Using and Leveraging Data to Improve Quality of Care for CYSHCN

October 23, 2017
MMC and Quality Measurement for CYSHCN

- Federal MMC regulations require states to develop and implement a state quality strategy
- States also required to contract with an external quality review organization to evaluate the quality, timeliness, and access to services
- Two-thirds (33) of states with MMC include specific language in their Medicaid MCO contracts regarding quality measurement for CYSHCN
- Measures are most often left up to health plans but where included typically condition specific (e.g., pediatric asthma admissions rate)
- Some states (e.g., Texas, Virginia) are implementing robust measurement systems for CYSHCN in MMC

Upcoming Resources on Quality Measurement for CYSHN

- **Online Learning Modules on Quality Measurement**
  - AMCHP will lead the development of 3 learning modules
  - After the meeting, we will conduct a brief survey to get LC states’ input

- **NASHP’s State Strategies for Medicaid Quality Improvement for Children with Chronic and Complex Health Care Needs**
  - Issue brief
  - Case studies on MI, NY, and TX
  - Webinar – Monday, November 27
Using and Leveraging Data to Improve Quality of Care for CYSHCN

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AGENDA FOR TODAY

• Level Set: Review basics for measurement....everyone’s favorite topic 😊
  – Measurement 101 – Why It is An Important Part of Your Strategy
  – Meaningful measurement anchored to **Intended Use & Unit of Analysis**

• Key considerations in measuring care for CYSHCN
  – Identifying the Population of CYSHCN that Can be Identified with the Data Sources Available AND for the Unit of Analysis You Are Measuring
  – Anchored to that data set and for that unit of analysis, metrics of quality

• Applied examples from our work:
  – Leverage State-Level Data to Identify Children with Health Complexity
  – Leveraging a Metric Requiring Data Sharing & Coordination for Specific Population of CYSHCN Based on Eligibility
  – Leveraging Patient Reported Data at the Health System-Level
  – Leveraging Medical Home Attestations Collected at Practice-Level

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Measurement is an Integral Part of Improvement

Confession: I am improvement person who has devoted a large part of my career to quality measurement as I have seen the power of DATA to guide and sustain improvements.

Measurement needs to be a critical piece of your strategies to improve care for CYSHCN:

- Metrics help you quantitatively know where to focus improvement efforts:
  - Where
  - For whom

Within your improvement efforts, metrics help you:
- Understand current performance = Your Baseline Rate
- Set goals for your future performance = Your Improvement Target
- Monitor the effects of the changes you are making (your interventions) = Interim Data Collection (e.g. Quarterly data Collection, Frequency of Data Collection)

What is Measured is What is Focused On
- Therefore, it is really important to consider how you measure activities
- A story from Oregon based on developmental screening

Policymaker Mantra = SHOW. ME. THE. DATA.
Metrics Critical Lever within Medicaid Managed Care

- Metrics are Key Component of Requirements of Medicaid Managed Care:
  - Required Performance Metrics
  - Required Performance Improvement Projects*
    - Note: These are anchored almost always anchored to the performance metrics
  - Optional Focus Studies (# seem to be going down as funding goes down)
    - A way you can build a case and pilot metrics
    - For example:
      - Optional Focus Study/PIP led to the data needed to have the Developmental Screening Metrics eventually be a PIP
  - External quality review validates projects, metrics → Then can only validate data if there are metrics in the contract

- Given limitations in budgets and state staffing, is very difficult to get traction on something outside of scope of managed care quality requirements

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Metrics 101 Considerations

• **Measure vs Indicator**
  – Indicator can be a count
  – Measure has a numerator and denominator. Give a sense of scope and scale. Requires a focus on WHO should have received the care.

• **Sustainable metrics are those that tied to sustainable data sources – Think of levers**
  – Claims data, utilization
  – Electronic medical record, searchable fields
  – Standardized surveys routinely administered
  – Metrics gathered as part of Medical Home attestations

• **That said, there are limitations to these data, so sometimes you have to collect more burdensome but informative data as part of improvement**
  – Office systems and reports
  – Medical chart review
  – Care coordination tracking
  – Counts of shared plans of care

• **Key to maintaining measurement sanity – Evil of Good is Perfect**
Meaningful Measurement Takes into Account:
1) Use, 2) Unit of Analysis, 3) Available Data Source

Varied Uses and Related Data Needs

1. Population estimates, assessments of regional variation and needs
   - Data needs to be available at population level
   - Data needs to be able to assessed regionally
   - Example: National Survey of Children’s Health, Title V tracking

2. Contracting
   - Data needs to be available at the unit at which you contract AND during the contracting time period
   - Example: Performance Metrics in Managed Care Contracts, PCCM PMPM Payment Models

3. To guide and evaluate performance Improvement
   - Anchored to improvement areas of focus
   - Able to be collected at the unit of analysis being improvement
   - Data sensitive to improvement effort
   - Example: Practice-Level Data Collected in Improvement Pilots

Unit of Analysis:
Who You Are Accessing & Trying to impact, The level which the data will be reported

Available data source:
Key Attributes to Assess:
- Is the data reliable and valid for measuring the construct of care?
- Is the data feasible to collect?
- Is the data is sensitive to improvement?

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• Questions?
Key Consideration in Measuring Care for CYSHCN

Part 1:

A) Identify the Population of CYSHCN that Can be Identified with the Data Sources Available AND

B) Ensure that can be done at the Unit of Analysis You Are Measuring (e.g. State, Health System, Community)

Part 2: Anchored to that data set and for that unit of analysis, meaningful and relevant metrics of quality for the population of CYSHCN

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Children are NOT Little Adults..... It will require a different methodology than used for adults
Is there a gold standard, ONE best way to identify CYSHCN?
Yes...and No

The best methodology to identify CYSHCN depends on:

1) **WHY** you are identifying CYSHCN and **WHAT** you hope to measure, and

2) **WHAT** data sources you have available

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Various Reasons for Identifying CYSHCN that Impact Data Methodology Used

• To track and assess a broad population of CYSHCN and assess for disparities in quality

• To identify a specific population that would benefit from care coordination

• To identify a specific population that would benefit from complex care management

• To identify a specific population to allocate care coordination resources

• To identify a specific population to inform payment methodologies
  – Rate setting
  – Alternative Payment Methodology (APM) tied to care coordination
  – APM tied to reduction of costs (not all CYSHCN’s costs can be reduced)
Various Data Sources Available at the State, System or Practice-Level Impact Methodology Used

1. Program eligibility
2. Claims – total and cost, type of claims, type of services received
3. Diagnosis
4. Chart/EMR Data – Problem lists, clinical gestalt
5. Provider Gestalt
6. Parent report on standardized tools
   – Within population surveys
   – At time of enrollment
   – Administered within clinic
For Medicaid Agencies, at the Contracting Level, the Data Sources Available Often Include

- Data sources available (currently) for all children in the system
  - Program eligibility (Usually the most narrow)
  - Types of visits and types of services (e.g. claims)
  - Diagnoses
  - **MAYBE (Likely Not)** Searchable fields in the EMR or Risk Stratifications
    » Most health systems don’t have access to this, but some states are building the **glide paths** for this to happen given power of clinical data

- Algorithms available using Claims Data
  - Proprietary: 3M Clinical Risk Groups (CRGs)
  - Publicly Available:
    » CAHMI developed CCC module for CAHPS® (used for CAHPS® HP)
    » Feudner Complex Chronic Conditions
    » Perrin/Kultha’su Chronic Condition List (CCL)
    » Chronic Illness and Disability Payment System (CDPS)
    » **Pediatric Medical Complexity Algorithm**

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Based on Data Source Used to Identify CYSHCN, Related Quality Metrics: Some Examples

Claims/Diagnosis Data

- Disclaimer: From my perspective, we don’t have good claims based metrics for assessing care for CYSHCN at-large. Some reasons:
  - Lack of claims for care coordination
  - Difficulty with risk adjustment methodologies.
  - Payment barriers with behavioral health integration, requirement for codes
  - HEDIS has no metric for population of CYSHCN

- Some Options:
  - Stratify existing claims or HEDIS based measures by CYSHCN (Remember you have to have a way to identify CYSHCN using that same data source the metrics is based on)
    - E.g. HEDIS metrics related to access to care (e.g. Well Visits)
  - Claims for specific care coordination processes → Direction Medicare is going with care planning codes
  - Look at specific care for specific conditions: Metrics related to Asthma, ADHD
  - Examine reduction in acute or emergency services for targeted population, however note there are issues with case mix adjustment:
    - Readmission rates, ED visit rates, Follow-up after hospitalization, Utilization of behavioral health services

Continued on Next Slide
Based on Data Source Used to Identify CYSHCN, Related Quality Metrics: Some Examples

Survey Based Metrics That Capture Specific Processes and Care Coordination

– National Survey of Children’s Health (State-Level)
– Consumer Assessment of Health Care Provider Survey – Chronic Conditions Module
  *(This add is important, includes sampling and survey items)*
– Family Experience of Care Coordination (FECC)
– Pediatric Integrated Care Survey (PICS)

Office Reported Tools...Collected at the Office Level

– Elements of NCQA PCMH – Note: It won’t be specific to CYSHCN
– Medical Home Index- Revised Short Form
– State-Specific Definitions
– Mixed Administrative Measure: CYSHCN that are attributed to a practice that is medical home certified, or at a specific level.
  • Requires data that allows you to know if they are a “medical home
  • Important to know attestations have low depth for CYSHCN.

Practice-Level Data Collection Tools

– Care Coordination Measurement Tool (CCMT)
– Chart review, reports of Shared Plans of Care
• Questions?
Enough of the Conceptual....
Let’s Dive into Some Examples
Example #1: Assessing the Population Health Needs of Children Covered by the Oregon Health Authority

- Project Funded by Lucile Packard Children’s Health Foundation
- In partnership with Oregon Health Authority
  - Designing methods for using state-level medical and social complexity data for identifying children with health complexity.
    - You can’t focus on a population if you can’t identify them
  - Engagement of public and private stakeholders on the data scoring methodologies, By Virtue of Examining Data Requiring Across State Department Conversations and Coordination (What we want to happen at the child-level)
  - Assessment of state-level data, regional variations in order to understand
    - Community and resource needs
    - Complexity of children assigned to CCOs
    - Understand how this could enhance methodologies to assess risk
  - Sharing of child-level data about health complexity with the Coordinated Care Organizations it contracts with for publicly insured children, in order to inform their pediatric complex care management programs.

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Medical Complexity

- Current method OPIP on working with KPNW and OHA is utilizing the Pediatric Medical Complexity Algorithm (PMCA)
  - Takes into account: 1) Utilization, 2) Diagnoses, 3) Number of Body Systems Impacted
  - Assigns child into of three categories: a) Complex with chronic conditions; b) Non-Complex, with chronic conditions; or c) Healthy.

Social Complexity:

- Defined by The Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) as “A set of co-occurring individual, family or community characteristics that can have a direct impact on health outcomes or an indirect impact by affecting a child’s access to care and/or a family’s ability to engage in recommended medical and mental health treatments”.

- Social complexity factors identified by COE4CCN as predictive of a high-cost health care event (e.g. emergency room use).

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What have we concluded from this study?

• 9 SC risk factors identifiable in state data are associated with ↑ ED utilization which may indicate poor access to outpatient primary care and need for care coordination:
  o Severe Poverty
  o Limited English proficiency
  o Parent mental illness
  o Parent criminal justice involvement
  o Child welfare system involvement (child abuse/neglect)
  o Homelessness
  o Child mental illness
  o Child substance abuse treatment need
  o Child juvenile or criminal justice involvement
Figure 2.0: Overview of System-Level Data used to Identify Children with Medical and Social Complexity, with the goal of Classifying Children with Health Complexity Who Would Benefit from Complex Care Management and Novel Data Sharing to CCOs/Health Systems

**Children with Medical Complexity**

Children Identified & Classifications Used: A Medical Complexity Score will be used, which incorporates utilization, diagnosis, and number of body systems impacted. The three categories of complexity are:

1. Children with Complex Chronic Disease
2. Children with Non-Complex Chronic Disease
3. Children without Chronic Disease

Standardized Scoring & Reporting Method: Pediatric Medical Complexity Algorithm (PMCA)

Data Source: Based on Oregon Health Authority (OHA) medical claims related to utilization and diagnosis. Examines all claims for publicly insured children, across all providers, in the last three years, regardless of lapse in insurance or changes to the CCO to which the child is assigned.

**Child-Level Data from OHA to CCO**

Data Sharing Through Project: For children assigned to the CCO/KPNW, child-level PMCA classifications (see three categories above).

Periodicity: Data are currently being run, and sharing to CCOs is expected within 2017. It is currently expected that there will be annual sharing of this information.

**Children with Social Complexity**

Children Identified & Classifications Used: A Social Complexity Score (indicating the number of social complexity risk factors identified) will be created based on a set of co-occurring individual, family, or community characteristics that have a direct impact on health outcomes or an indirect impact by affecting a child’s access to care and/or a family’s ability to engage in recommended medical and mental health treatments.

Standardized Scoring & Reporting Method: None currently exists. This project supports development of a scoring algorithm. Some elements of this data may be ready at different times. Therefore, there may be sharing of data based on program eligibility and administrative data shared separately from Integrated Client Services (ICS) data.

Data Sources: Three: 1) OHA Program Eligibility, 2) Administrative data used for Chronic Illness and Disability Payment System (CDPS), & 3) Integrated Client Services (ICS) Data Warehouse for the child and their parents. ICS includes data across the Oregon Department of Human Services (DHS) and OHA client-based services. Includes data from the following DHS Programs: Aging and People with Disabilities, Child Welfare, Developmentally Disabled, Self-Sufficiency, Vocational Rehabilitation. Includes data from the following OHA Programs: Alcohol and Drug (AD), Contraceptive Care (C-Care), Family Health Insurance Assistance Program (FHIAIP), Healthy Kids Connect (HKC), Medical Assistance Programs (MAP), Mental Health (MH), Women Infants Children (WIC). Includes data from the following external agencies: Department of Corrections (DOC), Oregon Housing and Community Services.

**Child-Level Data to OHA/CCO/KPNW**

Data Sharing Through Project: OHA Medicaid/CCO/KPNW will receive child-level social complexity score(s) for children assigned to them. This data will provide information about total complexity, but won’t provide specific information on specific risk factors. Data based on the program and CDPS data sources may be shared separately at different times than data from ICS.

Periodicity: To be determined through the project’s facilitated discussions. Data have been obtained by OHA, and they are currently being assessed for validity and additional factors. Goal is to implement data sharing by Fall 2018.

**Children with Health Complexity**

Children Identified & Classification Used: A Health Complexity Score will be created that combines the Medical Complexity Score and Social Complexity Score. This project supports the facilitation of conversations across public and private stakeholders about the scoring algorithms that will be used and the final classification to be made for each child.

Standardized Scoring & Reporting Method: None currently exists. This project supports these data being combined for the first time.

Data Source: Medical Complexity & Social Complexity information at a child level for children insured by Medicaid.

**Child-level Data from OHA to CCOs/KPNW**

Data Sharing Through Project: For children assigned to their CCO/KPNW, Health Complexity Score.

Periodicity: To be determined through the project’s facilitated discussions. Goal is to implement data sharing by Fall 2018.
Example #2: Metric for A Specific Population of CYSHCN Based on Eligibility

2017 Incentive Metrics for Oregon’s Coordinated Care Organizations

1. Adolescent well-care visits
2. Ambulatory care: Emergency department utilization
3. CAHPS Composite: Access to care
4. CAHPS Composite: Satisfaction with care
5. Childhood immunization status
6. Colorectal cancer screening
7. Controlling high blood pressure
8. Dental sealants on permanent molars for children
9. Depression screening and follow-up plan
10. Developmental screening in the first 36 months of life
11. Diabetes: HbA1c Poor Control
12. Effective contraceptive use among women at risk of unintended pregnancy
13. EHR Adoption
14. Follow-up after hospitalization for mental illness
15. **Mental, physical and dental health assessments within 60 days for children in DHS Custody**
16. Patient Centered Primary Care Home Enrollment
17. Prenatal and postpartum care: Timeliness of prenatal care
Metric Forced Data Sharing and Coordination Across Sectors

Numerator:
Children in DHS custody received a **physical** health assessment, a **mental health** assessment, and a **dental health** assessment within 60 days

- **Mental** health assessment codes: 90791 – 90792, 96101 – 96102, H0031, H1011. H2000-TG (modifier must be included). H00192 H2013 H0037
- **Dental health** assessment codes: Dental diagnostic codes (clinical oral evaluations): D0100-D0199

Denominator:
- Children/adolescents 0 – 17 years of age as of the first date of DHS/OHA notification and remained in custody for at least 60 days.
- Only children/adolescents **that DHS/OHA notified CCOs about** will be included in the denominator.
Example #3: Leveraging Consumer Assessment of Health Care Providers Survey (CAHPS) to Assess Care for CYSHCN

- Within Oregon, children in managed care are assigned to Coordinated Care Organizations (CCOs)
  - Annually the state collects the CAHPS® Health Plan (CAHPS® HP) Survey for Children Includes the Children with Chronic Conditions (CCC), for the CCOs
    - Includes a sampling strategy to identifying potential CYSHCN based on claims and diagnoses (Children with Chronic Conditions)
    - A parent-report set of items, the CYSHCN Screener, developed by the Child and Adolescent Health Measurement Initiative (CAHMI) in survey
      - Parent report to these items determines which children are CYSHCN
      - Items within the survey can then be stratified by CYSHCN
Child and Adolescent Health Measurement Initiative (CAHMI) CYSHCN Screener

• Meant to operationalize broad MCHB definition for population assessment. Items includes in NSCH.

**Asks about 5 different health consequences:**

1) Limited or prevented in ability to function
2) Prescription medication need/use
3) Specialized therapies (OT, PT, Speech)
4) Above routine use of medical care, mental health or other health services
5) Counseling or treatment for on-going emotional, behavioral or developmental problem

_______________________________________________________________________

a) Due to medical, behavioral or other health condition

AND

b) Condition has lasted or is expected to last for at least 12 months

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Example of Working with a CCO to Leverage Use of CAHPS CCC

• Worked with a CCO, Willamette Valley Community Health (WVCH), to help them better use their CAHPS® data and inform QI efforts

• Created strategic reports of the data findings for:
  – WVCH Board
  – WVCH Clinical Advisory Panel (CAP)
  – WVCH Community Advisory Council (CAC)
  – Facilitated a meeting of system-level leaders and practices on CAHPS® findings

• Presented them the CAHPS® CCC Findings showing:
  – Proportion of WVCH respondents that are CYSHCN
  – Variations and disparities in care for CYSHCN

Presentation on the Project: https://www.oregon.gov/oha/Transformation-Center/Documents/1C-PatientExperience-Reuland.pdf

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# WVCH: One in Five Children Have a Special Health Care Need (CYSHCN)

<table>
<thead>
<tr>
<th>Children &amp; Youth w/ Special Health Care Needs (CYSHCN)</th>
<th>Non-CYSHCN</th>
<th>CYSHCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD Valid % (N)</td>
<td>80% (N=262)</td>
<td>20% (N= 68)</td>
</tr>
<tr>
<td>Number of CYSHCN Consequences</td>
<td>1 Consequence</td>
<td>7% (N= 24)</td>
</tr>
<tr>
<td></td>
<td>2 Consequences</td>
<td>4% (N= 12)</td>
</tr>
<tr>
<td></td>
<td>3 Consequences</td>
<td>4% (N= 15)</td>
</tr>
<tr>
<td></td>
<td>4-5 Consequences</td>
<td>5% (N= 17)</td>
</tr>
</tbody>
</table>

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VARIATIONS in WVCH Child Scores on Rating of Specialist by MENTAL HEALTH and CYSHCN Mental Health Consequence

2015 CAHPS® HP CHILD Survey Data: Rating of Specialist, by Mental Health

-21%

N=19

N=11

2015 CAHPS® HP CHILD Survey Data: Rating of Specialist, by Mental Health CYSHCN Consequence

-19%

N=19

N=9

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Example #3: Collecting and Leveraging Practice-Level to Guide and Evaluation Medical Home Learning Collaborative

- Enhancing Child Health in Oregon (ECHO)
  - Learning Collaborative of eight private practices. 5 pediatric practices, three are family medicine practices; two are in urban areas, three in suburban areas and three in rural.

- Evaluation Tools:
  1. Oregon Patient Centered Primary Care Home (PCPCH) attestation data
  2. National Committee for Quality Assurance Patient-Centered Medical Home (NCQA PCMH™);
  3. Medical Home Index: Revised Short Form© (MHI-RSF©), a tool specific to Children & Youth with Special Health Care Needs;
  4. Patient Experience of Care Data: CAHPS CG PCMH with CYSHCN Screener Added to the Survey
Medical Home Transformation Achieved by ECHO Sites

![Graph showing medical home transformation](image)

**MHI-RSF©**
- Baseline
- Fall 2012
- Spring 2013
- Fall 2013
- Spring 2014

**NCQA PCMH™ 2011**
- Baseline
- Fall 2012
- Spring 2013
- Fall 2013
- Spring 2014

+19%
+31%

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General Medical Home Transformation Doesn’t Always Lead to Improved Care for CYSHCN

Each line represents an individual practice

- **Pediatric Practices**
- **Family Medicine Practices**

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### Example from a practice:

<table>
<thead>
<tr>
<th>Question</th>
<th>2014 Score</th>
<th>2012 Score</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q48.</strong> Someone at provider's office talked to you about whether there are any problems in your household that might affect your child</td>
<td>56.5%</td>
<td>39.2%</td>
<td>+17.3</td>
</tr>
<tr>
<td><strong>Q36/Q50.</strong> Someone at provider's office asked if there are things that make it hard for you to take care of your (child's) health</td>
<td>29.3%</td>
<td>24.0%</td>
<td>+5.3%</td>
</tr>
</tbody>
</table>
Reaction from State Team Participants

• What are the biggest data challenges in your state?
• What levers do you have for data collection in your state?
  What measurement or metrics exist now?
    o What opportunity do have to stratifying those by CYSHCN?
    o What opportunity exists to add on metrics for CYSHCN to that “measurement train”?
• What is the population of CYSHCN you are focused? Can you identify them through program enrollment or data sources available to you?
  o What specific aspects of care do you want to measure?
  o Can it be measured reliably, validly and feasibly in that date source?
  o What opportunities have you found?
  o What barriers?
• What questions did the presentation bring up for you?
State Team Reactants

- Lori Abramson, Director, Georgia Families 360
- Jill Morrow-Gorton, Senior Medical Director, MassHealth
Questions and Group Discussion