



APPENDIX

Building an Integrated System of Care for Children and Youth With Special Health Care Needs

TABLE OF CONTENTS

Appendix A	Oregon Child Integrated Dataset (OCID) Analysis Methods	2
Appendix B	Demographic Characteristics	8
Appendix C	Complex Social and Environmental Experiences	.11
Appendix D	Health Care Utilization Metrics	.13

This document is the appendix of a brief titled <u>Building an Integrated System of Care for Children and Youth With Special Health Care Needs</u>. These appendices provide information on the methodology used to create the 2021 profile analysis, including variable definitions and sources; and expanded data tables.

APPENDIX A

OREGON CHILD INTEGRATED DATASET (OCID) ANALYSIS METHODS

For the purposes of this MED policy brief, the Governance Committee of the Oregon Child Integrated Dataset (OCID) project supported the use of OCID data to create a profile analysis of Oregon children and youth enrolled in Medicaid or the Children's Health Insurance Program (CHIP) who had special health care needs in 2021. Within the brief, we present a set of data visualizations and a table showing the percentage of Oregon children in Medicaid or CHIP who had chronic health conditions, the prevalence of different social and environmental experiences in their lives, and their use of different types of health care services. We also include data from a recently completed OCID analysis series, Complex Medical and Social Needs in Early Childhood.¹ This data complements the brief's policy findings around building a system of care for children and youth with special health care needs, and demonstrates the value of an integrated, cross-program administrative dataset at a statewide level.

As part of OCID's governing principles, the project makes data analyses available to the public. This document provides details on the methods used to conduct the 2021 profile analysis, as well as a more detailed set of appendix tables for the different variables presented. For the full findings and methodology used for the recent OCID series on *Complex Medical and Social Needs in Early Childhood* (including public webinar recordings), please visit the <u>OCID website</u>.¹

Study Population

The aim of this analysis was to describe demographic characteristics, health states, health care utilization, complex social and environmental experiences, and public program participation among children in the OCID dataset enrolled in Medicaid or CHIP.

Data on demographic characteristics, health states, health care utilization, and complex social and environmental experiences focus on children and youth aged 0 to 21 years who were enrolled in Medicaid or CHIP in the year 2021. We first identified all members enrolled in Medicaid or CHIP for at least 1 month in 2021 and then restricted the analysis to children aged 0 to 21 years. OCID contains data on both children and their parents; members with a type-identifier "parent" were not included, which excludes both OCID members initiated into the dataset as parents, and OCID members initiated as children who subsequently became parents. Children were then matched in OCID demographic data by birthdate. Children with duplicate birthdates that could not also be matched based on demographic characteristics (n = 1,594) were excluded from the analysis, yielding a final cohort of 541,194 children. Twenty-five percent of children in this cohort (n = 136,167) were not born in Oregon; these children were excluded from denominators for estimates that required birth records or linkage through a family identifier but were otherwise included.

Data presented in the brief on public program participation during early childhood and early educational outcomes drew from a separate published analysis for the OCID project.¹ These variables were calculated for a cohort of children aged 0 to 5 years enrolled in Medicaid or CHIP and born between 2007 and 2010 (n = 34,450) For detailed methodology on that separate analysis, please visit the OCID website.¹

This analysis comprised administrative data from the Oregon Health Authority (OHA), Oregon Department of Education (ODE), the Oregon Department of Early Learning and Care (DELC), and the Oregon Department of Human Services (ODHS). Children were identified across programs and linked to family members using a universal identifier provided by Integrated Client Services, housed within the Oregon Office of Forecasting, Research, and Analysis (OFRA).

Variable Selection

Variables for this analysis were chosen based on policy priorities of the MED project, input from agency employees, and a review of relevant peer-reviewed literature and policy work. All variables were either used in the originally reported form from each agency, or created in consideration of agency-specific recommendations and reports. Methods specific to derived variables are described below. Variables were developed by a primary coder, code was reviewed by a secondary team member, and results were reviewed by the MED and OCID teams at large. Table A1 provides an overview of reported variables; detailed descriptions of variable data sources and analyses are below.

TABLE A1 Analysis variable descriptions and data sources

Variable	Description	Source
Demographic and equit	ty characteristics	
Age	Age at the end of 2021	Birth record, other OCID administrative sources when birth record not available
Sex or gender	Sex or gender designation in 2021	ODE; OHA Medicaid claims or Vital Statistics when ODE not available
Geography	Rural, urban, or tri-county ^a designation in 2021	ODE; OHA Medicaid claims when ODE not available
Race and ethnicity	Race and ethnicity designation in 2021	Multiple sources using the OCID <u>Race</u> and ethnicity methodology
Medicaid disability	Enrolled in Medicaid due to a federally qualifying disability in 2021	OHA Medicaid Claims
Individual Education Program	Any history of receipt of an individual education program between kindergarten and the 2021–2022 academic year	ODE
Low birth weight	Weighing less than 2,500 g at birth	OHA Vital Statistics
Parent education at birth	Highest level of education achieved by a linked parent at the time of birth	OHA Vital Statistics
WIC at birth	Parent participation in the Special Supplemental Nutrition Program for Women, Infants, and Children	OHA Vital Statistics
Social and environment	tal experiences	
Foster care	Any history of out-of-home foster placement between birth and 2021	ODHS
Substantiated maltreatment	Any history of a substantiated maltreatment claim between birth and 2021	ODHS

Variable	Description	Source
Student houselessness	Any history of houselessness during enrollment in public school through academic year 2021–2022	ODE
Deep poverty	Any history of personal or family participation in Temporary Assistance for Needy Families between birth and 2021	ODHS
Food insecurity	Any history of personal or family participation in the Supplemental Nutritional Assistance Program between birth and 2021	ODHS
Parent mental health treatment Health care utilization	Any history of a linked parent's participation in mental health treatment between birth and 2021	ODHS
Emergency department visits	Any history of an emergency department visit in 2021	OHA Medicaid claims
Inpatient stays	Any history of an inpatient stay in 2021	OHA Medicaid claims
Well-child visits	Any history of a well-child visit in 2021, calculated for children aged 3-6	OHA Medicaid claims

Note. ^a Tri-county area comprises Clackamas, Multnomah, and Washington counties in Oregon.

Abbreviations. ODE: Oregon Department of Education; ODHS: Oregon Department of Human Services; OHA: Oregon Health Authority; WIC: Women, Infants, and Children Nutrition Program.

Timing

This analysis shares a cross-sectional description of the demographic characteristics, health states, health care utilization, and complex social and environmental experiences for children in the OCID dataset enrolled in Medicaid or CHIP in calendar year 2021. Demographic characteristics, medical complexity, and health care utilization include those occurring or reported between January 1, 2021, and December 31, 2021. Complex social and environmental experiences are "ever-never" variables reported as having ever occurred during the life of the child, through the year 2021.

Houselessness and individualized education program (IEP) variables are collected through ODE administrative data and reported on the academic calendar; these variables were reported through academic year 2021–2022. Parental-level social and environmental factors (parental mental health treatment) were calculated for the parent during the life of the child, through year 2021.

Metrics on public program participation during early childhood and subsequent early educational experiences and outcomes came from a separately published analysis for the OCID project.¹ Metrics were calculated for a separate cohort of children aged 0 to 5 that were born between 2007 and 2010 and enrolled in Medicaid or CHIP for at least 1 month of each year from age 2 to the day before their fifth birthday.

Demographic and Equity Characteristics

Demographic characteristics are reported for the year 2021. OCID worked with state partners to develop a methodology for determining race and ethnicity attributions using multiple sources. See the OCID Race and Ethnicity Data Overview for a summary of the methodology.

The parent education at birth and low birth weight variables were taken from the birth record and reported only for children born in the state of Oregon. Receipt of an IEP is reported by ODE and is available only for years that the child is enrolled in Oregon public schools.

A small percent of children (~0.1%) were missing data on sex or gender and county of residence. Those children were not included in calculations for those variables but were otherwise included in prevalence estimates.

See the analysis variable table (Table A1) for a brief description of each variable.

Medical Complexity

Medical complexity in year 2021 was calculated for each child by applying the Pediatric Medical Complexity Algorithm (PMCA)^{2,3} to Medicaid and CHIP administrative claims data. The period of analysis was January 1, 2021, to December 31, 2021. The PMCA is a modification of the Chronic Disability Payment System that uses a claims-based algorithm to identify diagnoses specific to chronic conditions using ICD-10 codes.^{2,3} The PMCA requires a 3-year claim look-back period to identify conditions. For this analysis, children were required to be enrolled in Medicaid or CHIP for at least 1 month in the year 2021; no other enrollment criteria were applied. Children were categorized into either nonchronic, noncomplex chronic, or complex chronic groups based on the presence or absence and severity of each identified condition (see Table A2). The PMCA is a publicly available algorithm with published code for use within the Statistical Analysis System data analysis program.

TABLE A2
Pediatric medical complexity algorithm categories

Nonchronic	Noncomplex Chronic	Complex Chronic
 No acute or chronic conditions, or Acute conditions lasting < 1 year e.g., ear infection, pneumonia 	 Chronic conditions lasting at least 1 year Single body system affected Conditions are not progressive or malignant e.g., Type 1 diabetes, asthma, ADHD, depression 	 Chronic conditions in ≥ 2 body systems, or Progressive or malignant conditions, or Continuous dependence on technology > 6 months e.g., muscular dystrophy, lymphomas, Type 1 diabetes plus depression

Abbreviation. ADHD: attention-deficit/hyperactivity disorder.

This analysis used the less restrictive definition of PMCA to account for varying enrollment among children and maximize inclusion (see <u>Limitations</u> section for more details). Children in the cohort that met enrollment criteria but did not have any claims were classified as noncomplex.

Health Care Utilization

Children in the denominator for health care utilization metrics were required to be fully enrolled in Medicaid or CHIP for the year 2021 (n = 457,743). Children enrolled in both Coordinated Care Organizations (managed care) and fee-for-service plans were included. Utilization was reported as the proportion of children with at least 1 claim for each visit type (inpatient, emergency department, well-child) in the year 2021. Well-child visits were identified using applicable ICD-10 and current procedural terminology codes according to previously described OCID methods and OHA technical guidance.⁴ Well-child visits were reported for children aged 3 to 6 only.

See Table A1 for a brief description of each variable.

Complex Social and Environmental Experiences

Complex social and environmental experiences were those that occurred during the life of the child through the end of year 2021. Substantiated maltreatment and foster care data were taken from Oregon Child Welfare services in ODHS. A child was considered to have a history of substantiated maltreatment if they had a history of any substantiated report. A child was considered to have foster care contact if they experienced any removal from the home. Deep poverty was calculated as a history of receiving Temporary Assistance for Needy Families benefits through year 2021, and food insecurity was calculated as a history of receiving Supplemental Nutritional Assistance Program benefits through year 2021. Participation in WIC was calculated from the birth record and thus, is only available for children born in Oregon. A history of being affected by houselessness is reported by ODE from the time of enrollment in Oregon public schools through academic year 2021–2022. Notably, data on houselessness are available in OCID beginning in 2012.

Children were considered to have experienced complex parent-level (history of mental health treatment) if a parent experienced the factor any time from the birth of the child through the year 2021. Parents were linked to children using the family identifier variable assigned by OFRA. The family identifier variable requires use of the birth record; thus, parents can only be linked to children born in Oregon. Notably, some children may be linked to multiple parents and/or multiple families. Parents were identified as having a history of mental health treatment if they had any record of treatment from ODHS caseloads.

See Table A1 for a brief description of each variable.

Program Participation and Early Education Experiences and Outcomes

Public program participation metrics during early childhood and subsequent early education experiences and outcomes were calculated for a separate cohort of children aged 0 to 5 and born between 2007 and 2010 as part of the OCID Series on Complex Medical and Social Needs in Early Childhood.¹ Children were considered to have had contact with early childhood supports (Early Intervention [EI], Early Childhood Special Education [ECSE], public preschool, and home visiting) if they had any record of program participation from birth to age 5. The analysis also reported whether children had a history of participation in an Individualized Education Plan (IEP) or a Section 504 plan through third grade. Program participation data were collected from data in ODHS caseloads and

ODE. Participation in EI or ECSE was considered a combined, ever-never variable for participation in either program. Public preschool includes participation in the Oregon Prenatal to Kindergarten program. Home visiting data are from the Maternity Case Management/Babies First! programs; data from other home visiting programs available in Oregon are not collected by OCID or represented here, meaning that home visiting participation rates may be underrepresented. For detailed methodology on that separate analysis, visit the OCID website.¹

Limitations

There are limitations to this analysis. In general, analyses using secondary, administrative data sources are not necessarily comprehensive and may be subject to bias. Medicaid and CHIP claims data do not reflect the full spectrum of health states or health experiences of an individual, only those billed to the program. Other medical care by community health centers, school health centers, or care paid for out of pocket is not comprehensively captured here. Further, assessments, diagnoses, or treatments not eligible for reimbursement may not be recorded in administrative claims, and thus remain unidentifiable. Finally, the cohort for analysis comprised only children enrolled in Medicaid or CHIP; thus, results do not reflect the Oregon child population at large.

Medical complexity status was calculated using the less restrictive definition of the PMCA, which requires only 1 occurrence of a diagnosis code for inclusion in a diagnostic category.² This definition maximizes inclusion and accounts for Medicaid and CHIP enrollment churn; however, there is opportunity for misclassification, as there may be children with a single occurrence of a diagnostic code for testing or assessment purposes who do not result in having the condition. In addition, children who were enrolled in Medicaid or CHIP during the claim look-back period but did not have any administrative claims were classified as noncomplex. As full enrollment was not required for this calculation, it is possible these children had other medical claims not captured in Medicaid or CHIP that may classify them as having chronic conditions.

The data in this report are purely descriptive in nature, and no causal associations or assessment of effect should be taken from the results.

APPENDIX B DEMOGRAPHIC CHARACTERISTICS

TABLE B1 Demographics of Oregon children enrolled in Medicaid or CHIP aged 0 to 21, by medical complexity, 2021

	Nonchronic (n = 348,362)	Noncomplex chronic (n =120,491)	Complex chronic (n = 72,341)	Total (N = 541,194)
TOTAL	64.4%	22.3%	13.4%	100.0%
Sex or gender				
Female	50.2	46.6	45.6	48.8
Male	49.7	53.1	54.1	51.1
Nonbinary	0.1	0.3	0.3	0.2
Age (years)				
0 to 5	31.6	21.3	20.3	27.8
6 to 11	30.6	28.4	27.1	29.7
12 to 17	26.4	34.5	33.9	29.2
18 to 21	11.3	15.7	18.6	13.3
Geography				
Rural	27.7	27.4	25.6	27.3
Tri-county ^a	35.0	34.0	35.2	34.8
Urban	37.3	38.7	39.1	37.8
Race and ethnicity				
American Indian/Alaskan Native	9.3	10.3	10.0	9.6
Asian	4.1	3.2	2.9	3.7
Black/African American	5.6	6.0	6.4	5.8
Hispanic/Latinx	25.1	24.5	22.8	24.6
Native Hawaiian/Pacific Islander	2.1	1.7	1.4	1.9
White	49.5	52.5	55.0	50.9
Other race	0.8	0.5	0.4	0.7
Unknown	3.4	1.3	1.1	2.7
Medicaid disability ^b				
No	99.9	99.4	95.7	99.3
Yes	0.1	0.6	4.3	0.7
Ever had an IEP				
No	88.6	76.1	60.3	82.1
Yes	11.4	23.9	39.7	18.0
Low birth weight ^c				
No	94.4	93.0	89.3	93.4
Yes	5.6	7.0	10.7	6.6

	Nonchronic (n = 348,362)	Noncomplex chronic (n =120,491)	Complex chronic (n = 72,341)	Total (N = 541,194)
Parent education at birth ^c				
College+	19.8	15.2	15.2	18.1
Some college	26.7	26.8	27.0	26.8
High school graduate or GED	33.4	36.5	37.0	34.6
Some high school	14.0	15.5	15.1	14.5
8 th grade or less	5.4	5.4	4.9	5.3
WIC enrollment at birth ^c				
No	39.5	33.8	32.9	37.3
Yes	60.5	66.2	67.1	62.7

Notes. ^a Tri-county area comprises Clackamas, Multnomah, and Washington counties in Oregon. ^b Children enrolled in Medicaid with Program Eligibility Resource Codes, indicating a qualifying federal disability diagnosis. ^c Data represents the proportion of children born in Oregon as the denominator (n = 405,027).

Abbreviations. CHIP: Children's Health Insurance Program; GED: General Educational Development test; IEP: individualized education program; WIC: Special Supplemental Nutrition Program for Women, Infants, and Children.

TABLE B2

Demographics of Oregon children enrolled in Medicaid or CHIP aged 0 to 21, by medical complexity and age group, 2021

			chronic 48,362)		No		ex chror 20,492)	nic	(x chronio (2,341)	C
Age Group	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21
Sex or gender												
Female	51.3	52.7	47.6	46.1	43.6	43.0	48.2	53.9	38.8	36.4	49.3	59.5
Male	48.7	47.3	52.1	53.9	56.4	56.9	51.2	46.0	61.2	63.5	49.8	40.3
Nonbinary	Supp.	0.1	0.2	Supp.	Supp.	0.1	0.6	0.1	Supp.	0.1	0.8	0.1
Geography												
Rural	28.1	28.0	27.5	26.0	26.7	27.8	27.7	26.8	24.8	25.2	25.9	26.7
Tri-county ^a	33.6	34.7	36.1	37.6	35.5	33.5	33.2	34.3	38.1	36.4	34.0	32.8
Urban	38.3	37.3	36.4	36.4	37.8	38.7	39.1	38.9	37.1	38.5	40.1	40.5
Race and ethnicity												
American Indian/Alaskan Native	5.1	9.7	13.4	10.7	5.7	9.9	13.3	10.3	5.7	9.5	12.7	10.6%
Asian	3.5	4.3	4.5	4.4	3.4	3.4	2.9	3.1	3.4	3.0	2.6	2.5
Black/African American	4.9	6.2	5.9	5.1	5.4	6.9	6.1	5.4	6.1	7.0	6.6	5.3
Hispanic/Latinx	22.3	25.8	26.5	27.5	25.1	25.2	24.1	23.1	24.5	23.5	22.6	20.2
Native Hawaiian/Pacific Islander	1.6	2.5	2.4	1.8	1.6	2.0	1.7	1.3	1.4	1.8	1.5	1.0
White	52.8	50.0	46.3	46.6	52.3	52.2	51.6	55.4	53.2	55.0	53.8	59.2
Other race	2.5	Supp.	Supp.	Supp.	2.5	Supp.	Supp.	Suppr.	2.1	Supp.	Supp.	Supp.
Unknown	7.2	1.5	1.1	3.9	4.0	0.4	0.3	1.5	3.7	0.3	0.2	1.2

Source. Center analysis of Oregon Child Integrated Dataset (OCID).

	Nonchronic (n = 348,362)			Noncomplex chronic (n = 120,492)				Complex chronic (n = 72,341)				
Age Group	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21
Medicaid disability ^b												
No	100	100	99.9	99.7	99.9	99.6	99.3	98.9	98.0	94.6	95.3	95.2
Yes	Supp.	Supp.	0.1	0.3	0.1	0.4	0.7	1.1	2.0	5.4	4.7	4.8
Ever had an IEP												
No	99.3	87.5	81.0	79.4	97.2	72.0	68.7	71.3	93.3	44.7	52.9	60.4
Yes	0.7	12.5	19.0	20.6	2.8	28.0	31.3	28.7	6.7	55.3	47.1	39.6
Low birth weight ^c												
No	94.3	94.3	94.6	94.6	91.4	93.5	93.8	93.3	84.5	91.0	91.8	89.8
Yes	5.7	5.7	5.4	5.4	8.6	6.5	6.2	6.7	15.5	9.0	8.2	10.2
Parent education at birth ^c												
College+	26.0	20.1	13.3	11.5	21.8	10.9	9.9	16.8	21.8	11.3	9.6	17.6
Some college	29.7	28.9	21.9	21.1	30.2	23.1	22.9	29.9	29.8	23.4	23.4	31.0
HS graduate or GED	31.5	31.1	37.3	38.6	33.3	40.3	41.3	32.8	33.5	40.7	42.9	32.1
Some high school	9.6	14.7	18.5	17.5	11.0	18.1	17.0	15.6	11.3	17.4	16.4	14.9
8th grade or less	2.9	4.9	8.2	9.6	3.3	6.7	7.6	4.6	3.1	6.3	6.2	4.0
Unknown	0.4	0.3	1.0	1.6	0.4	0.9	1.4	0.3	0.4	0.9	1.5	0.4
WIC at birth ^c												
No	47.9	32.1	36.0	41.1	40.6	32.9	39.7	26.2	39.2	31.7	38.3	26.0
Yes	52.1	67.9	64.0	58.9	59.4	67.1	60.3	73.8	60.8	68.3	61.7	74.0

Notes. ^a Tri-county area comprises Clackamas, Multnomah, and Washington counties in Oregon. ^b Children enrolled in Medicaid with Program Eligibility Resource Codes, indicating a qualifying federal disability diagnosis. ^c Data represents the proportion of children born in Oregon as the denominator (n = 405,027).

Source. Center analysis of Oregon Child Integrated Dataset (OCID).

Abbreviations. CHIP: Children's Health Insurance Program; GED: General Educational Development test; HS: high school; IEP: individualized education program; Supp.: suppressed due to small sample size; WIC: Special Supplemental Nutrition Program for Women, Infants, and Children.

APPENDIX C

COMPLEX SOCIAL AND ENVIRONMENTAL EXPERIENCES

TABLE C1
Lifetime complex social and environmental experiences^a for Oregon Medicaid or CHIP enrollees aged 0 to 21 years, by medical complexity, 2021

	Nonchronic (n = 348,362)	Noncomplex chronic (n = 120,491)	Complex chronic (n = 72,341)	Total (N = 541,194)
TOTAL	64.4%	22.3%	13.4%	100.0%
Foster care				
No	95.4%	90.8%	87.6%	93.3%
Yes	4.6%	9.2%	12.4%	6.7%
Substantiated maltreatment				
No	88.0%	80.5%	77.1%	84.9%
Yes	12.0%	19.5%	22.9%	15.1%
Student houselessness				
No	89.3%	84.0%	82.7%	87.2%
Yes	10.7%	16.0%	17.3%	12.8%
Deep poverty (TANF)				
No	67.9%	58.0%	55.4%	64.0%
Yes	32.1%	42.0%	44.6%	36.0%
Food insecurity (SNAP)				
No	25.2%	16.0%	14.8%	21.8%
Yes	74.8%	84.0%	85.2%	78.2%
Parent mental health treatment ^b				
No	61.7%	47.9%	43.0%	56.0%
Yes	38.3%	52.1%	57.0%	44.0%

Notes. ^a A child was considered as having a complex social or environmental experience if any relevant record existed from birth through year 2021. ^b Experiences related to parental factors (parent mental health treatment) are those that occurred during the life of the child and are only calculated for children born in Oregon.

Source. Center analysis of Oregon Child Integrated Dataset (OCID).

Abbreviations. CHIP: Children's Health Insurance Program; SNAP: Supplemental Nutritional Assistance Program; TANF: Temporary Assistance for Needy Families.

TABLE C2
Lifetime complex social and environmental experiences^a for Oregon Medicaid or CHIP enrollees aged 0 to 21 years, by medical complexity and age group, 2021

	Nonchronic (n = 348,362)			Noncomplex chronic (n = 120,492)				Complex chronic (n = 72,341)				
Age Group	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21
Foster care												
No	97.7	95.4	93.5	93.0	95.5	91.7	88.3	88.1	92.2	88.8	85.7	84.2
Yes	2.3	4.6	6.5	7.0	4.5	8.3	11.7	11.9	7.8	11.2	14.3	15.8
Substantiated maltreatment												
No	94.1	86.7	83.3	85.8	90.7	80.5	74.9	78.5	86.9	77.9	72.1	74.3
Yes	5.9	13.3	16.7	14.2	9.3	19.5	25.1	21.5	13.1	22.1	27.9	25.7
Student houselessness												
No	99.5	88.3	80.9	82.9	99.3	85.5	76.3	77.3	99.2	84.9	74.8	75.7
Yes	0.5	11.7	19.1	17.1	0.7	14.5	23.7	22.7	0.8	15.1	25.2	24.3
Deep poverty (TANF)												
No	79.4	64.6	60.0	63.5	74.3	56.2	51.0	54.2	71.3	54.1	49.1	51.4
Yes	20.6	35.4	40.0	36.5	25.7	43.8	49.0	45.8	28.7	45.9	50.9	48.6
Food insecurity (SNAP)												
No	37.9	20.2	17.5	21.8	29.2	13.4	11.1	13.4	27.5	13.1	10.4	11.2
Yes	62.1	79.8	82.5	78.2	70.8	86.6	88.9	86.6	72.5	86.9	89.6	88.8
Parent mental health treatment ^b												
No	71.6	55.9	56.0	57.4	63.7	43.8	41.4	44.2	59.6	39.8	36.8	37.1
Yes	28.4	44.1	44.0	42.6	36.3	56.2	58.6	55.8	40.4	60.2	63.2	62.9

Notes. ^a A child was considered as having a complex social or environmental experience if any relevant record existed from birth through year 2021. ^b Experiences related to parental factors (parent mental health treatment) are those that occurred during the life of the child and are only calculated for children born in Oregon.

Abbreviations. CHIP: Children's Health Insurance Program; SNAP: Supplemental Nutritional Assistance Program; TANF: Temporary Assistance for Needy Families.

Source. Center analysis of Oregon Child Integrated Dataset (OCID).

APPENDIX D

HEALTH CARE UTILIZATION METRICS

TABLE D1

Health care utilization (%) among Oregon children aged 0 to 21 years, continuously enrolled in Medicaid or CHIP, by medical complexity status and age group, 2021

	Nonchronic (n = 280,262)			No		olex chro 09,896)		Complex chronic (n = 67,585)				
Age Group	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21	0-5	6-11	12-17	18-21
≥ 1 emergency department visit	18.6	9.0	9.1	12.4	25.1	13.9	16.5	23.5	30.5	17.6	24.7	35.4
≥ 1 inpatient visit	1.7	0.1	0.3	1.3	2.2	0.5	1.0	2.7	5.1	2.0	3.5	6.0

Source. Center analysis of Oregon Child Integrated Dataset (OCID).

Abbreviation. CHIP: Children's Health Insurance Program.

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Suggested citation

Baumgartner J, Burbank C, Evans AB, King VJ. Appendices: building an integrated system of care for children and youth with special health care needs (CYSHCN). Portland, OR: Center for Evidence-based Policy, Oregon Health & Science University; 2025.

Conflict of interest disclosure

No authors have conflicts of interest to disclose. All authors have completed and submitted the Oregon Health & Science University form for Disclosure of Potential Conflicts of Interest.

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