnership QI initiatives
Moving Toward New Technologies -

$25 million dollars appropriated for development of an Electronic Health Records Program FORMAT for Children’s HEALTH CARE:

- Additional Partnership with Agency for Healthcare Research and Quality
- 2010 contract will be awarded to develop an EHR format for children
- CMS is expanding the EHR Program to be more comprehensive
Enhanced focus on Managed Care Quality Reporting

- Historical CMS technical assistance processes for Medicaid Programs are now under review
- CMS External Quality Review Protocols that were issued in 2003 will be reviewed and updated
- External Quality Review reporting and requirements for State Quality Improvement Strategies are now extended to CHIP programs
CMS will provide *technical assistance to states as they*:

- Adopt & integrate performance measures
- Implement Quality Demonstrations under CHIPRA
- Create & implement quality improvement initiatives
- Utilize & interpret reported measures
- Use evidence to identify exemplary performers and opportunities for improvement – sharing best practices
- Address Managed Care Quality Reporting Requirements
- Support State initiatives including public reporting/pay-for-performance/value-based purchasing/payment reform
- Implement HIT/EHR technology
Initial CMS & AHRQ CHIPRA Quality-Specific Technical Assistance

CMS Technical Assistance Email:
CHIPRAQualityTA@cms.hhs.gov

CMS Technical Assistance Website:
http://www.cms.hhs.gov/CHIPRA/17_TechnicalAssistance.asp#TopOfPage

Additional Information available from AHRQ:
http://www.ahrq.gov/chip/chipraact.htm
AN OPPORTUNITY – QUALITY REPORTS TO CONGRESS

- Efforts to improve duration and stability of coverage
- Status of quality of care by type of care
- Status of quality of care by quality domain
- Status of States voluntary reporting
- Recommendations for legislative changes
CHIPRA & the American Recovery And Reinvestment Act

- The Quality Measurement Improvement Program under CHIPRA will include development of child health measures across all care settings, and therefore support eligible providers to meet meaningful use requirements under ARRA

- The CHIPRA pediatric EHR template will comply with ARRA certification requirements to be finalized by the Office of the National Coordinator
Conceptual Approach to Quality Measurement and Meaningful Use

- Data capture and sharing
- Advanced clinical processes
- Improved outcomes
Do you know how to make chocolate milk (or chocolate chip cookies)?
And now ……

HEALTH REFORM

Martin Luther King –
Of all the forms of inequality, injustice in health care is the most shocking and inhumane.
The Right Care
For Every Person
Every Time