System-Level Approaches to Identify Children with Health Complexity and Develop Models for Complex Care Management

Stakeholder Meeting to Obtain Feedback

11/8/17

A Project of the Oregon Pediatric Improvement Partnership Supported by the Lucile Packard Foundation for Children's Health
Welcoming Remarks

Jeremy Vandehey,
Acting Director of Health Policy and Analytics,
Oregon Health Authority
Waiver Renewal: Key Components
The Next Level of Reform

1. Build on transformation with focus on integration of physical, behavioral, and oral health care through a performance driven system

2. More deeply address social determinants of health and health equity with the goal of improving population health and health outcomes

3. Commit to continuing to hold down costs through an integrated budget that grows at a sustainable rate

4. Continue to expand the coordinated care model
Oregon Health Policy Board’s Action Plan

Action plan for health 2017–2019

- Pay for outcomes and value
- Shift focus upstream
- Improve health equity
- Increase access to health care
- Enhance care coordination
- Engage stakeholders & community partners
- Measure progress
Importance of a Focus on Children

• Within OHA, **children are an important population** to focus efforts:
  – Children represent about 2 in 5 publicly insured clients.
    • Children 0-18 years old are 42% of clients enrolled in Medicaid
  – Children with **medical & social complexity** represent an important opportunity to focus our efforts to enhance coordinated care:
    • National studies show that children with special health care needs represent roughly 15-20% of the childhood population and account for 80% of the healthcare expenditures for all children.
      – There is also an unquantifiable cost to families
        » Families are required to become care coordinators in addition to their role as the care taker of the child.
        » Impacts well being, ability to work, and family functioning
  • Early life experiences, such as Adverse Childhood Events, can impact lifelong health.
    – Children with exposure to ACES are more likely to be adults with chronic conditions
    – Value in intervening early and building resilience
    – Social complexity impacts the complexity of medical conditions
Oregon Health Authority, Health Analytics' Commitment to this Work

Jon Collins, PhD
Health Analytics Director
Power of Data

- Strength of robust claims data across types of services, service lines, and CCOs enrolled
- Centralized staffing to analyze data
  - Value in centralized learning curve
  - Value in facilitation of across agency agreements about how data can be shared
  - May be cumbersome for this to be done within silos or for specific groups
- Value in more robust data to understand state level population needs, regional needs
  - Understand better child health needs based on data available
  - Informing shared conversations across departments
- Identify federal, state, local and private partners that are leads or influence the area/determinate
  - Identify related performance measures or quantified objectives
- Consider how this information can possibly be used to enhance Medicaid Value Based Payments for addressing Social Determinants of Health
From Data to Information

• Scope of Today’s Conversation: Discussion with CCOs to facilitate sharing of information that aligns with the goals of this project

• For this project, OHA has committed to providing in-house resources to analyze and share information to CCOs about:
  - Medical complexity
  - Social Complexity, which involves coordination and collaboration with various state agencies and significant data cleaning efforts

Health Complexity for Children

• Commitment anchored to hypothesis that this meaningful information will be used by CCOs

• A key goal for today is to understand how, within the scope of this project and work, we can set this up for success
  • Given significant staffing resource are being invested, we need to understand ROI in terms of use by CCOs in partnership with many of the stakeholders in the room
Agenda for Today:

1) Context Setting: Key Components of the Project, Efforts Leading up to the LPCHF Proposal, Importance of Public/Private Stakeholder Engagement

2) Review Specific System-level Data that Will be Used to Operationalize Health Complexity Based on Indicators of Medical & Social Complexity
   - Part 1: Pediatric Medical Complexity Algorithm
   - Part 2: Indicators of Social Complexity
   - Part 3: Medical + Social Complexity = Health Complexity

3) Input from Attendees and Group-Level Discussion
   - Part 1: Targeted input related to specific components of data scoring & dissemination
   - Part 2: Global input anchored to the scope of the project

4) Next Steps
Problem.......or Opportunity!

– Despite wonderful gains in patient centered primary care homes, coordinated care organizations, and other efforts related to complex care management, there is a need to provide enhanced supports to children with health complexity.

• In order to impact children’s future health & preventable chronic conditions, we need to address predictive social determinants of health and build resilience

– One component of this effort needs to include a system-level focus.

• At a system-level, in order to focus on children with health complexity, there is a need to be able to identify them.

• In order to identify children with health complexity that may benefit from complex health management, systems need:
  – Methods that are valid, reliable and meaningful for children
  – Standardized and feasible using data available at the system-level
  – Include data that takes into account

Medical Complexity AND

+ Social Complexity

Health Complexity
Efforts that Led Up to OPIP’s Proposal

– OPIP efforts with practices and health systems focused on:
  • Identifying children and youth with special health care needs
  • Care Coordination, methods for tiering patients
  • Complex Care Management Pilot within Kaiser Permanente Northwest (KPNW)

– Stakeholder Engagement on the Need and Opportunity for System-Level Methods to Identify Children with Health Complexity
  • OPIP Partners Meetings (Public and Private Stakeholders): Fall 2015, Spring 2016
  • August 11th 2016- Meeting of Leaders within OHA, State Departments that Address Social Complexity, CCOs and Health Care Providers
    – Value and Need was Confirmed Amongst Attendees;
    – CCOs Indicated they would USE the Information

– Follow-Up to 8/11/16 Meeting
  • OHA Health Analytics
    – Pediatric Medical Complexity Algorithm
    – Data request to the Integrated Client Services Data Warehouse
  • OPIP
    – Continued work with KPNW to pilot complex health management for children, Develop system-level approaches to identify children with health complexity
    – OPIP asked to submit a proposal to Lucile Packard Foundation for Children's Health
**Title:** System-Level Approaches to Identify Children with Health Complexity and Develop Models for Complex Care Management

**Goal:** Inform health systems on novel and generalizable approaches to identify, and design complex care management programs for, children with health complexity.

**Time Period:** August 2017-March 2019

**Key Partners:**

- Oregon Health Authority (Letter from Leslie Clement, Partnership with OHA Health Analytics)
- Kaiser Permanente Northwest – Publicly & Privately insured
- Coordinated Care Organizations (Health Share of Oregon Submitted a Letter of Support)
Children We Are Focusing On: Some Definitions

- **Medical Complexity**
  - Utilize the Pediatric Medical Complexity Algorithm (PMCA)
    - Takes into account: 1) Utilization, 2) Diagnoses, 3) Number of Body Systems Impacted
    - Assigns child into one 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”.
  - Operationalizing factors identified by COE4CCN as predictive of a high-cost health care event (e.g. emergency room use).

- **Health Complexity:** Combines medical and social complexity to create global score.
  - COE4CCN findings were that the children we may be most able to positively impact and lower costs through complex care management are those with:
    - Some level of medical complexity AND social complexity risk factors
Social Complexity Factors Identified by the Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN)

- 12 SC risk factors from literature review related to worse outcomes:
  1. Parent domestic violence
  2. Parent mental illness
  3. Parent physical disability
  4. Child abuse/neglect
  5. Poverty
  6. Low English proficiency
  7. Foreign born parent
  8. Low parent educational attainment
  9. Adolescent exposure to intimate partner violence
  10. Parent substance abuse
  11. Discontinuous insurance coverage
  12. Foster care

- COE4CCN Identified an additional 6 SC risk factors that may be associated with worse outcomes:
  1. Parent death
  2. Parent criminal justice involvement
  3. Homelessness
  4. Child mental illness
  5. Child substance abuse treatment need
  6. Child criminal justice involvement
Use Data to Inform Community-Level Asset Mapping

Children with Medical Complexity

Children with Health Complexity

Children with Social Complexity

Children with No Indications of Medical or Social Complexity

Community assets that support children, youth and families who need complex care and complex health management

ENCC
PCPCHs
Behavioral Health Supports
Community Health Workers
Parent to Parent Supports
NICU
CaCoon
Home Visiting Nurses
Transition-Based Supports
Early Learning Hubs
PCPCHs w/ Integrated Behavioral Health or Social Workers
Hospital-Based Supports
Mental Health
Centralized Team-Based Care Models
Public Health-Maternal Child Health: Shared Plan of Care
Family Involvement Network
Oregon Family to Family Information Center

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• Prioritize who would benefit from further assessments and information about health complexity and complex care and/or care coordination needs gathered from the primary care provider and patient/family.
  – Culture shift on the front-line of the medical and social indictors of health and opportunities for support.

Combined with this assessment information:
• Prioritize which children/families to receive complex health management vs. which children could benefit from enhanced care coordination
• Propose the best match team for that child/family and best match outreach approach
• Use system-level quantitative metrics to determine and track resource investments needed for each child/family
Children with Complex Needs

- Children with Medical Complexity
- Children with Health Complexity
- Children with Social Complexity

Example of Potential Services in a Community Identified to Support Families

- Centralized Nurse Care Coordinator
- Care Coordinator in PCPCH
- Social Worker
- Public Health Home Visiting Nurse
- Navigator within Health System
- Parent-to-Parent Support
- Exceptional Needs Care Coordinator
- Community Health Worker
Purpose and Scope for Today’s Conversation

• Engagement of public and private stakeholders, including CCOs, on the component of the project that relates to Oregon Health Authority- Health Analytics efforts to analyze, score, and disseminate data to CCOs on:
  – Medical Complexity
  – Social Complexity
  – A global indicator of Health Complexity

• Input We Need Today Given Timing of the Project & Specific to the Scope
  – Analysis within OHA focused on indicators of medical and social complexity
  – Sharing this indicator information with CCOs

• Future meetings will focus on health complexity indicators, complex care management models

• Therefore, given short time period and need for insight on current project priorities we will be very strict about within scope conversations
  – Please use the feedback sheet provided to raise important issues for future discussion and consideration

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Let’s Get Polling

• Let’s find out more about who is here today.
• List of attendees in your packet.
• We intentionally invited public and private stakeholders to this meeting.
• Let’s see who we have here today.

1. Please indicate which group you represent:
   a) Coordinated Care Organization
   b) Oregon Health Authority
   c) State Department
   d) Health care providers, IPA for Health Care Providers
   e) Parents of children with health complexity
   f) Other (Please Specify)
Start the presentation to activate live content
Hearing About the Value and Need for this Work from the End Users

- Parents of children with health complexity
  - Is there a need for and value in these efforts focused on identifying children with health complexity and sharing these indicators with Coordinated Care Organizations?

- Health Care Providers
  - Given the current infrastructure, do children – and their families - with health complexity get the supports they need?
  - Have you seen the different and collective impact that medical and social complexity has on your ability to provide quality care that maximizes the child’s health?
  - Is there value in OHA leveraging data available to identify this important group of children with specific indicators?

- Coordinated Care Organizations
  - Will this information help you understand your pediatric population and their potential needs better?
  - Do you currently have a standardized, valid method to use system-level data to identify children with health complexity?
Review of Specific Data Used to Operationalize Global Indicator of Health Complexity Based on Flags of Medical and Social Complexity
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**

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.

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**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) ICS. Data includes data across the Oregon Department of Human Services (DHS) and OHA client-based services. Includes data from the following OHA 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 (FHIAP), Healthy Kids Connect (HKC), Medical Assistance Programs (MAP), Mental Health (MH), Women Infants Children (WIC).

**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 and 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 Spring 2018.

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**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.
Note About This Session

• Review each component in detail in first so that full picture can be understood
  – The power is in the bigger picture
  – That said, different data is available at different parts and we want to support folks in using data available
  – This is a data sharing quality improvement project with PDSA cycles related to data sharing

• Then we will open it up for your input about individual parts or sections once you the larger picture is clear

• Given our short time today and given limited resources provided in the project, we want to hone in on questions within the scope of project
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 may Benefit from Complex Care Management and Novel Data Sharing to CCOs/Health Systems

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Part 1: Pediatric Medical Complexity Algorithm

- Developed by a team at Seattle Children’s, Validated by Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN)
  - For children 0 to 18 insured
  - Developed as a way to **target and allocate care coordination resources**
- Based on Claims and Diagnosis
- Categorizes complexity into three categories:
  1) **Complex Chronic Disease**,  
  2) **Non-Complex Chronic Disease**, and  
  3) **Without Chronic Disease**
- Takes into account three main factors:
  - Diagnoses  
  - Number of body systems impacted  
  - Patient utilization
- The three categories are co-linear with COST (*i.e. as complexity increases, so does cost*)

Pediatric Medical Complexity Algorithm (PMCA)

1) Complex Chronic Disease
   - Sig. chronic condition in two or more body systems
   - Progressive condition associated with deteriorating health and decreased life expectancy in adulthood OR
   - Technology dependent for 6 months OR
   - Malignancy, excluding those in remission for more than five years

2) Non-Complex Chronic Disease, and
   - Chronic conditions that are lifelong but not complex
     • One body system
     • Conditions not progressive
   - Episodic chronic conditions with variable duration and severity

3) Without Chronic Disease
   - No chronic conditions
   - Occasional self-limited acute
     (e.g. ear infection)
1) Complex Chronic Disease

• Children with *Complex* Chronic Disease
  – Significant chronic condition in \( \geq 2 \) body systems
    • Body system examples:
      – Pulmonary
      – Gastrointestinal
      – Mental health
      -OR-
    – Progressive condition that is associated with deteriorating health with
      a decreased life expectancy in adulthood
      -OR-
    – Technology dependent for 6 months
      • Ex – Ventilator, G-Tube, Tracheostomy
      -OR-
    – Malignancy – excluding those in remission for \( \geq 5 \) years
2) Non-Complex Chronic Disease

• Children with *Non-Complex* Chronic Disease
  – Chronic Conditions that are lifelong but not complex
    • These are conditions that involve a single body system
    • Conditions are not progressive and are not expected to shorten life expectancy
    • Ex: type 1 diabetes
  -OR-
  – Episodic chronic conditions that have variable duration and severity
    • Ex: ADHD, Asthma, Diabetes
3) Healthy Group

- Children who are Healthy
  - No chronic conditions
  - Occasional self-limited acute illnesses
    - Ex: Ear infections, pneumonia, bronchiolitis
OHA Application of the Pediatric Medical Complexity Algorithm (PMCA)

Current Proposal Based on Developers Recommendations:

• Use the “Most Conservative” approach given robustness of data
• Look back period: 2 years, across all services
  – Across all CCOs or programs child enrolled
  – Across all types of services (Physical, Mental, Dental)
Important Disclaimers:
What is There and What is Not There

- PMCA not a population estimate of CYSHCN at-large
- PMCA is intentionally based on claims, diagnoses and utilization, to target kids that may have care coordination needs as they are accruing costs
- Because it is based on utilization
  - Does not capture medically complex children who are not accessing services
  - Does not capture medically complex children who cannot access specialized services
  - Does not capture kids whose various diagnoses were not coded, the complexity of their medical information not in the data we have access to
- Medical Complexity DOES NOT equal need for complex care management….and Vice Versa
Preliminary Findings

Data Summarized by…

1) State
2) Regional Variation
Non-Chronic Healthy
Non-Complex Chronic
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<td>Yamhill</td>
<td>60.5%</td>
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</tbody>
</table>
Additional Options We Will be Exploring

• Children for whom Medicaid is the 2\textsuperscript{nd} Insurance
  – Examining the feasibility and validity of using the All Payor All Claims (APAC) to understand indications of medical complexity through the first insurance
  – Estimates indicate that we have claims for approximately 80\% of Oregon’s population.

• Known gaps in APAC are
  – 1) ERISA self-insured plans are exempt due to Gobeille, and
  – 2) Oregon’s reporting threshold is 5,000 covered lives.
Proposal for Sharing to CCOs
(Scope of This Project)

• Proposal is anchored to hypothesis this information will be used.
• We will share data over course of the project.
  • If we see the data is used by CCOs in a meaningful way, then we want to explore how and the periodicity

Current Proposal:

a) Global Report: CCO rate and comparisons to other CCOs
  – Overall, By Age Groups, Race-Ethnicity, County
  – Periodicity of Sharing: Annually

b) Child-level indicator score based on PMCA labelling
  • Categorical Variable: 1) Children with Complex Chronic Disease, 2) Children with Non-Complex Chronic Disease, 3) Children without Chronic Disease
  – Periodicity of Sharing: Annually
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 Noven-Targeting 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 OHA 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 (FHIAAP), 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 and 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 Spring 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 CCOs/KPNW, Health Complexity Score.

Periodicity
To be determined through the project’s facilitated discussions. Goal is to implement data sharing by Fall 2018.

* Social Complexity as defined by The Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CN)
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 (FHIAP), 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.
Trying to Anchor Work to Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) Factors

• 12 SC risk factors from literature review related to worse outcomes
  1. Parent domestic violence
  2. Parent mental illness
  3. Parent physical disability
  4. Child abuse/neglect
  5. Poverty
  6. Low English proficiency
  7. Foreign born parent
  8. Low parent educational attainment
  9. Adolescent exposure to intimate partner violence
  10. Parent substance abuse
  11. Discontinuous insurance coverage
  12. Foster care

• COE4CCN Identified an additional 6 SC risk factors that may be associated with worse outcomes:
  1. Parent death
  2. Parent criminal justice involvement
  3. Homelessness
  4. Child mental illness
  5. Child substance abuse treatment need
  6. Child criminal justice involvement
ACE Informed Approach

The three types of ACEs include:

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Mother treated violently
- Divorce
- Incarcerated Relative
- Substance Abuse
Important Note: ONLY Global Counts Will be Shared

• The following slides will show the specific indicators that are being used to develop a global social complexity indicator.

• Individual data will not be shared at an identifiable manner in accordance with data sharing agreements.
Indicators Included GLOBAL Social Complexity Based on Available Data and Agreements and Feasibility to Merge with OHA-Analytics Data At This Time:

1. Poverty
   - Child or child’s parent(s) have history on SNAP caseload
   - Severe Poverty- child or child’s parent(s) have a history on TANF caseload
2. Mental Health - **Child** has a history of interaction with mental health services
3. Mental Health - **Parent** of child has a history of interaction with mental health services
4. Parental Incarceration
5. Foster Care - ORKids
6. Death of parent or primary caregiver.
DRAFT PROPOSAL: GLOBAL Social Complexity Indicator

• Look Back Time Period: Last 16 Years

• Notes About Specific Indicators:
  – Mental Health (Child or Family): Does not consider if interaction was one time or repeated.
  – Parental Incarceration: Based on history with Department of Corrections. Only includes state-level felonies. Lesser crimes are not included in the data.
  – Foster Care - Child has been placed in foster care. This can include kinship care where the child is placed with a relative.
  – Death of parent - Child has experienced the death of a parent or primary caregiver. This will not include any parent(s) who died outside of Oregon.
Preliminary Learnings at the Process

- State of Integrated Client Services and Integrated Client Services Data Warehouse
- Data sharing agreements that create warehouse different than…
  - Data sharing agreements of combined data and then sharing with specific entities
- Importance of building collaboration and trust
- Importance of match between proposed use and sharing
- Importance engaging various OHA offices (e.g. Equity and Inclusion)
- Value of centralized data cleaning and structure
  - Analytic conventions to clean data—de-duplicate/what’s in/out
  - Analytic conventions/decisions must create alignment with use and interpretation of findings
Preliminary Findings--All Exploration

• Social program data availability and degree of overlap with risk factor list
• Service enrollment observations vs. unique individuals which need to be counted differently
• How children are paired with families
• Determine whether service data include parents or children or both
• Determine whether risk factor is defined by parents or only children in denominators
• Degree to which risk factors overlap
Children
Integral Process of Linking and Attributing Observations to Specific Children

232,622 Individual Children

Observations

400,083 Flagged Observations
Breakdown of Social Risk Factors

More than one service per child possible

SNAP: 162978
MH: 63865
TANF: 42997
Criminal Just: 13882
Foster Care: 4911
Parental Death: 553
Risk Factor Count Per Child

Preliminary Exploratory Analysis Findings

Total=232,622
Percent of children with 1-2 social risk factors

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Percent of children with 3-4 social risk factors

Legend

5-9%
10-14%
15-19%
20-24%

PRELIMINARY DRAFT ANALYSIS

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Percent of children with 5+ social risk factors

Legend

- 0-1%
- 2-3%
- 4-5%
- 6-7%
- 8-9%

PRELIMINARY DRAFT ANALYSIS

Do not copy or reproduce without proper OPIP citation
Percent of children with 0 social risk factors

Legend

- 40-44%
- 45-49%
- 50-54%
- 55-59%
- 60-64%
- 65%+

PRELIMINARY DRAFT ANALYSIS

Do not copy or reproduce without proper OPIP citation
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Proposal for Sharing to CCOs
(Scope of This Project)

Proposal Anchored Observed Use by CCO:

a) Global Rates: CCO rate and comparisons to other CCO
   • Overall, Lagged Snapshots by Age Groups, Race-Ethnicity, County
   • Periodicity of Sharing: Annually

b) Child-level indicator score to CCOs
   • Total Score Only, not why they scored that way
   • Periodicity of Sharing: Annually
Focus of Next Meeting

Medical Complexity

Social Complexity

Health Complexity

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Analytic Processing: De-duplicating, merging

Scoring and Weighting, Creation of Global Score OR Categorical Variable

COMBINED HEALTH COMPLEXITY SCORE—Next Meeting
Next Meeting: Health Complexity Scoring

• Cross tab analysis of medical and social complexity
  – Examine distribution

• Explore options for scoring
  – Equal weight of each factor vs differential weights
  – Categorical variable
    • High medical, High social
    • High medical, no social
    • Low medical, High Social
    • Medium Medical, Medium Social
Input from Attendees

- Part 1: Specific Input on Specific Components
- Part 2: Global Input Anchored to Ensuring Meaningful and Appropriate Use
Specific Input Needed
Part 1: Medical Complexity and Pediatric Medical Complexity Algorithm (PMCA)

The preliminary data shown today used a 2-year look back period.

That said, given the quality of data the developers recommend a **3-year look back time period**. This is the time period we are using in KPNW.

1) Do you see any problems with using a **3-year** look back period?
   a) Yes
   b) No
   c) Don’t know
   d) Don’t have an opinion
The developers recommendation is to use a 3 year lookback period. Do you see any problems with this approach?
Specific Input Needed
Part 1: Medical Complexity and Pediatric Medical Complexity Algorithm (PMCA)

For the attendees from CCOs in the room.

2) The proposal is to share the data annually. Is there a problem with this approach?
   a) Yes
   b) No
   c) Don’t know
   d) Don’t have an opinion
Attendees: The proposal is to share the data and... Is there a problem with this approach?

Yes

No

Don't know

Don't have an opinion

Start the presentation to activate live content

If you see this message in presentation mode, install the add-in or get help at PollEv.com/app.

Oregon Pediatric Improvement Partnership
3) For non-CCO members in the room, would the development of a state-wide annual report be helpful?

   a) Yes
   b) No
   c) Don’t know
   d) Don’t have an opinion
CCO members in the room: would the development of a state-wide annual report be helpful?

Yes
No
Don't know
Don't have an opinion

Start the presentation to activate live content
If you see this message in presentation mode, install the add-in or get help at PollEv.com/app
4) Given the literature on the impact of these factors, the proposal is to **look back 16 Years** and identify whether there was ever this flag for a child and his/her family. Do you see any problems with this look-back period?

   a) Yes  
   b) No  
   c) Don’t know  
   d) Don’t have an opinion

If Yes, what time period would you propose:  
- Answer in years
In the literature on the impact of these factors, it is to look back 16 years about whether there was a flag for a child and his/her family. Is there a problem with this look-back period?

- Yes
- No
- Don't know
- Don't have an opinion

Start the presentation to activate live content

If you see this message in presentation mode, install the add-in or get help at PollEv.com/app
5) Given the data shown was preliminary and exploratory, what **questions do you have about the findings related to the social indicators?** Was there something that seemed questionable in the data?
Significant OHA resources are needed to support this data analysis, data cleaning, and data sharing. We will need indicators that investment in staff resources is justified given the use of the data provided.

6) What would be good indicators that CCOs are using this information?
Input from Attendees

- Part 1: Specific Input on Specific Components
- Part 2: Global Input Anchored to Ensuring Meaningful and Appropriate Use
Ensuring the data flags are used as indicators, not as classifications or labels.

– What are specific ways we can communicate about the data to make this clear?
– Are there models for other kinds of indicator data where this has worked well?
For Non-CCO attendees:

– How can CCO’s best leverage and use this information to stimulate community-level conversations?
– What are key assets that need to be engaged in communities that can help support children with health complexity?
– Are there existing activities where this information could be useful?
Value of this Data Integration and Data Sharing Pilot to Inform Other Efforts in the State

This is the first time that data from the Integrated Client Services Data Warehouse will be merged, at a child-level, with data from OHA Health Analytics and then shared with CCOs.

– Are there other efforts that the learnings from this novel pilot can help inform?
Wrap Up and Next Steps

• CCO Learning Session Directly Following This Meeting, Spotlight on KPNW Efforts to Identify Children with Health Complexity and Provide Complex Health Management

• Spring Stakeholder Meeting For You All
  – Grant Time Period: April 18
  – Any special considerations in terms of time?
  – Proposal is to have the meeting in Salem

• In the meantime, the door is always open for constructive feedback and input
  – Colleen Reuland:
    reulandc@ohsu.edu
  – Valerie Stewart:
    VALERIE.T.STEWART@dhsoha.state.or.us