



Health Systems Strategies that Prioritize Children with Health Complexity

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Meet Today's Speakers



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LIVE CAPTIONING

Select CC CLOSED CAPTIONING in Zoom **or**
Click the link in the chat to view captions

ASK QUESTIONS

Please submit your questions through the Q&A

We have reserved significant time at the end to have an interactive conversation that addresses questions received and are willing to stay beyond 11:00 PT to answer remaining questions

Today's Agenda

- Setting the Context
- Reviewing *Health Systems Strategies to Ensure a Focus on Children with Health Complexity*
- Hearing from Health System Leaders
- Question and Answer Session



Oregon Pediatric Improvement Partnership

The Oregon Pediatric Improvement Partnership (OPIP) supports a meaningful, **long-term collaboration of stakeholders** invested in child health care quality, with the common purpose of improving the health of the ALL children and youth in Oregon.

OPIP is primarily contract and grant funded. We are based out of Oregon Health & Science University, Pediatrics Department.

Learn more: oregon-pip.org

OPIP Grant from the Lucile Packard Foundation for Children's Health

Title:

Guiding and Informing Policy, System and Practice-Level Efforts Focused on Children with **Health Complexity**: Supporting and Learning from Efforts in Oregon

Goal:

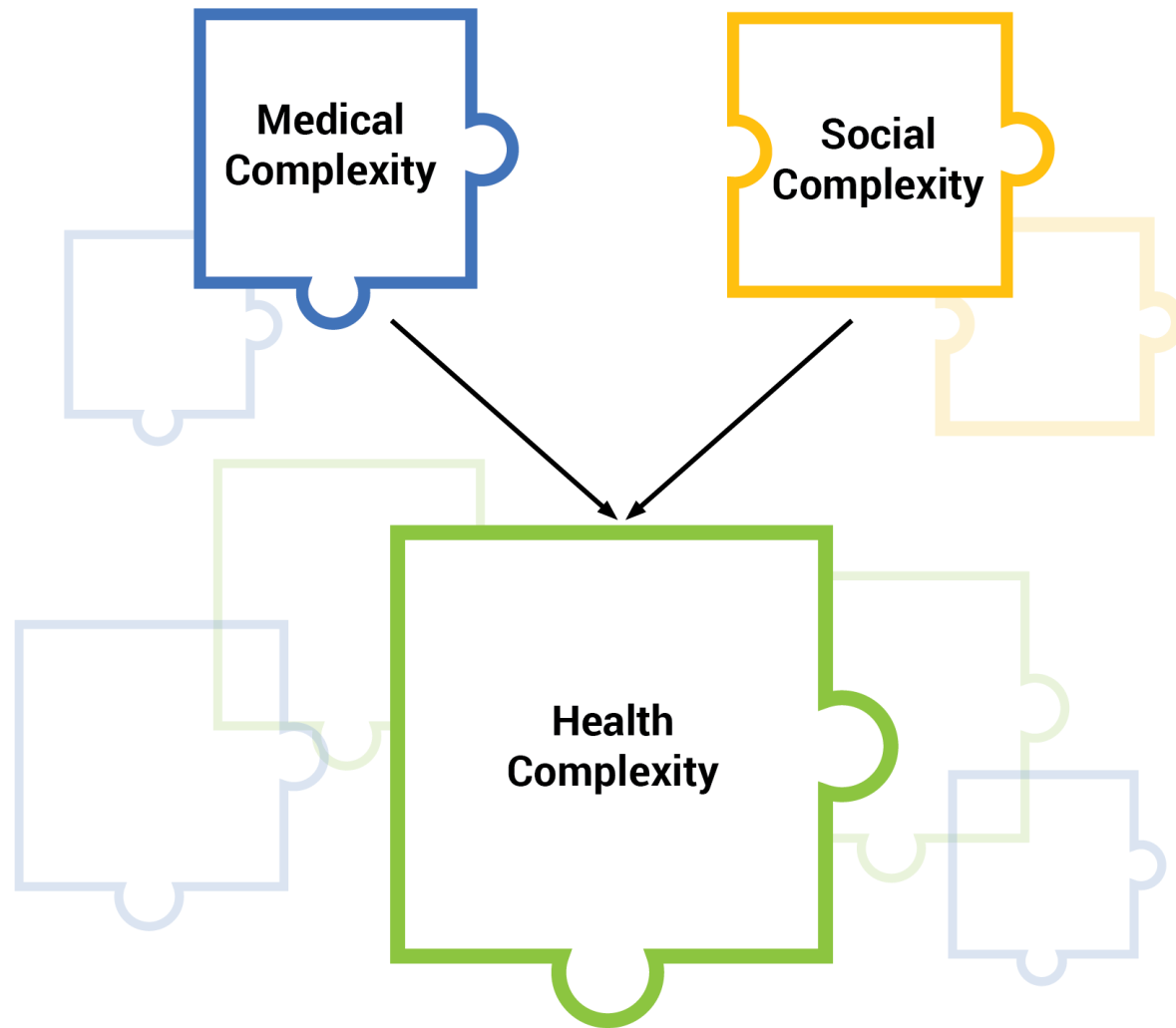
Inform health systems on novel and generalizable approaches to identify **children with health complexity**, use of this to design better support systems for children and their families

Technical assistance to:

- Health Systems Nationally
- Oregon Health Authority (OHA)
- Coordinated Care Organizations (CCOs)

Learn more:

<https://oregon-pip.org/our-projects/system-level-approaches-cyshcn-with-health-complexity/>



Why Should Health Systems Focus on Child Health Complexity



- Children are an important population that health systems serve
- Population management and quality of care for children requires a focus that is anchored to population needs
 - You can't focus on and ensure quality for a population if you can't identify them,
 - Having standardized language and definitions for the population can be used to inform cross-sector conversation
- Importance of health complexity model:
 - Lifelong health and well-being start in early childhood
 - Health complexity factors associated with indicators related to costs for the child and family
 - Child health and development particularly impacted by the social determinants of health and equity
 - For many children, the parent/care giver is also within the system

Focusing on Children with Health Complexity: Indicators are Gauge of Vulnerability and Health Disparities

Intervening early can change trajectories before our systems fail the most vulnerable:

- Identify families likely to face significant barriers accessing care and supports
- Fast-track families into programs and services to address their needs
- Build access to dyadic behavioral health models to support intergenerational healing



Identifying Children with Health Complexity



Priority step: Use data available at the child-level to identify and categorize individual children with varying degrees of **medical** and **social** complexity

- Ensures focus on population of children with health complexity
 - Allows for tailored strategies to support specific populations with similar levels of health complexity
-
- Incorporate data elements related to a child's medical complexity and social complexity to quantify the degree to which children have health complexity

Medical Complexity



Defined using the **Pediatric Medical Complexity Algorithm (PMCA)**

- Assigns child into one of three categories:
 1. Complex with chronic conditions (e.g. malignancy, cystic fibrosis)
 2. Non-Complex, chronic conditions (e.g. asthma, obesity)
 3. Healthy

Utilizes administrative claims data available to health systems

- Takes into account:
 1. Utilization of services
 2. Diagnoses
 3. Number of body systems impacted

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”

Incorporates indicators defined by COE4CCN as:

- Predictive of a high-cost health care event (e.g. emergency room use)
- Associated with worse health outcomes

Some indicators aligned with ACEs (adverse childhood experiences)

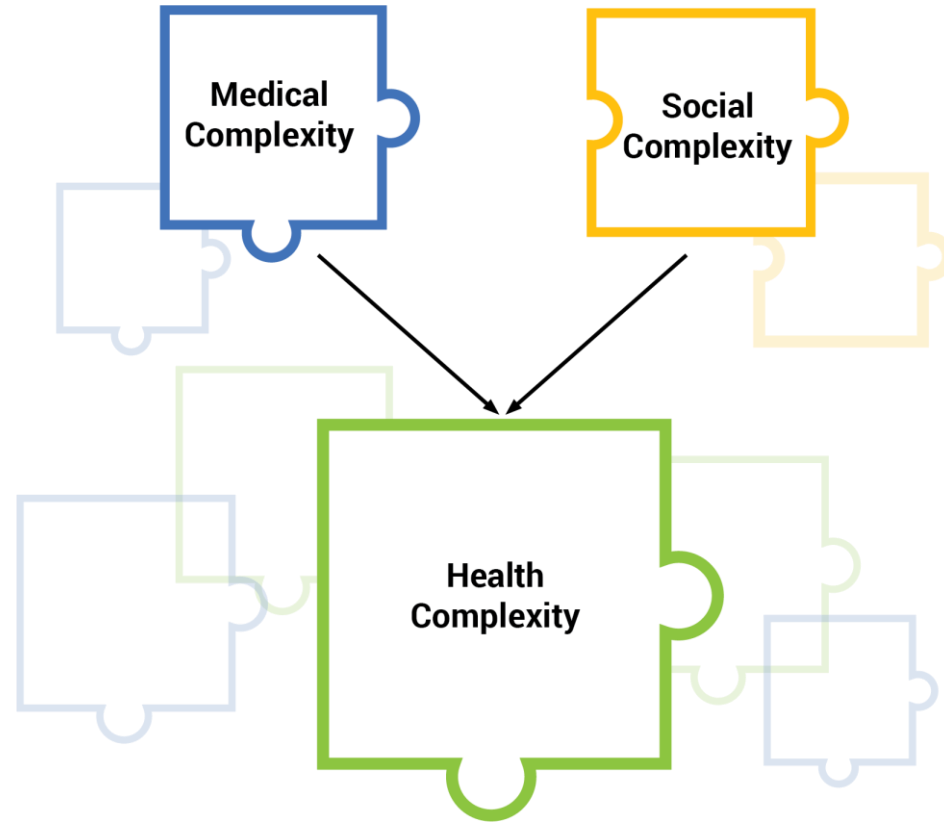
Social Complexity

A yellow puzzle piece icon containing the text "Social Complexity".

Social
Complexity

Factors Associated with Poor Health Outcomes and Higher Healthcare Costs, as Identified by the Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN):

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 education attainment
9. Adolescent exposure to intimate partner violence
10. Parental substance use disorder
11. Discontinuous insurance coverage
12. Foster care
13. Parent death
14. Parent criminal justice involvement
15. Homelessness
16. Child mental illness
17. Child substance use disorder treatment need
18. Child criminal justice involvement



Combines the factors of **Medical** and **Social** Complexity into ONE Indicator to create global understanding of children's health and needs

Example from the Field: Oregon State-Level Health Complexity Model



Source Variables Related to **Medical** and **Social** Complexity

■ Health Complexity
 ■ Medical Complexity
 ■ Social Complexity

Medical Complexity (3 Categories)	Social Complexity (Total Factors Possible in Preliminary Data Shown Here N=12)		
	3 or More Indicators	1-2 Indicators	None in System-Level Data
HIGH Medical Complexity (Chronic, Complex PMCA=1)	5.1% (26,650)	3.7% (18,993)	0.9% (4,868)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	9.2% (47,446)	7.0% (36,454)	2.1% (10,851)
NO MEDICAL COMPLEXITY (PMCA=3)	23.9% (123,764)	27.6% (142,851)	20.5% (106,199) Neither Medically nor Socially Complex

Data Source: ICS Data Warehouse & Medicaid data sourced from Medicaid Management Information System (MMIS). Children publicly insured (Medicaid/CHIP) in Oregon October 2021.

Examples of Innovation Shared in Brief (Page 5)

- **Oregon's Child Health Complexity Model**
 - **PMCA:** Use of All Payors All Claims Data Base
 - **Social Complexity:** Use of the Oregon Integrated Client Data Warehouse (ICS)
- **Colorado Medicaid**
 - **PMCA:** Use of Medicaid/CHIP Claims
 - **Social Complexity:** Factors related to ethnicity/race, citizenship and limited English proficiency
- **Kaiser Permanente Northwest**
 - **Medical: PMCA** based on information from clinical encounters, electronic health record
 - **Social Complexity:** Screening data collected at the point of care to operationalize twelve social complexity indicators

From Data to Action

Start with priority step:
Identifying Children with
Health Complexity



Use the Child-Level Indicators to
Improve Health Systems for
Children with Health Complexity

Data in Action: Using the Child-Level Indicators to Improve Health Systems for Children with Health Complexity

Four strategy options for using data to ensure a focus on children with health complexity:

- **Option 1:** Enhance Awareness, Analysis, Refinements and Use of Data to Galvanize, Guide and Inform Improvements in Care
- **Option 2:** Ensure the Needs of Children with Health Complexity Are Met
- **Option 3:** Assess for Healthcare Quality for Children with Health Complexity
- **Option 4:** Prioritize Investments that Build Health and Resilience, and Family-Based Approaches to Care

Option 1: Enhance Awareness, Analysis, Refinements and Use of Data to Galvanize, Guide and Inform Improvements in Care

Share data with partners collectively supporting children with health complexity

- Physical health
- Behavioral health
- Public health
- Community partners

Stratify health complexity data into sub-populations to ensure refined focus

- Age group (e.g. birth to five, grade-school age, adolescent, young adult)
- Race and ethnicity
- Specific primary care sites
- Specific regions (e.g. school district, zip code, rural/suburban/urban)

Enhance data with voice and perspective of those with lived experience

Examples of Innovation Shared in Brief (Page 7)

- **Oregon Data Report Provision to Support Action**

- Data provided at state-level, for each of the 36 counties in Oregon, and by the 16 Coordinated Care Organizations (CCOs)
- CCOs in Oregon receive child-level data related to the medical complexity, social complexity, and health complexity of each of their members birth through 20, blinded to specific social complexity factors.


- **In Douglas County, Oregon**

- Cross-sector group of community members used the data to develop a Call to Action for Children with Health Complexity with support from The Ford Family Foundation

- **In Marion County, Oregon**

- Used by the collective impact entity Community, Business and Education Leaders (CBEL)
- Used data to identify where to prioritize investments for housing and dyadic behavioral health supports

Call to Action



ADDRESSING Child Health Complexity In Douglas County


In the late fall of 2019, the Oregon Pediatric Improvement Partnership (OPIP), in partnership with The Ford Family Foundation, convened key stakeholders in Douglas County to develop a call to action for creating solutions for children with medical and social needs. That meeting was the beginning of a year-long process, guided by a steering committee of local leaders, that set the foundation for cross-sector collaboration focused on the social and medical needs of children birth to age 21.

The community wide effort established the foundation for transformative partnerships connected to a common goal: support local communities to engage partners, galvanize action, and support improvement efforts focused on children with medical and social needs.


This work builds on previous OPIP efforts to engage health systems and communities in Oregon using data to inform population-based improvement efforts for children with complex health needs.

Why focus on child health complexity?


- Lifelong health and well-being start in early childhood.
- Child health and development are particularly impacted by the social determinants of health and equity.
- Thoughtful and innovative approaches are needed to address children's health complexity and health disparities.
- Provides a targeted approach to addressing Oregon's priorities focused on families.



Medical Complexity
Includes utilization of services, diagnoses, and number of body systems impacted.



Health Complexity
Combining the medical and social complexity factors create a health complexity score.




Social Complexity
Includes individual, family, or community characteristics that impact health outcomes.

In Douglas County

31.2% of publicly insured children 0-21 present with chronic health conditions and **medical complexity**.

28.1% of publicly insured children 0-21 are **health complex**, experiencing both medical and social complexity.

Just under half (**45.9%**) of publicly insured children 0-21 experience high levels of **social complexity** (3 or more indicators). For young children ages 0-5, **34.2%** already have high social complexity.



Reviewing the data and seeking solutions included nearly 70 people from health, education, and community organizations — and parents — that resulted in a call to action with seven themes:

- **Increase Community-level Awareness** About the Health Complexity Data & Leverage Data to Identify Needs.
- **Community Mapping of Available Resources and Services**, Assessment of Capacity and Identifying Priority Gaps.
- **Address Barriers to Access** of Existing Services.
- **Train Providers** to Better Care for Health Complex Children and Their Families.
- **Address Capacity** of and Child and Family Centered Pathways to Behavioral Health.
- **Address Preventive Health & Social Service Needs** of Socially Complex Children.
- **Improve Housing** for Health Complex Children.

Addressing health complexity in Douglas County will require sustained community efforts that are synergistic with local projects. Over the next two years, OPIP will use a population-based improvement approach and collaborate with local partners to move the work forward in two priority areas that encompass many of the themes above:

1. Address capacity of, and child and family centered pathways to, behavioral health: assess resources and build capacity, elevate family voice, examine barriers to services, engage providers, and strengthen referrals and care coordination.
2. Collaborate with Umpqua Health Alliance (UHA) to increase awareness and use of the health complexity data to identify gaps in care and inform improvement efforts.

This work will focus on the areas deemed highest priority by local partners. The steering committee intends to further galvanize action across all seven themes by identifying opportunities in their own work and collaborating with initiatives such as Network of Care, Community Health Improvement Plan, and Umpqua Health Alliance's CCO 2.0 efforts.

Steering Committee Members

Alison Hinson, Douglas Education Service District
Amanda Rigby, Umpqua Health Alliance
Brian Mahoney, Public Health Network
Jessica Hunter, Dept. of Human Services Child Welfare
Jill Fummerton, FEATT Family Network
Gillian Wesenberg, South Central Early Learning Hub
Kat Cooper, Umpqua Health Alliance

Lee Ann Grogan, Health Care Coalition of Southern Oregon
Lisa Platt, Mercy Foundation
Rob McAdam, Umpqua Health Alliance
Robin Hill Dunbar, The Ford Family Foundation
Ruth Galster, Network of Care
Sondra Williams, Early Intervention/Early Childhood Special Education
Tracy Livingston, Dept. of Human Services Child Welfare

This project is dedicated to Cory Lyn Ortega for her role on the steering committee and her professional dedication to support children with medical and social needs and their families.

Identifying and Serving Children with Health Complexity [Learn More >](#)

Option 2: Ensure the Needs of Children with Health Complexity Are Met

Are children with health complexity receiving routine physical, behavioral and oral health care?

- Improvement efforts to address root causes and barriers in accessing care

Prioritize children with health complexity for care coordination supports

- Family-centered outreach, engagement, needs and strengths assessment
- Tailored supports and empowerment approaches
- Integration across sectors
- Align magnitude of children with health complexity and staffing

Tailor all supports to level of health complexity **and** direct assessments of family strengths, priorities, and needs

Examples of Innovation Shared in Brief (Page 9)

Examine rates of routine **well-child care** and **immunizations** for children with varying levels of health complexity

- Gaps seen in accessing preventive care for children with complex medical conditions (seeing specialists) and children with high social complexity
 - Can build targeted outreach and family-centered, strengths-based approaches to supporting these families

Examine **Intensive Care Coordination** and **Wraparound** service availability compared with magnitude of children with health complexity in different regions

- Can bolster these services to be more equitably distributed

Option 3: Assess for Healthcare Quality for Children with Health Complexity

Assess for the **quality** of care that children with health complexity receive

- Stratify children into sub-populations by medical, social and health complexity indicators
- Examine quality measures and improvement by sub-populations (i.e. children with high complex chronic disease; children with 3 or more social complexity indicators)

Can be used to spotlight and **create incentives** specific to sub-populations

Can drive and inform **health equity efforts**

- Especially useful given lack of race & ethnicity data

Examples of Innovation Shared in Brief (Page 10)

- As states and health systems move to reporting on the **Child Core Set**:
 - Stratify metrics by children with health complexity in order to inform gap analysis
 - Targeted improvement efforts of metrics for children with health complexity – component of equity focus

Examine **cost metrics** by varying levels of health complexity:

- Rates of **avoidable emergency department (ED)** use highest in children with both medical and social complexity
 - Rates of avoidable ED use in children with **only social complexity** just as high (and in some regions higher) as children with medical complexity
 - Can look for root **causes of avoidable ED** use in children with different levels of health complexity and tailor approaches to reducing ED use
- Prolonged hospitalizations and repeat hospitalizations

Option 4: Prioritize Investments that Build Health and Resilience, and Family-Based Approaches to Care

Develop payment models to incentivize and compensate for high quality care

- **Primary care:** Rate setting to help cover increased care coordination and other supports needed by these families
- **Behavioral health:** Invest in resources for children AND their families
- **Traditional health workers and community health workers**
- **Intensive care coordination and wraparound services:** Invest to match magnitude of children with health complexity in data

Focus on family-centered services

- Support for families with multiple children with health complexity
- Linkage of children in data to one or both parents for coordinated support of both adult and child, dyadic services

Examples of Innovation Shared in Brief (Pages 12-13)

- Addressing the **Social-Emotional Health** of Young Children to Support Kindergarten Readiness in Oregon
 - Component of metric is examination of administrative claims data, which captures the social-emotional services that young children in the CCO have received, stratified by specific social complexity factors
- Examination of Health Complexity Data by **Primary Care Home** to Which the Child is Attributed and By Zip Code
 - Value-based payments to Patient-Centered Primary Care Homes, depending on tier of care they provide
 - Advocate to internal leaders for investments in enhanced care coordination, integrated behavioral health, other supports
- Examine rates of children with health complexity in specific regions to inform **community investments**
 - Central Oregon: Investments made for specialty behavioral health supports in regions with more health complexity, less existing supports

Reflections from Health System Leaders Who Received Technical Assistance

Breana Holmes, MD

Senior Faculty, Vermont Child Health Improvement Program (VCHIP)
Clinical Associate Professor of Pediatrics, University of Vermont Larner College of Medicine

Elizabeth Baskett

Founder & Principal, Baskett, LLC

Steven Kairys, MD

Professor of Pediatrics, Department of Pediatrics, Hackensack Meridian Health School of Medicine
Principal Investigator of New Jersey Integrated Care for Kids (InCK)

For More Information

Visit the OPIP website: www.oregon-pip.org

Specific links will be provided in follow-up email from LPFCH

Contact Information:

- Colleen Reuland: reulandc@ohsu.edu
- Lydia Chiang: chiangl@ohsu.edu

We pursue a system that works for children with special health care needs.

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