Addressing Medicaid/CHIP Insured Children with Health Complexity in Oregon:

Starting Point Conversation about How to Leverage and Use Pediatric Health Complexity Data

Key topics

1) Context setting

2) Review specific system-level data being used to operationalize health complexity and <CCO Name> data:

Part 1: **Pediatric Medical Complexity Algorithm**

Part 2: Indicators of **Social Complexity**

Part 3: **Medical** + **Social** Complexity = **Health Complexity**

Why focus on children's 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
  - Adverse childhood experiences (ACEs)
- Thoughtful and innovative approaches are needed to address children's health complexity and health disparities
  - Multi-generational focus

CCO 2.0 focus areas

CCO 2.0 policies build on Oregon's strong foundation of health care innovation and tackle our biggest health problems.

Improve the behavioral health system and address barriers to the integration of care

Increase value and pay for performance

Focus on the social determinants of health and health equity

Maintain sustainable cost growth and ensure financial transparency

Alignment with *Raise Up Oregon* strategies

- **Objective 4: Early childhood physical and social emotional health promotion and resilience – Strategies 4.1, 4.2, 4.4**

- **Objective 5: Young children with social emotional, developmental, and health care needs identified early and supported to reach full potential – Strategy 5.2**

- **Objective 7: Parents and caregivers have equitable access to support for their physical and social emotional health – Strategy 7.2**

- **Objective 9: Families and young children who are experiencing adversity have access to coordinated and comprehensive services – Strategies 9.1-9.4**

- **Objective 14: Data infrastructure is developed to enhance service delivery, systems building, and outcome reporting – Strategies 14.1, 14.4**

Learn more: https://oregonearlylearning.com/raise-up-oregon

Problem... or opportunity in Oregon? OPIP's perspective: Why They Were Interested in Health Complexity

Despite wonderful gains in patient centered primary care homes, coordinated care organizations and other efforts, there is a **need to better support children with health complexity**.

- To impact children's future health and preventable chronic conditions, **need to address predictive social determinants of health and build resilience**.
- To address children with health complexity, **a population-** and **community-based approach and cross-sector engagement** are required.

Efforts that led up to OPIP's proposal for grant funding focused on Health Complexity

Supporting practices, health systems and communities 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
- Pathways from screening to services work focused on children 0-5

Through these efforts, identified barriers in:

- Staffing and resources to serve these children within the practice
- Community-level resources
- Lack of metrics focused on this population (what's measured is what's focused on)
- Lack of payment models aligned with a focus on this population

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
- Meeting of leaders within OHA, state agencies that address social complexity, CCOs and health care providers: August 2016

Funding from Lucile Packard Foundation for Children's Health to OPIP

Grant #1: 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 **children with health complexity**, use of this inform to design better support systems for children and their families

Key Partners: Oregon Health Authority (OHA), Coordinated Care Organizations (CCOs), Kaiser Permanente Northwest – Publicly & Privately insured*

Grant #2: Health Complexity Indicators to Guide and Inform Policy, System- and Practice-Level Efforts: Supporting and Learning from Efforts in Oregon

Goal: Support the meaningful use of population-level health complexity data to drive improved policies and investments in care and health management supports for children with health complexity.

Key Partners: Oregon Health Authority (OHA), Coordinated Care Organizations (CCOs), Health System

Learn more: **oregon-pip.org/projects/Packard.html**

Measuring children's health complexity

- **Medical Complexity**
  - Defined using the Pediatric Medical Complexity Algorithm (PMCA)
    - Takes into account: 1) Utilization of services, 2) Diagnoses, 3) Number of body systems impacted
    - Assigns child into one of three categories: a) Complex with chronic conditions; b) Non-complex chronic conditions; or c) Healthy/ non-chronic conditions.

- **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"
  - Our work incorporates factors identified by *COE4CCN* as predictive of a **high-cost health care event** (for example, emergency room use).

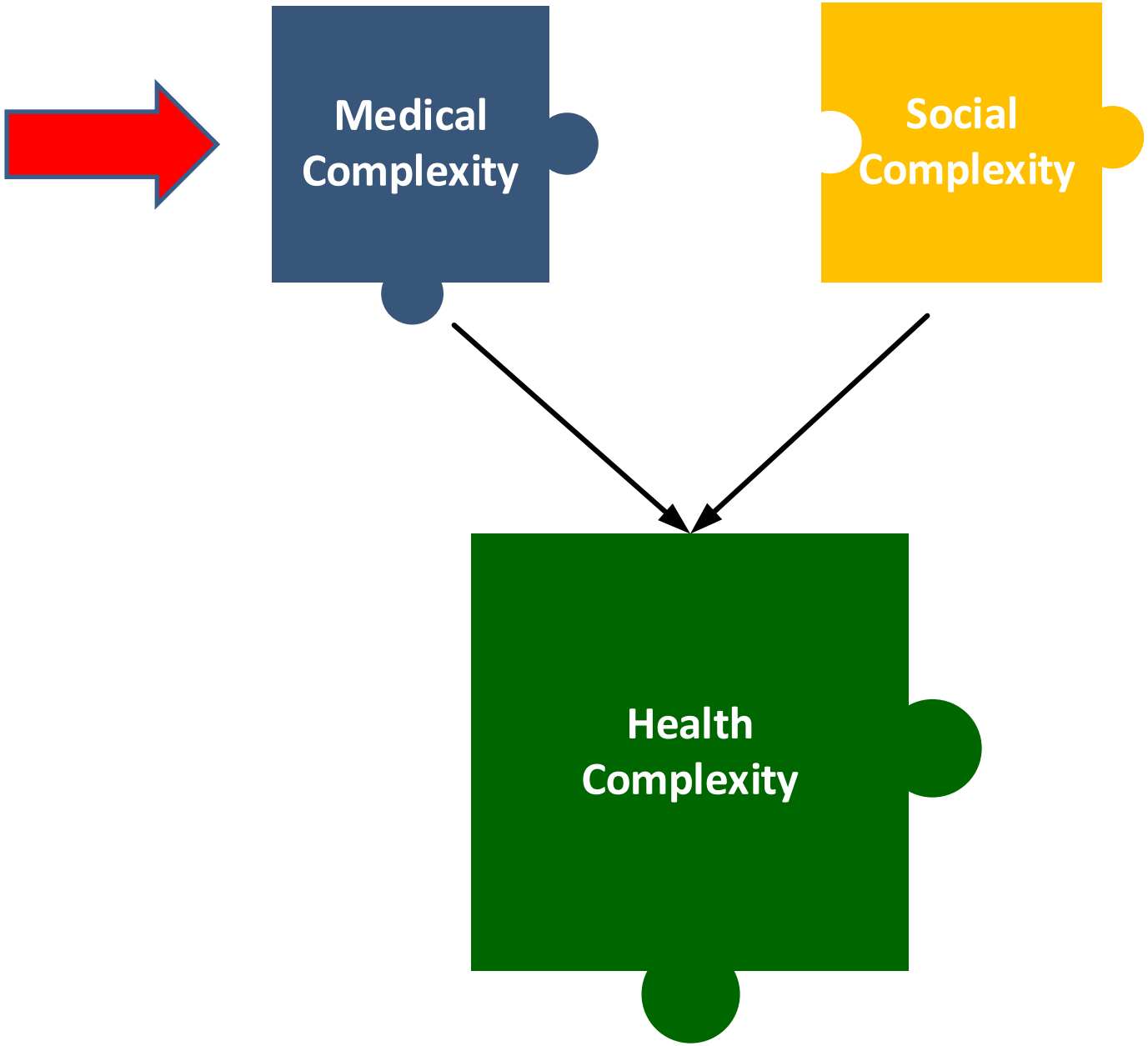
- **Health Complexity**
  - Combines medical and social complexity to create global understanding of children's health and needs

Important Note About System-Level Data & Indicators

- System-level data ***limited to enrollment and service utilization***
- Represents an incomplete view of the needs of children and families as well as their resiliency and self-efficacy.
  - ✓For example, while the social complexity indicators represented in the data may indicate a need for enhanced resources or care coordination, these indicators may also reflect the resiliency and navigation skills of families in seeking and securing the services they need.
  - ✓While the complexity of children and their families' needs cannot be ignored, **we encourage you to engage families to better understand their individual and community-level needs and resiliency** as you consider how best to respond to these findings.

New Updates to the Data Sources for 2020

- The data source for the medical complexity data has changed from accessing Medicaid data via the Medicaid Management Information System (MMIS) to now using All Payers All Claims (APAC) claims data from all payers (Commercial, Medicaid and Medicare).
- Updated cohort: All children **enrolled in Medicaid/CHIP in July 2020** between 0 through 20 years of age as of May 31, 2020
- Includes children ages **0 through 20 years of age**. Previous datasets only included children 0 through 17 years of age.
- Removed continuous enrollment to be as inclusive as possible.
- For Medical Complexity: Looks at claims data from January 1, 2017 – December 31, 2019.


Medical Complexity
Social Complexity
Health Complexity

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)
  - Developed as a way to identify a population, stratify quality metrics, and target patients who may benefit from complex care management
  - Intentionally meant to address issue with Chronic Illness & Disability Payment System
- Based on claims and diagnosis
- Categorizes complexity into three categories:
  1) **Complex chronic condition,**
  2) **Non-complex chronic condition, and**
  3) **Healthy**
- The three categories are co-linear with COST (*as complexity increases, so does cost*)
- **Updated data uses All Payor All Claims Data**
- **PMCA 3.1, Three Year Look Back Period, More Conservative Algorithm**

Pediatric medical complexity algorithm findings for Oregon

Oregon State Total Enrolled: N=497,738

1. Complex Chronic Condition: 10.1%

   N=50,473

30.7%

2. Non-Complex Chronic Condition: 20.6%

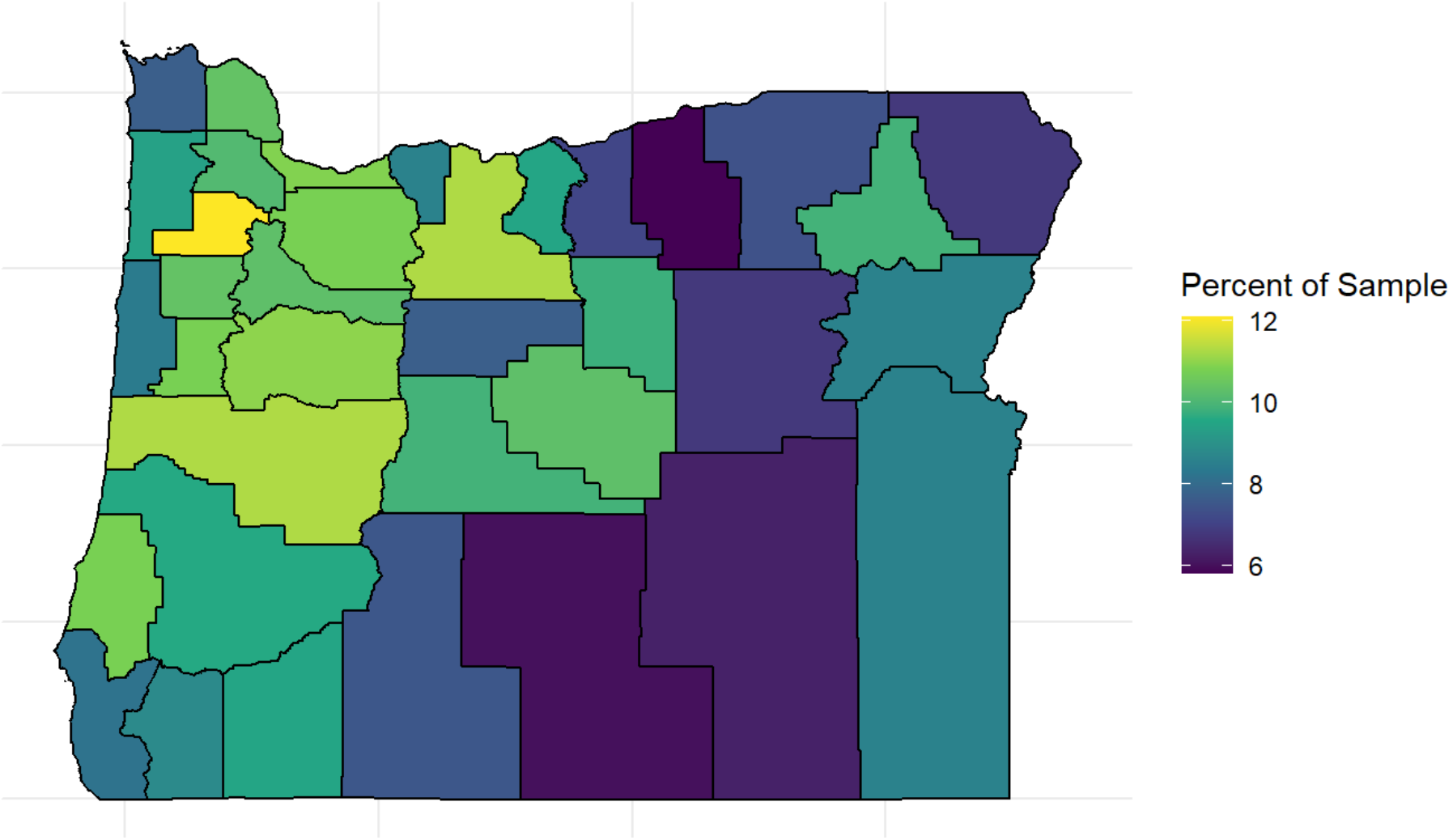
   N=102,506

3. Healthy: 69.3%

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

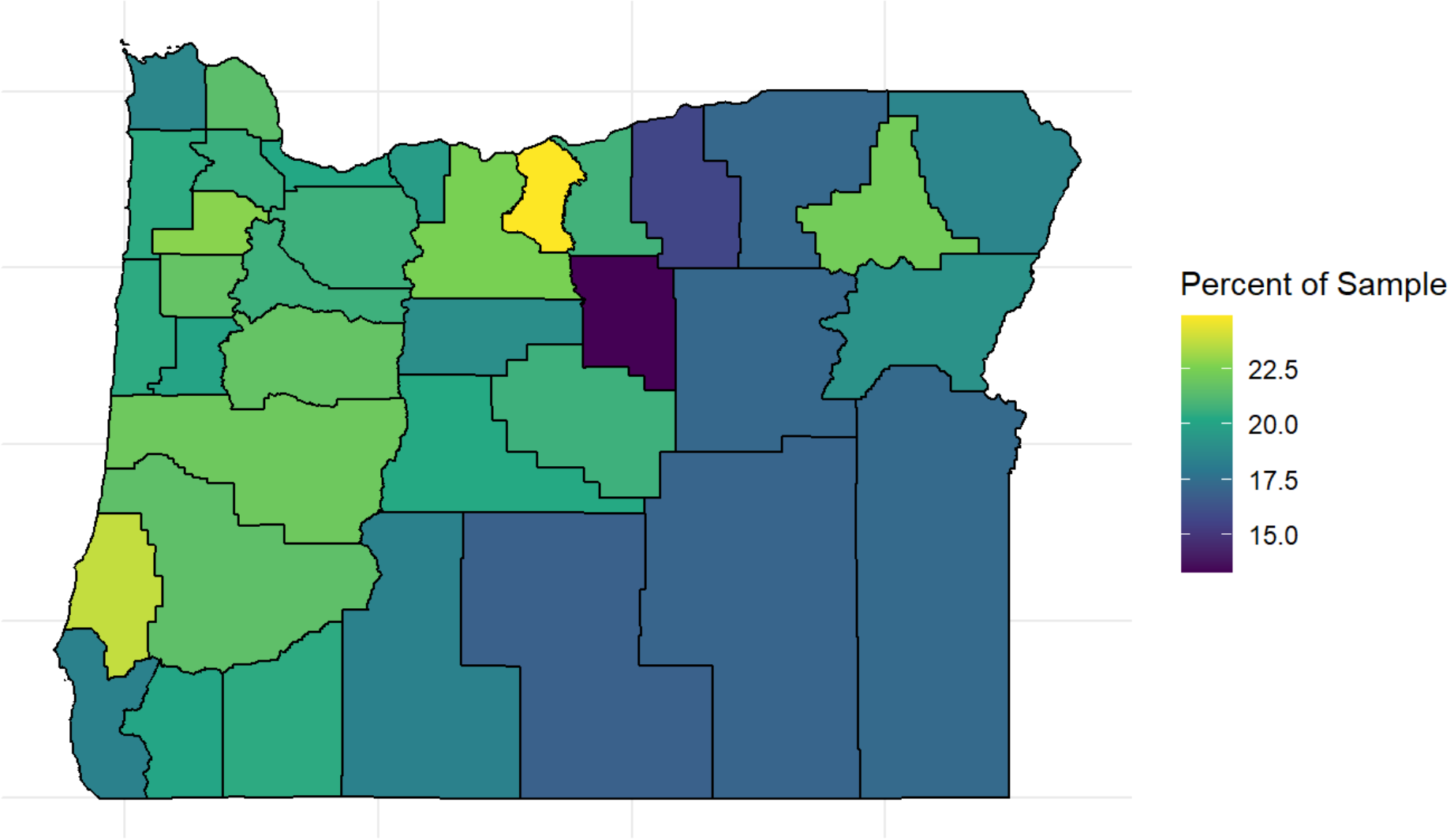
DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Complex chronic

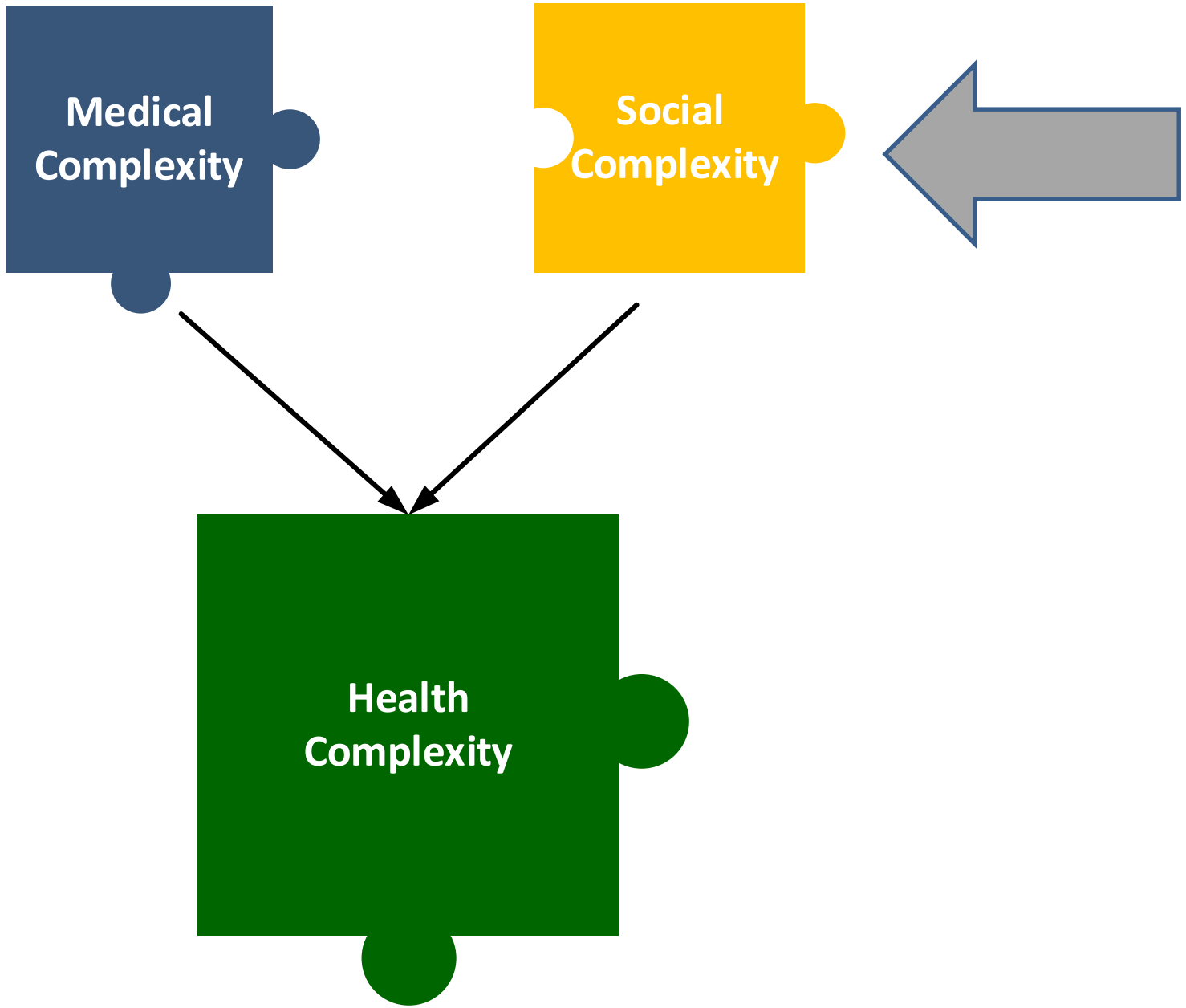


Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

Non-Complex chronic



Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database


Medical Complexity
Social Complexity
Health Complexity

18 social complexity factors

Identified by the Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) as associated in literature with worse health outcomes and costs

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 studies showed worse outcomes or consensus on impact:

13. Parent death
14. Parent criminal justice involvement
15. Homelessness
16. Child mental illness
17. Child substance abuse treatment need
18. Child criminal justice involvement

Identifying feasible social complexity variables in Oregon:
Leveraged Integrated Client Data Warehouse (ICS)

- Data sources from OHA-Health Analytics and **Integrated Client Data Warehouse** (ICS)
- Collaboration between OHA and DHS to provide staffing
- Data-sharing agreements
- Linkage of the child and parent to allow for child-level and population-level analysis
- Input obtained from public and private stakeholders in November 2017 and April 2018 about data methodologies

Identifying feasible social complexity variables in Oregon:
Leveraged Integrated Client Data Warehouse (ICS)

Data sources from OHA-Health Analytics and **Integrated Client Data Warehouse** (ICS)

ICS includes data across the Department of Human Services (DHS), OHA client-based services, and data from other external agencies

DHS program data includes:

Aging and People with Disabilities, Child Welfare, Developmental Disability Services, Self-Sufficiency and Vocational Rehabilitation

OHA program data includes:

Alcohol and Drug , Contraceptive Care , Family Health Insurance Program , Healthy Kids Connect, Medical Assistance Programs , Mental Health , Women Infants and Children

Additional agency data includes:

Department of Corrections, Oregon Housing and Community Services

Social complexity indicators

INDICATOR: Descriptive Information* (*Source*)	CHILD FACTOR	FAMILY FACTOR	TOTAL
POVERTY – CHILD: Access of Temporary Assistance for Needy Families (TANF), below 37% federal poverty level *(ICS, data available 2000-2020)*	X		X
POVERTY – PARENT: Access of TANF *(ICS, data available 2000-2020)*		X	X
FOSTER CARE: Child received foster care services (*ICS, data available 2000-2020*)	X		X
PARENTAL DEATH: Death of parent/primary caregiver in OR (*ICS-Death Certificate in Oregon, data available 1989-2020*)		X	X
PARENTAL INCARCERATION: Parent incarcerated or supervised by the Dept. of Corrections in Oregon (*ICS-Department of Corrections for state felony charges, not including county/municipal charges, data available 2000-2020*)		X	X
MENTAL HEALTH – CHILD: Received mental health services through DHS/OHA (*ICS- NMH Caseloads, data available 2000-2020*)	X		X
MENTAL HEALTH – PARENT: Received mental health services through DHS/OHA (*ICS-NMH Caseloads, data available 2000-2020*)		X	X
SUBSTANCE ABUSE – CHILD: Substance abuse treatment through DHS/OHA (*ICS- AD Caseloads, data available 2000-2020*)	X		X
SUBSTANCE ABUSE – PARENT: Substance abuse treatment through DHS/OHA (*ICS-AD Caseloads, data available 2000-2020*)		X	X
CHILD ABUSE AND NEGLECT: ICD-9, ICD-10 dx codes used by provider (*OHA Medicaid Claims Data, data available 2002-2020*)	X		X
POTENTIAL LANGUAGE BARRIER: Language other than English listed in the primary language field (*OHA Medicaid Enrollment, most current data for family*)		X	X
PARENTAL DISABILITY: Parent is eligible for Medicaid due to a recognized disability (*OHA Medicaid Enrollment, data available 2002-2020*)		X	X
TOTAL NUMBER OF INDIVIDUAL FLAGS	**5**	**7**	**12**

* Look back period includes prenatal period through the lifetime of the child, unless an exception is noted due to availability of data.

DHS Oregon Department of Human Services · Oregon Health Authority · OPIP

Social complexity findings

Important notes about data being shown:

- Look back period for factors from ICS: Presence of the risk factor in prenatal period (year before birth) through lifetime of the child OR since variable was available in the ICS data system
- For "Family" indicators: Linkage of child to a parent in ICS:
  - Unable to link to a parent: 23%
  - 1 parent: 11%
  - 2 parents: 66%
- For the aggregate population-level reports: state, CCO and county-level:
  - Reporting of prevalence of individual factors in the aggregate data reports
- For the child-level data file to be sent to CCO for their attributed population, the variables **are blinded** and indicate the number of risk factors, but do NOT indicate WHICH specific indicators.
  - ❖Three **social complexity** count variables: Child (0,1,2,3, 4-5), Family (0,1,2,3,4,5,6-7) and Total (0,1,2,3,4,5,6,7,8,9,10,11-12)

Population: Children Medicaid/CHIP insured [in Oregon as of July 2020].
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

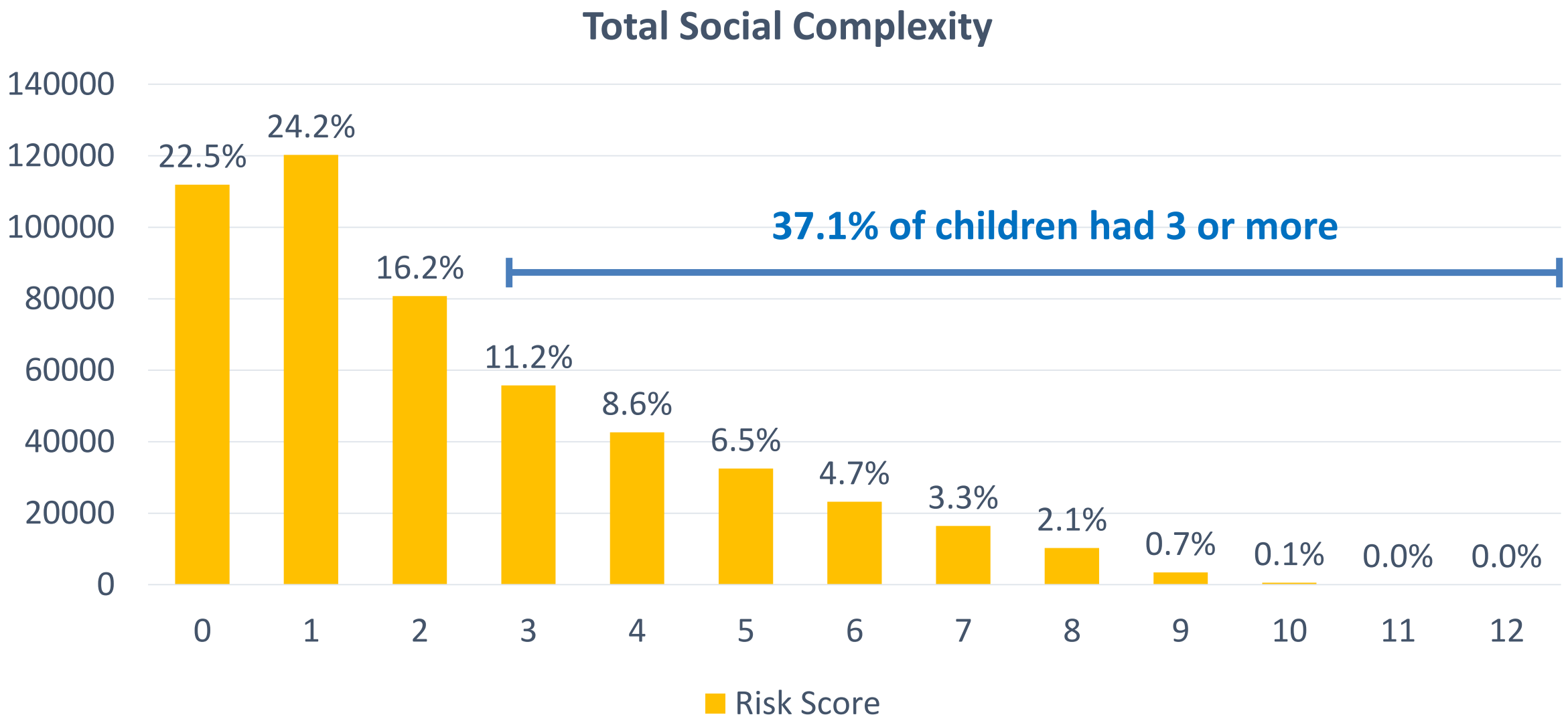
Oregon findings on prevalence of each social complexity variable

INDICATOR	CHILD FACTOR	FAMILY FACTOR
Poverty –TANF (For Child and For Either/Both Parent), Below 37% of Poverty Level (ICS, data available 2000-2020)	**38.8%** (193,226)	**33.1%** (164,771)
Foster care – Child received foster care services (ICS, data available 2000-2020)	**12.2%** (60,534)	
Parent death – Death of parent/primary caregiver in OR (ICS-Death Certificate in Oregon, data available 1989-2020)		**1.4%** (6,903)
Parental incarceration – Parent incarcerated or supervised by the Dept. of Corrections in Oregon (ICS Dept. of Corrections for state felony charges, not including county/municipal charges, data available 2000-2020)		**19.3%** (96,146)
Mental Health: Child – Received mental health services through DHS/OHA (ICS-NMH caseloads, data available 2000-2020)	**34.2%** (170,272)	
Mental Health: Parent – Received mental health services through DHS/OHA (ICS-NMH caseloads, data available 2000-2020)		**38.3%** (190,431)
Substance Abuse: Child – Substance abuse treatment through DHS/OHA (ICS-AD Caseloads, data available 2000-2020)	**3.4%** (16,966)	
Substance Abuse: Parent – Substance abuse treatment through DHS/OHA (ICS-AD Caseloads, data available 2000-2020)		**23.1%** (115,210)
Child abuse/neglect: ICD-9, ICD-10 dx codes used by provider (OHA Medicaid Claims Data, data available 2002-2020)	**8.1%** (40,420)	
Potential Language Barrier: Language other than English listed in the primary language field (OHA Medicaid enrollment, most current data for family)		**16.4%** (81,593)
Parent Disability: Parent is eligible for Medicaid due to recognized disability (OHA Medicaid Enrollment, data available 2002-2020)		**3.9%** (19,214)

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services · Oregon Health Authority · OPIP

Distribution of social complexity factors in Oregon



Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

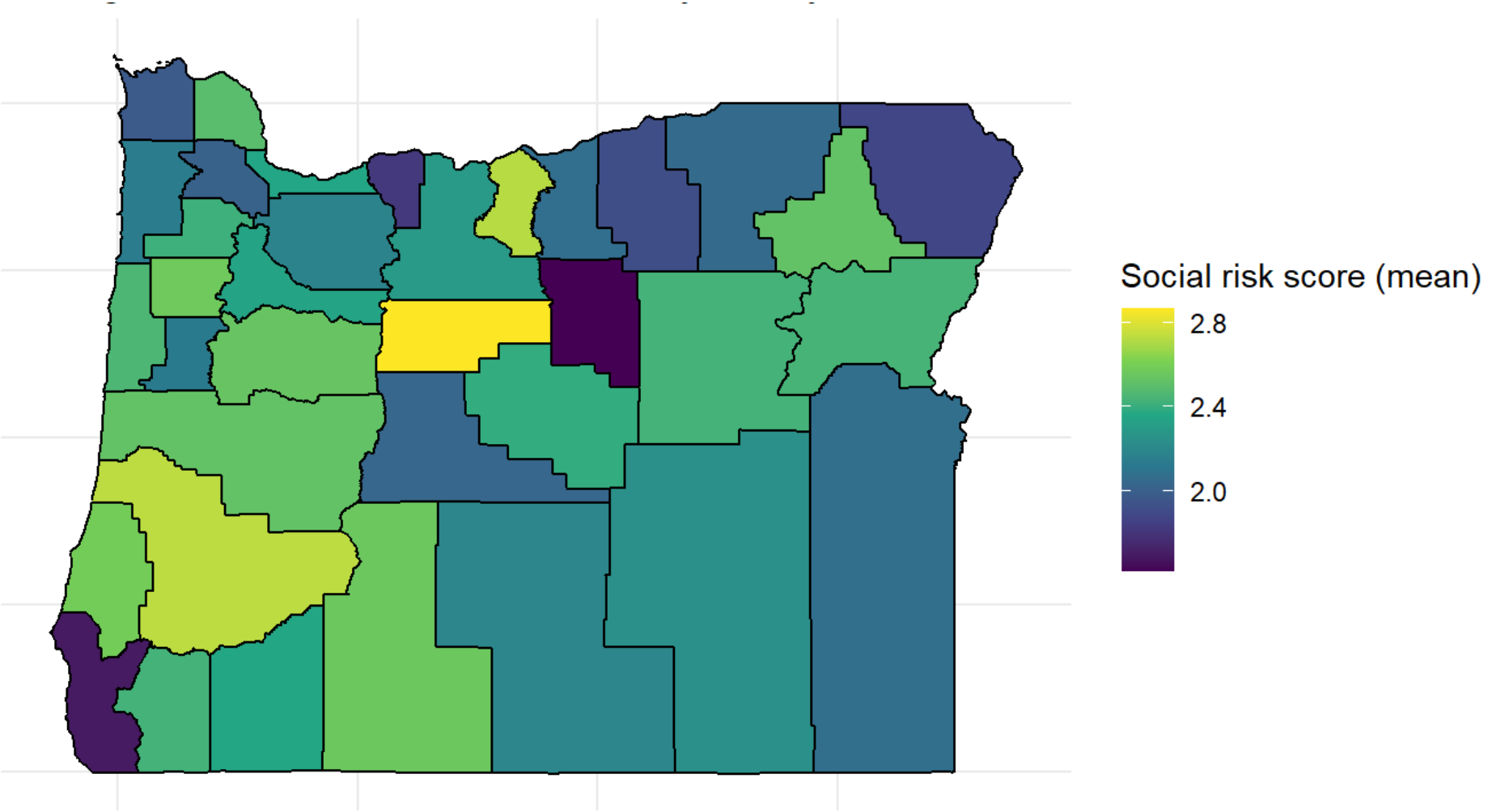
Putting the data into perspective: number of individual children

- Looking at the 0-20 population:
  - When we look at the proportion of kids exposed to **3 or more** of the risk factors: 37.1% → **184,869 kids**

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

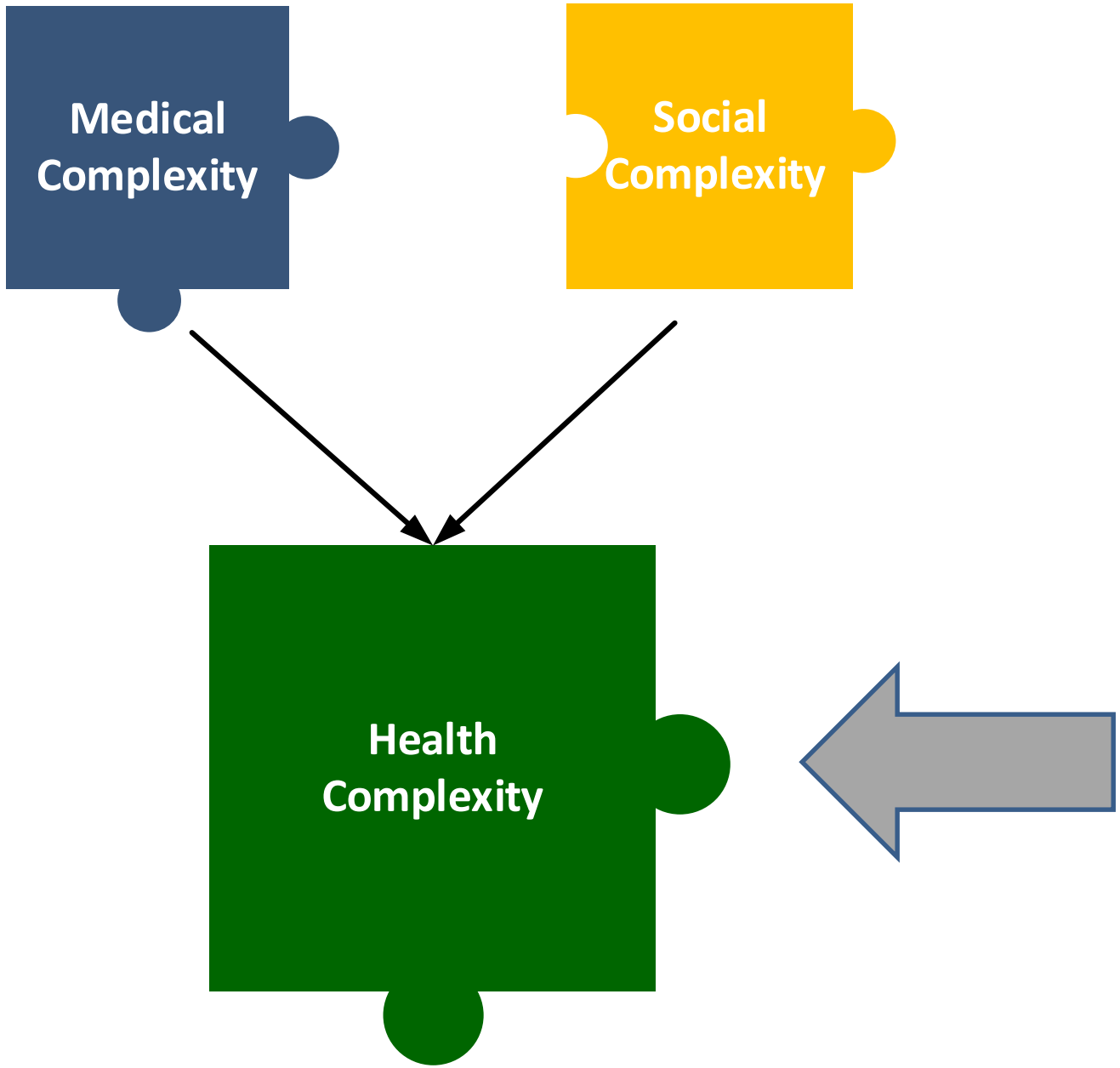
DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Social complexity by county



For the social risk score distribution (range: 0 - 11), there is a statistically significant difference in the social complexity indicator count between counties. (Kruskal-Wallis 2 = 4132.3,p < .001).

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database


Medical Complexity
Social Complexity
Health Complexity

Health complexity categorical variable: purpose and goal

- Given that **medical** complexity and **social** complexity will be independently examined and shared, create a categorical variable that combines the unique and different information from each analysis.
  - Categories anchored to level of medical complexity AND level of social complexity
    - ❖ Understand the population with both levels of complexity
- Build off the learnings from the COE4CCN
  - One or more social complexity indicators associated with higher costs
  - The more factors present, the higher costs – gradient effect
- Create a manageable level of categories for population-level aggregate reports that are aligned with the goal of the health complexity variable
  - CCOs will have the fodder for the health complexity variable (child-level medical and social complexity categorical variables) and create their own versions depending on their intended uses.
- Ensure categories have sufficient denominators to allow for state and county-level reporting, maintain data sharing agreements when shared at a child level

Oregon Health Complexity
Categorical Variable Findings

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)	5.3% (26,376)	3.8% (19,126)	1.0% (4,971)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	9.9% (49,270)	8.1% (40,251)	2.6% (12,985)
NO MEDICAL COMPLEXITY (PMCA=3)	21.9% (109,223)	28.4% (141,587)	18.9% (93,949) Neither Medically or Socially Complex

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

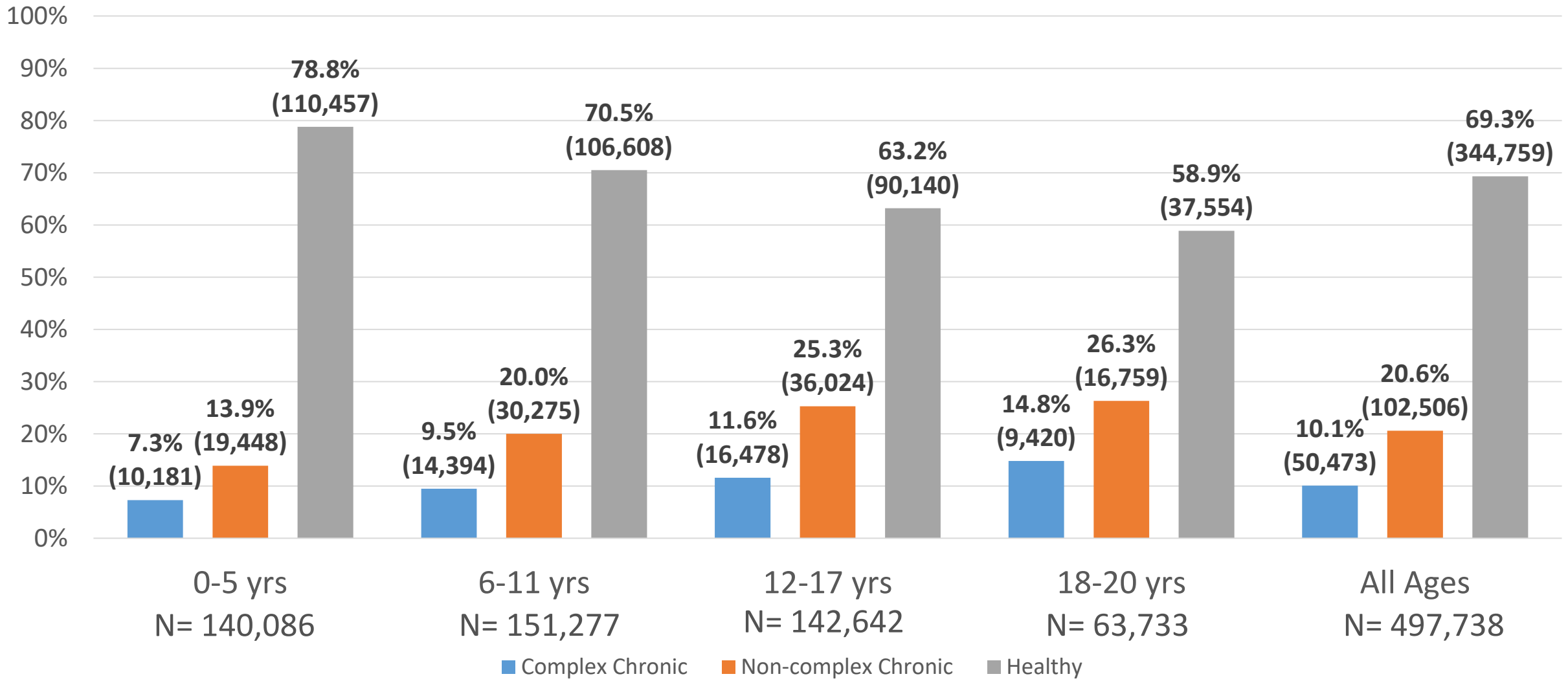
DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Aggregate data reports display the data by groups of children

Data displayed by four age groups:

- 0-5 years old
- 6-11 years old
- 12-17 years old
- 18-20 years old

Pediatric medical complexity algorithm findings: by age of child



Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Social complexity by age of child

Indicator *For data sources, see data dictionary	Children 0-5 N=140,086		Children 6-11 N=151,277		Children 12-17 N=142,642		Children 18-20 N=63,733	
	Child Factor	Parent Factor	Child Factor	Parent Factor	Child Factor	Parent Factor	Child Factor	Parent Factor
Poverty –TANF (For Child and For Either/Both Parent), Below 37% of Poverty Level	**26.6%** (37,298)	**31.4%** (44,014)	**42.4%** (64,073)	**35.8%** (54,084)	**45.4%** (64,717)	**33.4%** (47,611)	**42.6%** (27,138)	**29.9%** (19,062)
Foster care – Child received foster care services	**6.7%** (9,370)		**11.4%** (17,195)		**16.0%** (22,846)		**17.5%** (11,123)	
Parent death – Death of parent/primary caregiver in OR		**0.4%** (506)		**1.1%** (1,721)		**2.0%** (2,868)		**2.8%** (1,808)
Parental incarceration – Parent incarcerated or supervised by the Dept. of Corrections in Oregon		**16.3%** (22,895)		**19.9 %** (30,089)		**21.3%** (30,453)		**19.9%** (12,709)
Mental Health: Child – Received mental health services through DHS/OHA	**14.6%** (20,458)		**32.7%** (49,417)		**46.8%** (66,732)		**52.8%** (33,665)	
Mental Health: Parent – Received mental health services through DHS/OHA		**37.7%** (52,805)		**40.6%** (61,420)		**37.9%** (54,031)		**34.8%** (22,175)
Substance Abuse: Child – Substance abuse treatment through DHS/OHA	**N/A**		**0.7%** (987)		**4.7%** (6,735)		**14.5%** (9,241)	
Substance Abuse: Parent – Substance abuse treatment through DHS/OHA		**16.8%** (23,586)		**23.0%** (34,777)		**27.7%** (39,490)		**27.2%** (17,357)
Child abuse/neglect: ICD-9, ICD-10 dx codes related used by provider	**5.7%** (8,003)		**8.4%** (12,708)		**9.8%** (13,958)		**9.0%** (5,751)	
Potential Language Barrier: Language other than English listed in the primary language field		**11.0%** (15,365)		**17.3%** (26,202)		**20.3%** (28,994)		**17.3%** (11,032)
Parent Disability: Parent is eligible for Medicaid due to recognized disability		**3.1%** (4,348)		**3.5%** (5,230)		**4.4%** (6,234)		**5.3%** (3,402)

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services · Oregon Health Authority · OPIP

Social complexity by age of child

NUMBER OF INDICATORS (SOCIAL RISK FACTORS)	CHILDREN AGES 0-5 N= 140,086	CHILDREN AGES 6-11 N= 151,277	CHILDREN AGES 12-17 N= 142,642	CHILDREN AGES 18-20 N= 63,733
0	**32.6%** (45,627)	**21.0%** (31,702)	**16.4%** (23,461)	**17.4%** (11,115)
1	**25.5%** (35,786)	**23.9%** (36,096)	**23.4%** (33,335)	**23.6%** (15,014)
2	**15.1%** (21,090)	**16.3%** (24,600)	**17.3%** (24,611)	**16.4%** (10,432)
3 or More	**26.8%** (37,583)	**38.9%** (58,879)	**42.9%** (61,235)	**42.6%** (27,172)

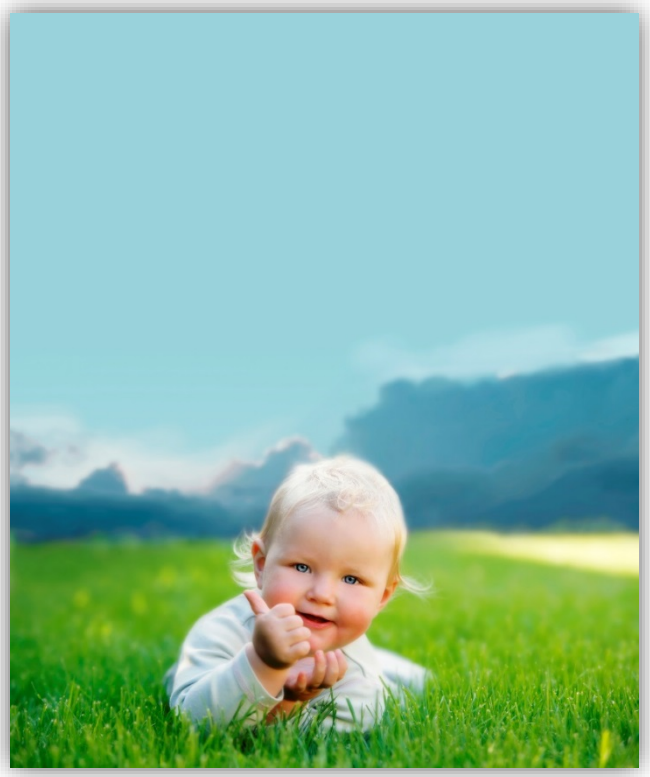
Population: Children Medicaid/CHIP insured [in Oregon as of July 2020].
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

Magnitude of social complexity for Children Birth-to-Five

Social complexity of children **Birth to Five** (n=140,086):

3 or more social complexity factors:

26.8% = 37,583 children



Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

Oregon Health Complexity
Categorical Variable Findings for Children 0-5

Children Aged Birth to Five **MEDICAL COMPLEXITY (3 Categories)**	Children Aged Birth to Five: **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)	2.9% (4,003)	3.0% (4,220)	1.4% (1,958)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	4.7% (6,587)	5.8% (8,109)	3.4% (4,752)
NO MEDICAL COMPLEXITY (PMCA=3)	19.3% (26,993)	31.8% (44,547)	27.8% (38,917) Neither Medically or Socially Complex

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Oregon Health Complexity
Categorical Variable Findings for Children 6-11

Children Aged 6-11 **MEDICAL COMPLEXITY (3 Categories)**	Children Aged 6-11: **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% (7,696)	3.6% (5,372)	0.9% (1,326)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	9.6% (14,564)	7.8% (11,867)	2.5% (3,844)
NO MEDICAL COMPLEXITY (PMCA=3)	24.2% (36,619)	28.7% (43,457)	17.5% (26,532) Neither Medically or Socially Complex

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Oregon Health Complexity
Categorical Variable Findings for Children 12-17

Children Aged 12-17 **MEDICAL COMPLEXITY (3 Categories)**	Children Aged 12-17: **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)	6.5% (9,288)	4.3% (6,134)	0.7% (1,056)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	13.6% (19,334)	9.6% (13,722)	2.1% (2,968)
NO MEDICAL COMPLEXITY (PMCA=3)	22.9% (32,613)	26.7% (38,090)	13.6% (19,437) Neither Medically or Socially Complex

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Oregon Health Complexity
Categorical Variable Findings for Children 18-20

Young Adults Aged 18-20: MEDICAL COMPLEXITY (3 Categories)	Young Adults Aged 18-20: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)	8.5% (5,389)	5.3% (3,400)	1.0% (631)
MODERATE Medical Complexity (Non-Complex, Chronic PMCA=2)	13.8% (8,785)	10.3% (6,553)	2.2% (1,421)
NO MEDICAL COMPLEXITY (PMCA=3)	20.4% (12,998)	24.3% (15,493)	14.2% (9,063) Neither Medically or Socially Complex

Population: Children Medicaid/CHIP insured in Oregon as of July 2020.
Data Source: ICS and Medicaid /CHIP data sourced from All Payer All Claims database

DHS Oregon Department of Human Services
Oregon Health Authority
OPIP

Priority Areas We Want to Focus Next

- Hearing from and learning from families about their lived experience
  - Understanding the data and what it means, and doesn't
  - Parent informed and driven solutions about how to provide best match supports to meet the needs of families
  - Learn from families with high complexity that are thriving – what made it work and what barriers do we need to remove
- Hearing from communities about the strengths and weakness of the data
- Ensuring those people who are using the data and who may receive the data are trauma informed and use a trauma informed lens in all applications
- Framing the report with a resiliency and strength-based lens, adding in resiliency data

Data in action: Ways that OPIP has Supported CCOs and Key Stakeholder to Use the Health Complexity Data to Galvanize Action

Supports provided by OPIP include activities in these three areas:

1. **Use the population-level findings to engage community partners** to:
   - Understand child and family needs,
   - Identify community-level assets, and
   - Address capacity of services to serve children with health complexity

2. **Use the population and child-Level findings to identify:**
   - Opportunities to enhance care coordination and care management
   - Community-based and centralized supports for children with health complexity

3. **Leverage the data to support a health complexity informed approach with front-line health care providers:**
   - Trauma informed and culturally responsive care
   - Explore role of health complexity in value-based payment models

Example of a Group Discussion:

Reflections to Data and Global Opportunities for Using this Data

- What findings **resonate with you?**
- What is **missing from the data** that is important context as we consider how to use it?
- How do we **get the family voice** on the data?
- What local data do you have about **resilience** that should be added?
- **How can the data be provided to you** so that is helpful in your efforts? Is there analysis or groups of children that you want to see the data specific to, why?
- What assets and resources in the community **exist NOW** that that can support children with various levels of health complexity?
- **What gaps** exists to address children with high health complexity?

OPIP

Example of a Group Discussion

Let's roll up our sleeves: Brainstorm on what the data means related to care coordination

- How do we gather input from families about what supports would be helpful and what barriers we need to remove?
- What would it look like if children with various levels of heath complexity received best-match supports in your community?
    - Consider the differences in needs and best match services across the nine groups of children with health complexity.
- What would have to happen to make that possible?
- Within your community, what care coordination programs currently exist?
- How do these programs address children with various levels of health complexity?
- Are they intentionally addressing different populations?

Example of a Group Discussion: **Leveraging data to support health complexity approach with front-line health care providers**

Part 1: Value of **examining aggregate population-level data** by practice and by **geographic regions** to assess resources and health complexity management needs in the practice and/or community

- What resources or supports are needed in places that have high proportions of children with health complexity?
- What are ways the population-level information could be used as part of work with practices? To stratify metrics? To inform APM models? To inform VBP models?
- How do we consider children with high medical complexity for whom the primary care provider may not necessarily be the person with the best connection to the family or who the child sees the most? What are ways that specialty-based complex care management may be considered?

Example of a Group Discussion: **Leveraging data to support health complexity approach with front-line health care providers**

Part 2: Sharing the child-level data variable indicators with the primary care practice to which the child is attributed

- What system and processes need to be in place before this data is shared?
  - ❖ Trauma-informed (for example, has the practice gone through a trauma-informed training?)
  - ❖ Does the practice have resources to assess families?
  - ❖ Does practice have resources and support to address areas identified?
- Value and need for primary care input on the strengths and needs of the child and family
- Value of relationship and trust PCP may have with the family (if child accessing routine care) to engage in complex care management services identified

For More Information

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

Visit: https://oregon-pip.org/area-of-focus/health-complexity/l

Children's Health Complexity Data
Transformation Center, Oregon Health Authority

Visit: oregon.gov/oha/HPA/dsi-tc/Pages/Child-Health-Complexity-Data.aspx

Lucile Packard Foundation for Children's Health

https://www.lpfch.org/cshcn/blog/2019/03/05/april-2-maximizing-system-level-data-address-health-and-social-complexity