



Practice-Level Assessment of the Proportion of Children and Youth with Special Health Care Needs (CYSHCN) and Variation in the Quality of Medical Home Services Provided for CYSHCN



Colleen Peck Reuland, MS¹, Charles Gallia, PhD² *

¹ Oregon Pediatric Improvement Partnership (OPIP), Oregon Health & Science University ² Office of Health Analytics, Oregon Health Authority

Objectives

- To examine the **proportion, type, and level of special health needs** observed in 21 primary care practices.
- To assess variations in Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Clinician and Group, Patient-Centered Medical Home (CAHPS CG PCMH) quality domains by CYSHCN.

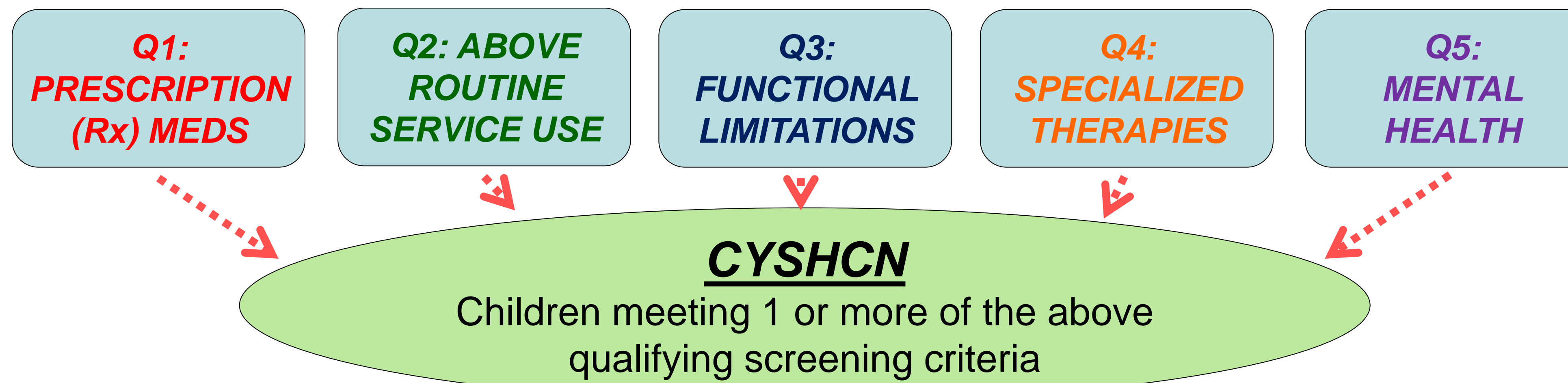
Design

- Through the Tri-State Children's Health Improvement Consortium (T-CHIC), the Medicaid/CHIP programs in Alaska, Oregon, and West Virginia supported the administration of the CAHPS CG PCMH for 21 primary care sites.
- The survey was administered **October-December 2012** using the standardized protocols.
- Respondents were surveyed in English and Spanish.
- A validated **five-item screener to identify CYSHCN**, developed by the Child and Adolescent Health Measurement Initiative and anchored to five health consequences that map to the Maternal and Child Health Bureau definition of CYSHCN, was added to the survey.
- The overall **proportion of children who experience one or more of the consequences** and their types was calculated.
- The standard **CAHPS CG PCMH quality domain achievement scores** were calculated and transformed to 0-100 values, with higher scores indicating higher quality.
- Quality domain achievement scores were compared between CYSHCN and non-CYSHCN.
- Practices not achieving a sample size of N=30 were excluded from practice-level analysis.**

Population Studied

- Children whose parents responded to the CAHPS CG PCMH survey and who receive care in one of 21 primary care practice sites (N=1874).

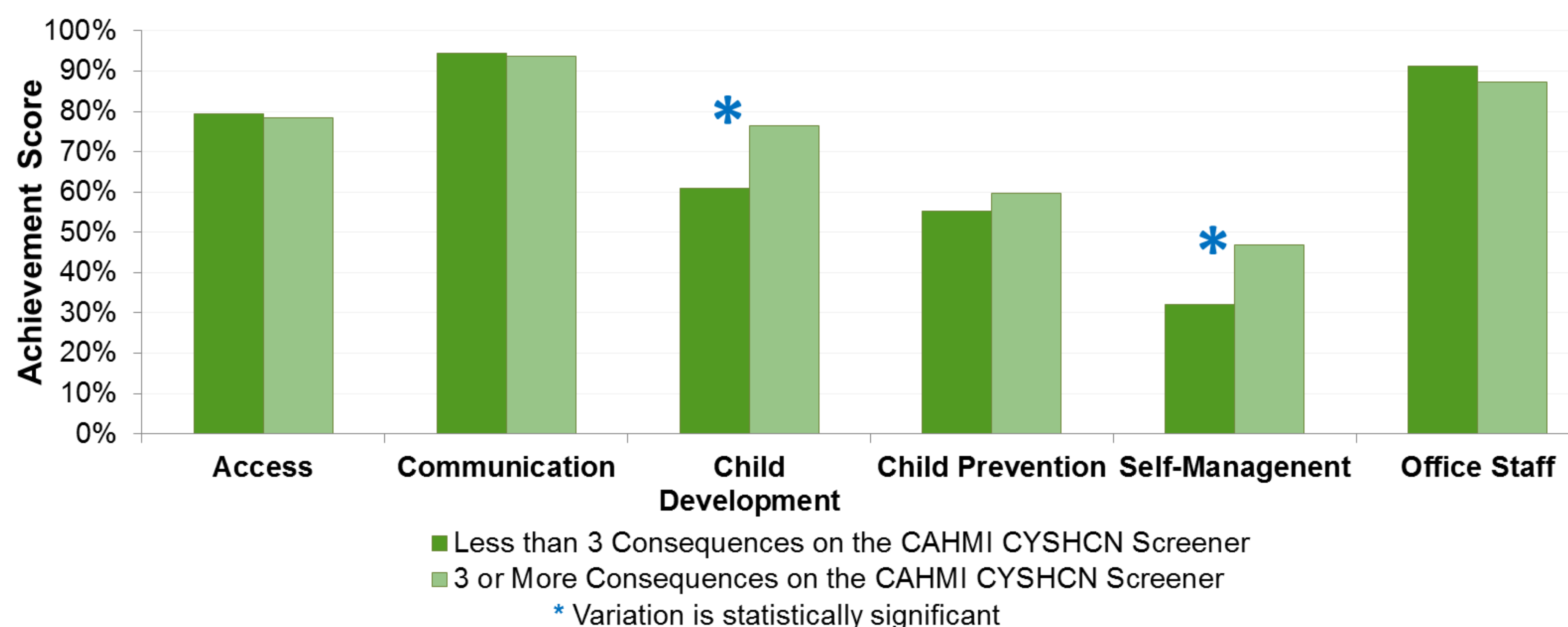
CAHMI CYSHCN Screener Included in T-CHIC CAHPS CG PCMH



Proportion of CYSHCN, by number of Consequences and by each Consequence on the CAHMI CYSHCN Screener

Number/ type of Consequence on the CAHMI CYSHCN Screener	Proportion Across All Practices (21 practices)	Proportion from Participating Practices within Each State		
		AK Practices (3 practices)	OR Practices (8 practices)	WV Practices (10 practices)
Proportion of Children, by number of Consequences on the CAHMI CYSHCN Screener				
One or More Consequences on the CAHMI CYSHCN Screener	30%	23%	26%	35%
Range of Practice Percentages	19%-49%	22%-26%	19%-49%	22%-49%
Three or More Consequences on the CAHMI CYSHCN Screener	8%	9%	7%	10%
Range of Practice Percentages	2%-18%	8%-10%	2%-16%	6%-18%
Proportion of Children, by each Consequence on the CAHMI CYSHCN Screener				
1) Prescription medication need/use	22%	13%	18%	29%
Range of Practice Percentages	10%-44%	10%-16%	13%-35%	17%-44%
2) Above routine use of medical care, mental health or other health services	13%	13%	12%	14%
Range of Practice Percentages	8%-24%	13%-13%	8%-24%	9%-22%
3) Limited or prevented in ability to function	7%	10%	6%	8%
Range of Practice Percentages	2%-18%	9%-12%	2%-12%	4%-18%
4) Specialized therapies (OT, PT, Speech)	6%	10%	5%	6%
Range of Practice Percentages	2%-12%	10%-12%	2%-10%	3%-11%
5) Counseling or treatment emotional, behavioral or developmental problems	11%	11%	10%	11%
Range of Practice Percentages	3%-22%	11%-13%	3%-22%	4%-22%

Families of CYSHCN who Experience Significant Consequences More Likely to report a Higher Achievement Score on Child Development and Self-Management Domains



Principal Findings

- A response of **18.0%** yielded a sample of **N=1,908**. Three practices did not have 30 responses.
- The **prevalence of CYSHCN** among children age 0-17 years was **30%**, with **8%** of children **experiencing three or more** of the five health **consequences** assessed.
- Significant variation** was observed in the practice-level samples in the proportion of CYSHCN (Range: **22%-49%** $p < 0.001$).
- CYSHCN reported **higher achievement scores** in the **Child Development (68% vs 60%** $p < 0.001$) and **Self-Management (41% vs 30%** $p < 0.001$) domains when compared to non-CYSHCN.
- Of the children who experience three out of five of the health consequences assessed, less than half (**42%**) **reported receiving Self-Management support**.
- There was no significant variation in the achievement scores on the Access, Communication, Child Prevention or Office Staff domains.

Specific Quality Domain Items on which CYSHCN Scored Higher than Non-CYSHCN

Child Development and Self Management Items for which a Significant Difference (p < 0.05) between CYSHCN and Non-CYSHCN Achievement Scores Exist	N	Average Item Achievement Score
Q38 In the last 12 months, did you and anyone in this provider's office talk about your child's learning ability?	Non-CYSHCN: 1185 CYSHCN: 496	48% 62%
Q41 In the last 12 months, did you and anyone in this provider's office talk about your child's moods and emotions?	Non-CYSHCN: 1188 CYSHCN: 498	55% 67%
Q47 In the last 12 months, did you and anyone in this provider's office talk about how your child gets along with others?	Non-CYSHCN: 1182 CYSHCN: 499	47% 61%
Q49 In the last 12 months, did anyone in this provider's office talk with you about specific goals for your child's health?	Non-CYSHCN: 1178 CYSHCN: 499	41% 58%
Q50 In the last 12 months, did anyone in this provider's office ask you if there are things that make it hard for you to take care of your child's health?	Non-CYSHCN: 1182 CYSHCN: 496	18% 24%

Conclusions

- The **rates of CYSHCN vary** by practice.
- Types of **consequences and health needs also vary** by practice.
- CYSHCN were more likely to receive care** addressing their child's development and self-management needs when compared to non-CYSHCN, however there remains significant room for improvement.

Implications for Policy, Delivery, and Practice

- The **CAHPS CG PCMH survey with the inclusion of a CYSHCN screener** allows practices to better understand the needs of their patient population, including the proportion of CYSHCN and type of special health care needs.
- Enhancing the CAHPS CG PCMH allows the practice to **assess the quality of medical home services** for CYSHCN, for whom the original definition of medical home was intended.
- Medicaid/CHIP programs can support practices in understanding their population of CYSHCN and improving care for this population through supporting **group-level contracting of the survey**.

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Child CAHPS CG PCMH Respondents, by Participating Practices in each State

Variable	Specification	Proportion Across All Practices (21 practices)		Respondents from Participating Practices within Each State					
		N=1815	%	AK Practices (3 practices)	OR Practices (8 practices)	WV Practices (10 practices)			
Ethnicity of Child	White, Non-Hispanic	1384	76%	79	34%	523	72%	782	91%
	Range of Practice Percentages	0-97%		0-76%		21-89%		68-97%	
	Non-White or Hispanic	431	24%	156	66%	199	28%	76	9%
	Range of Practice Percentages	3-100%		24-100%		11-79%		3-32%	

T-CHIC

The Tri-state Children's Health Improvement Consortium (T-CHIC) is an alliance between the Medicaid/CHIP programs of Alaska, Oregon, and West Virginia, formed with the goal of markedly improving children's health care quality. T-CHIC aims to drive continuous quality improvement in child health care by: 1) Improving children's health and health care quality measurement; 2) Integrating Health Information Technology (HIT) systems; and 3) Developing the best models of health care delivery for children and their families. Each participating state will learn what works best for improving children's health in their own state and across T-CHIC.