

June 2016

INTRODUCTION

Previous research has shown that children with special health care needs generally require more health care services and generate health care costs at a rate 3 times higher than that of children without special health care needs (Newacheck & Kim, 2005). Despite this fact, little research has been conducted at the state level on the health needs of this vulnerable population. This data brief uses the 2015 Ohio Medicaid Assessment Survey (OMAS) to describe key health indicators of Ohio's children with special health care needs (CSHCN). These indicators include insurance coverage, poverty status, health status, access to health care, and health care utilization. This brief addresses the disparities between CSHCN and children without SHCN in Ohio with particular attention to children covered by Medicaid.

BACKGROUND

Children with special health care needs (CSHCN) are defined in the literature as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally” (McPherson et al., 1998). The Data Resource Center for Child and Adolescent Health reported that common conditions among CHSN include, but are not limited to learning disability, ADD/ADHD, anxiety, behavioral problems, developmental delay, speech problems, and asthma.

CSHCN generally have more severe health care needs that require additional health services compared to children without SHCN (Houtrow, Okumura, Hilton, & Rehm, 2011). Further, one study reported that CHSN with one or more chronic conditions accounted for more than 45% of all pediatric charges (Looman et al., 2013). Families of CSHCN are more likely to live in poverty as the medical costs associated with the health care needs of their child can be burdening and various care taking demands can lead to parental unemployment (van Dyck, Kogan, McPherson, Weissman, & Newacheck, 2004).

The 2012 OMAS reported that 23% of all children in Ohio had special health care needs (Chisolm, Steinman, Asti, Earley, 2013). The 2015 OMAS results can provide a better understanding of CSHCN and their specific health care needs.

OBJECTIVES

This policy brief aims to compare CSHCN to Children without SHCN by addressing certain health indicators that include insurance coverage, poverty status, health status, access to health care, and health care utilization. In addition to comparing children with and without special health care needs, this brief will include a separate section discussing these health indicators for Ohio children with and without special healthcare needs who receive Medicaid.

METHODS

OMAS is a telephone survey that samples both landline and cell phones in Ohio. The survey examines access to the health system, health status, and other characteristics of Ohio's Medicaid, Medicaid eligible, and non-Medicaid populations. In 2015, researchers completed 42,876 interviews with adults and 10,122 proxy interviews of children. The 2015 OMAS is the sixth iteration of the survey. For details, please see the OMAS methods report. In the 2015 OMAS, the following questions were asked to identify children with special health care needs:

1. Does the child currently have a developmental disability?
2. Does the child currently need or use medicine prescribed by a doctor or other health care professional (other than vitamins)?
3. Does the child need or use more medical care, mental health or educational services than is usual for most children of the same age?
4. Is the child limited or prevented in any way in their ability to do the things most children of the same age can do?
5. Does the child need or get special therapy, such as physical, occupational or speech therapy?
6. Does the child have any kind of emotional, developmental or behavioral problem for which he/she needs or gets treatment or counseling?

A child was identified as having a special health care need if the adult proxy answered “yes” to any of the six questions and indicated that the problem was due to any medical, behavioral or other health condition that was expected to last for at least 12 months. Children were classified as children without special health care needs (children without SHCN). A limitation of this methodology is that it is possible for children to meet criteria based on a prescription medicine (such as allergy medicine) or to the parent’s estimate of what other children his/or her age can do, but would not in fact be considered to have a special health care need. The only severity qualifier in the OMAS is whether the condition is expected to last for at least 12 months. While this criterion was required for CSHCN classification, it is not the most appropriate measure of severity.

RESULTS

Demographic and Household Characteristics of All Ohio Children

According to the 2015 OMAS, 25% (693,849) of Ohio children 18 years and younger were reported to have special health care needs.

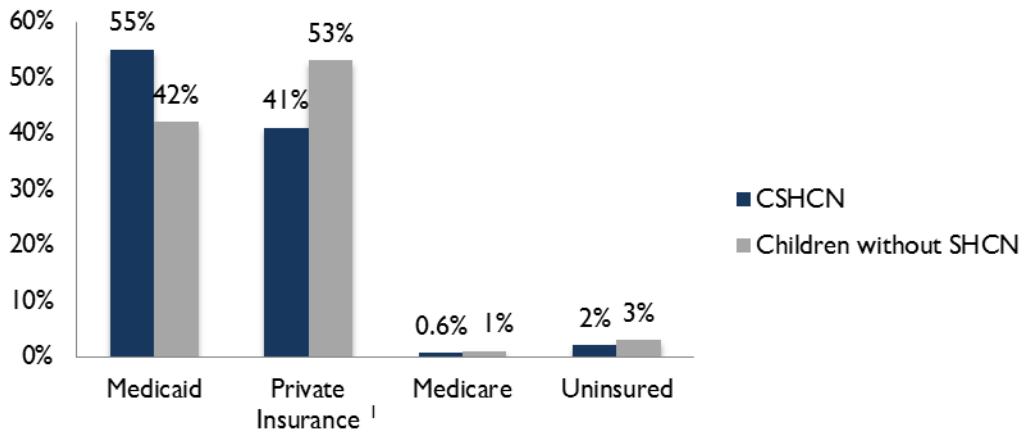
Figure 1 demonstrates insurance status among the two groups. CSHCN were much more likely to be covered by Medicaid compared to children without SHCN (55% vs. 42%, respectively).

Compared to children without SHCN, CSHCN were more likely to be male (55% vs. 50%) and relatively older as 82% of CSHCN were between the ages of 6 to 18 compared to 66% of children without SHCN. CHSCN were also more likely to live

Table 1. Distribution of Select Demographic characteristics of children with CSHCN and Children without SHCN in Ohio

		# of CSHCN	%	# of Children without SHCN	%
Gender	Male	380,663	55%	1,044,724	50%
	Female	313,187	45%	1,048,934	50%
Age (Years)	0-5	123,481	18%	718,317	34%
	6-18	570,368	82%	1,375,342	66%
Race/Ethnicity	White	495,596	71%	1,543,908	74%
	African-American	109,603	16%	298,357	14%
	Hispanic	42,433	6%	113,617	5%
	Other	46,218	7%	137,776	7%
County Type	Metro	404,814	58%	1,108,643	53%
	Rural Appalachian	107,226	16%	366,350	18%
	Rural Non-Appalachian	84,750	12%	298,214	14%
	Suburban	97,059	14%	320,452	15%
Income (% of FPL)	200% or less	364,039	53%	964,105	46%
	200% to 400%	188,554	27%	629,565	30%
	400% or more	141,256	20%	499,988	24%
Insurance	Medicaid	365,820	53%	860,701	41%
	Medicaid & Medicare	17,636	3%	16,117	1%
	Medicare	4,145	0.6%	15,916	1%
	Employer-Sponsored	264,217	38%	1,003,996	48%
	Other directly purchased and Exchange	17,752	3%	76,129	4%
	Other and Insurance type Unknown	13,706	2%	68,578	3%
	Uninsured	10,573	2%	52,221	3%

Figure 1. Health Insurance Type of Ohio Children



¹ Private Insurance is defined as employer-sponsored, other directly purchased, exchange, or other

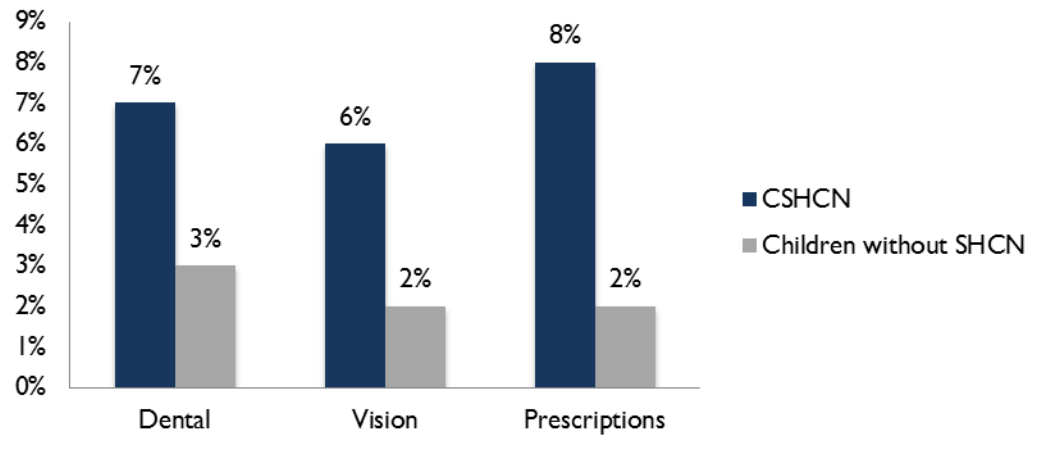
in lower income households as 53% of CHSCN lived in households with incomes below 200% of the Federal Poverty Level (FPL) compared to 46% of children without SHCN. Children with CSHCN and children without SHCN were similar in terms of racial identification and county type. Detailed information about the demographics of the two groups can be found in Table 1.

Reported Health Statuses of Children

The 2015 OMAS data revealed that the rates of fair or poor health status

among CSHCN have improved since 2012. Previously reported findings from the 2012 OMAS indicated that Ohio children without SHCN were 12 times more likely to report fair or poor general health than children without SHCN (Chisolm, Steinman, Asti, Earley, 2013). In 2015, CSHCN were 10 times more likely to be in fair or poor health compared to children without SHCN (11% vs. 1.1%), which suggests that, although the rates of poor health status among CSHCN have improved since 2012, the disparity in poor health status among CSHCN remains high. Figure 2 shows that children with CSHCN are especially likely to have unmet dental, vision, and prescription health care needs compared to children without SHCN.

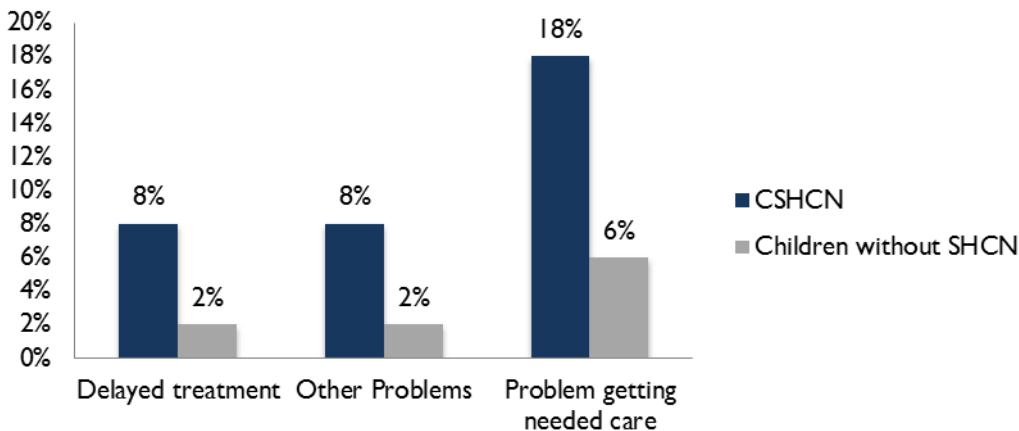
Figure 2. Unmet Health Care Needs of Ohio Children



Access to Health Care

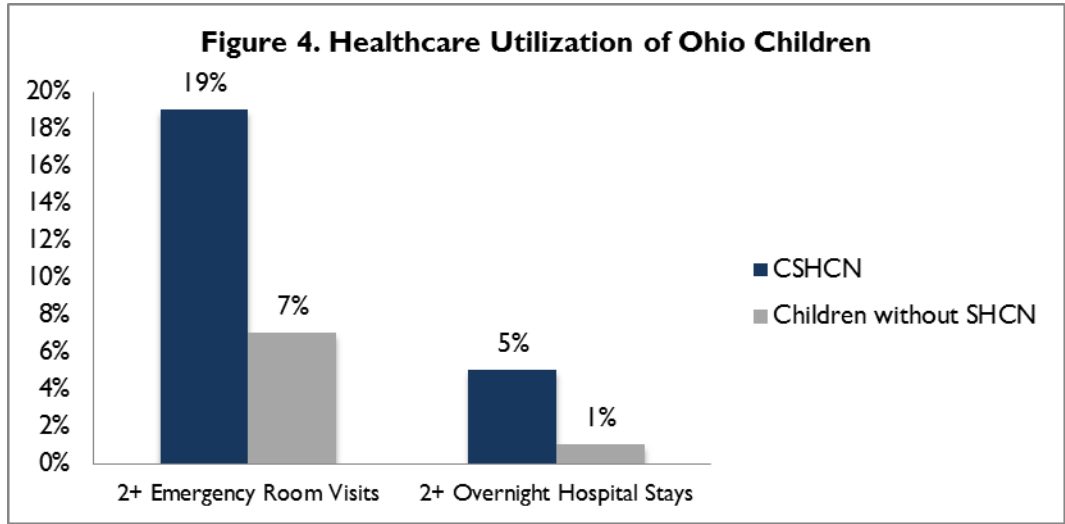
The overwhelming majority of children in Ohio had a usual source of care that was not an emergency room (98% for CSHCN, and 96% children without SHCN). Having a personal health care provider has been associated with improved health outcomes

Figure 3. Access to Health Care of Ohio Children

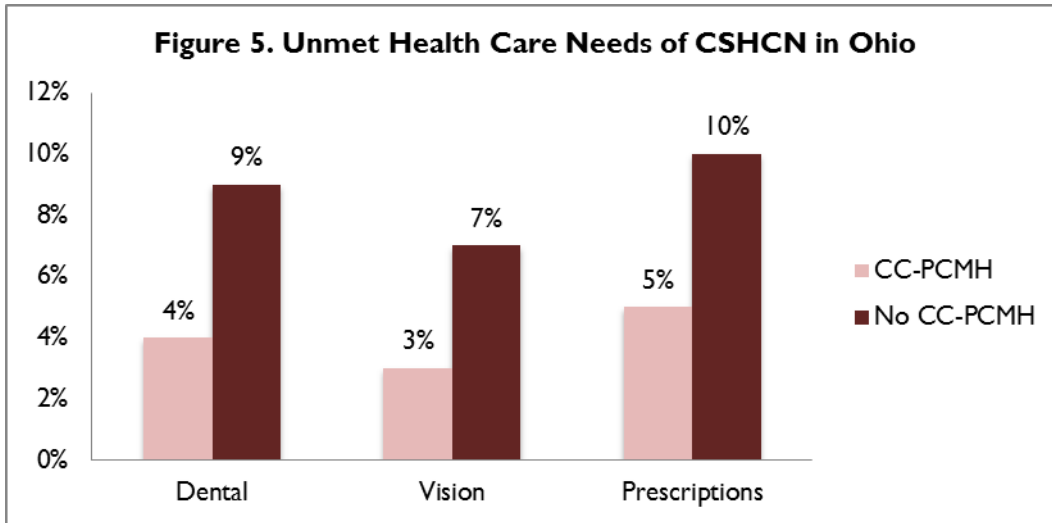


in children (Toomey, Chien, Elliott, Ratner, & Schuster, 2013). However, CSHCN have extensive healthcare needs and often experience poor access to health care and worse health outcomes (Houtrow, Okumura, Hilton, & Rehm, 2011). The 2015 OMAS data indicates that 8% of CSHCN were reported to have delayed treatment and other problems getting treatment compared to only 2% of children without SHCN.

Despite the fact that the vast majority of Ohio children have a usual source of care, 18% of CSHCN had problems getting needed health care compared to only 6% of children without SHCN. Good care coordination and access to health care specialists are important predictors of good health outcomes for children with developmental and other special health care needs (Miller, 2014; Krauss, Gulley, Sciegaj, & Wells, 2003). The 2015 OMAS data revealed that 26% of parents of CSHCN needed help coordinating their child's care.



Having a usual source of care doesn't necessarily guarantee better access to care as fewer CSHCN were able to get a same-day appointment for urgent care needs (54%) compared to children without SHCN (59%). In fact, 22% of CSHCN needing urgent care had to wait two or more days to obtain an appointment compared to 16% of children without SHCN.



Health Care Utilization

Despite the fact that 98% of CSHCN were reported to have a usual source of care, the prevalence rate of CSHCN having two or more emergency room visits in the past 12 months was 2.7 times higher than children without SHCN. Studies have shown that CSHCN who attend preventive care visits are less likely to utilize avoidable hospitalization and visits to the emergency room (Van Cleave, Matthew, & Davis, 2008).

Figure 4 demonstrates that the prevalence of two or more overnight hospital stays in the past 12 months for CSHCN was five times higher than children without SHCN.

Care Consistent with Patient-Centered Medical Home

The Patient-Centered Medical Home (PCMH), also known as the medical home model is a health care delivery model where the patient's primary care is comprehensive, patient-centered, and coordinated to increase the quality and safety of an individual's health care (Ashmead, Seiber, & Sahr, 2013).

The OMAS survey uses self-reported data and could not determine whether an individual received their health care through a recognized or accredited PCMH, thus this brief will use the term "care consistent with a PCMH" (CC-PCMH). To be classified

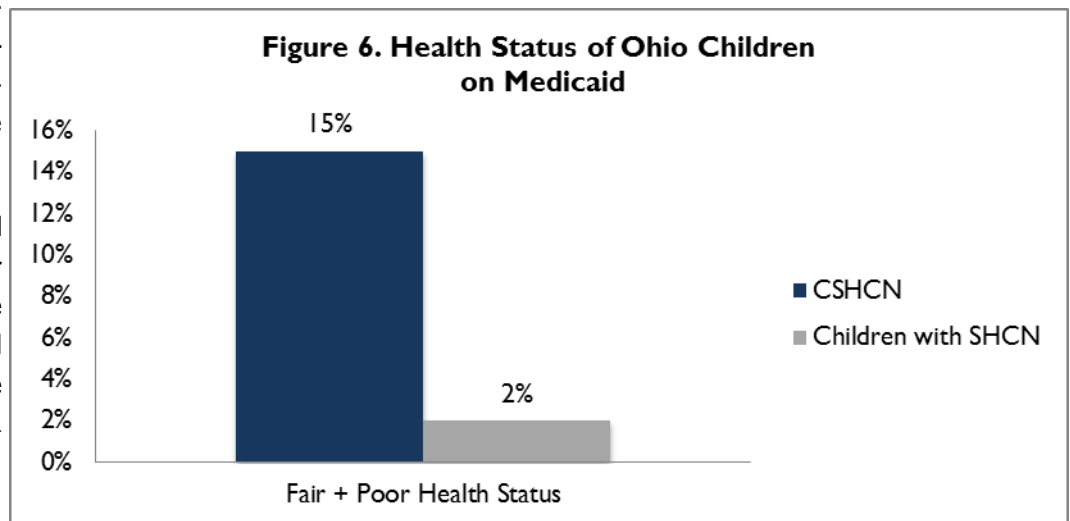
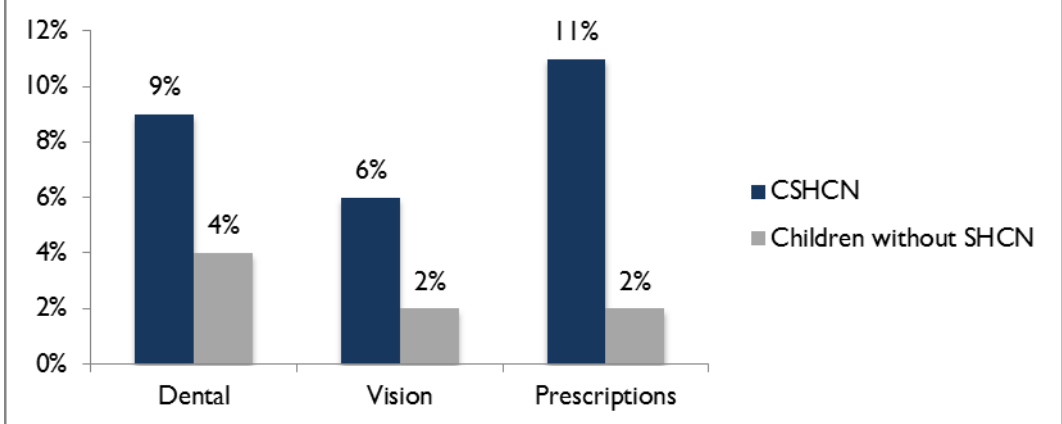


Figure 7. Unmet Healthcare Needs of Ohio Children covered by Medicaid



as CC-PCMH from the OMAS survey, a respondent had to meet seven criteria: (1) Has an appropriate, usual source of care (e.g. doctor’s office); (2) Has a personal care provider (PCP); (3) Has seen their PCP in the past 12 months; (4) Reports that their PCP communicates well with them; (5) Got urgent care (if needed) on the same or next day; (6) Got after hours care (if needed) without a problem; (7) Got specialist care (if needed) without a problem (Wickizer, Steinman, Shoben, Chisolm, Biehl, & Phelps,

2016).

CSHCN have more chronic conditions than children without SHCN and could benefit from CC-PCMH as this care is more coordinated and comprehensive. The 2015 OMAS revealed that 38% (264,368) of CSHCN had CC-PCMH, and 34% of CSHCN with Medicaid had CC-PCMH. The 2015 OMAS found that CSHCN who had CC-PCMH had fewer reports of fair/poor health compared to CSHCN who did not have CC-PCMH (6% vs 15%, respectively). Further, 89% of CSHCN who had CC-PCMH received needed health care compared to 77% of CSHCN who did not have CC-PCMH. Figure 5 demonstrates that CSHCN who had CC-PCMH had fewer unmet healthcare needs in dental care, vision care, and prescriptions compared to CSHCN who did not have CC-PCMH.

Results for Ohio Children Covered by Medicaid

As previously stated, 55% of CSHCN were covered by Medicaid. As shown in Figure 6, the health status of CSHCN with Medicaid was more likely to be reported as fair or poor compared to children without SHCN with Medicaid (15% vs. 2%), which is very similar to the results reported earlier in this brief for children in all insurance categories.

Unmet healthcare needs among children in Ohio covered by Medicaid follow a similar pattern as the full population (all insurance types) of children across the two health care need groups. Figure 7 demonstrates that CSHCN covered by Medicaid had more unmet health care needs in terms of dental care, vision care, and filling prescriptions compared to children without SHCN covered by Medicaid.

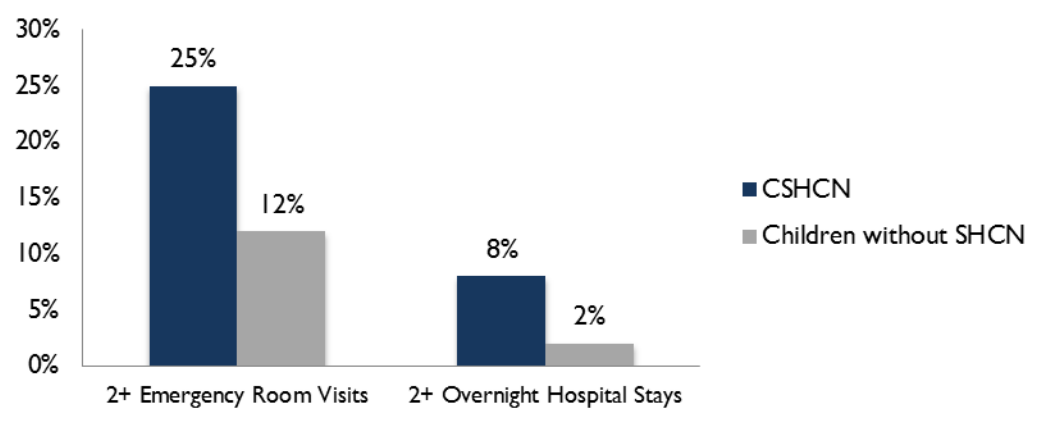
CSHCN covered by Medicaid had a higher rate of utilization of the health care system compared to children without SHCN with Medicaid, which is similar to the findings reported earlier of all Ohio’s CSHCN. Figure 8 demonstrates 25% of CSHCN covered by Medicaid had two or more emergency room visits in the past 12 months compared to only 12% of children without SHCN covered Medicaid. Further, 6% of CSHCN covered by Medicaid had two ore more overnight hospital stays in the past 12 months, compared to only 1% of children without SHCN covered by Medicaid.

POLICY CONSIDERATIONS

Patient-Centered Medical Home

Although the majority of CSHCN were reported to have a regular source of care such as a physician in a doctor’s office, the higher proportion of emergency room visits among CSHCN compared to children with-

Figure 8. Health Care Utilization Among Ohio Children covered by Medicaid



out SHCN suggest that CSHCN may face barriers to accessing primary care. Further, CSHCN had a much higher proportion of unmet healthcare needs compared to children without SHCN. The 2015 OMAS data revealed that 26% of families of CSHCN reported needing help coordinating their child's care. The goals of PCMH are to provide care that is coordinated, patient-centered, and comprehensive. The 2015 OMAS found that CSHCN who had CC-PCMH had fewer reports of fair/poor health status and fewer unmet health care needs than CSHCN who did not have CC-PCMH. Ohio may consider expanding CC-PCMH, particularly to CSHCN who have high health care utilization patterns.

Addressing Contextual Barriers to Health Care

The 2015 OMAS revealed that CSHCN with Medicaid have higher rates of health care utilization and poor health compared to children without SHCN. Further CSHCN with Medicaid have high rates of unmet healthcare needs in dental care, vision care, and prescriptions. An increased focus on mitigating the effects of poverty and understanding specific barriers to care for CSHCN could improve the health in this population. Moreover, future OMAS's may consider adding questions that address specific barriers to care to better understand why this vulnerable population is experiencing such high disparity rates.

Other Considerations

The 2015 OMAS identified 25% of children as having special health care needs. The set of six OMAS questions used to define children with special health care needs could potentially overestimate the number of children in this group. Although it is not possible to verify the special health care need status of children classified in this group, the OMAS designers may consider conducting additional analyses or re-examining the 6-items or the criteria used to identify CSHCN.

Conclusion

The 2015 OMAS data demonstrates that Ohio's CSHCN have higher poverty rates, greater unmet health care needs, less access to healthcare, and have higher utilization rates compared to children without SHCN. Moreover, families of CSHCN report problems getting needed health care and needing help coordinating health care for their child. CSHCN could greatly benefit from better care coordination as through a patient-centered medical home model and further research focused on mitigating the effects of poverty in CHSCN may be considered.

REFERENCES

- Ashmead, R., Seiber, E., & Sahr, T. (2013). Patient-Centered Medical Home Status in Ohio: Final Report. *The Ohio Colleges of Medicine Government Resource Center*.
- Child and Adolescent Health Measurement Initiative (2012). "Who Are Children with Special Health Care Needs (CSHCN)." The U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Available at www.childhealthdata.org.
- Chisolm, D., Steinman, K., Asti, L., Earley, E. (2013). Emerging Challenges of Serving Ohio's Children with Special Health Care Needs. Retrieved from <https://osuwmcdigital.osu.edu/sitetool/sites/omaspublic/documents/CSHCNFinalReportOMAS2012.pdf>
- Houtrow, A. J., Okumura, M. J., Hilton, J. F., & Rehm, R. S. (2011). Profiling Health and Health-Related Services for Children With Special Health Care Needs With and Without Disabilities. *Academic Pediatrics*, 11(6), 508–516.
- Krauss, M. W., Gulley, S., Sciegaj, M., & Wells, N. (2003). Access to specialty medical care for children with mental retardation, autism, and other special health care needs. *Mental Retardation*, 41(5), 329-339.
- Looman, W. S., Presler, E., Erickson, M. M., Garwick, A. W., Cady, R. G., Kelly, A. M., & Finkelstein, S.M. (2013). Care Coordination for Children With Complex Special Health Care Needs: The Value of the Advanced Practice Nurse's Enhanced Scope of Knowledge and Practice. *Journal of Pediatric Health Care*, 27(4), 293–303.
- McPherson, M., et al. (1998). A New Definition of Children With Special Health Care Needs. *Pediatrics*, 102(1), 137–139.
- Miller, K. (2014). Care coordination impacts on access to care for children with special health care needs enrolled in Medicaid and CHIP. *Maternal and Child Health Journal*, 18, 864-872.
- Newacheck, P.W., & Kim, S. E. (2005). A national profile for health care utilization and expenditures for children with special health care needs. *Archives of Pediatrics and Adolescent Medicine*, 159, 10-17.
- Ohio Colleges of Medicine Government Resource Center and RTI International. (2015). 2015 Ohio Medicaid Assessment Survey: Methodology Report. *RTI International*. Retrieved from <https://osuwmcdigital.osu.edu/sitetool/sites/omaspublic/documents/12015OMASMethReptFinal121115psg.pdf>
- Toomey, S. L., Chien, A. T., Elliot, M. N., Ratner, J., & Schuster, M. A. (2013). Disparities in unmet need for care coordination: the national survey of children's health. *Pediatrics*, 131(2), 217-224.
- Van Cleave, J., & Davis, M. M. (2008). Preventive Care Utilization Among Children With and Without Special Health Care Needs: Associations With Unmet Need. *Ambulatory Pediatrics*, 8(5), 305–311.
- Van Dyck, P.C., Kogan M.D., McPherson, M.G., Weissman, G.R., & Newacheck, P.W. (2004). Prevalence and characteristics of children with special health care needs. *Archives of Pediatrics & Adolescent Medicine*, 158(9), 884–890.
- Wickizer, T., Steinman, K., Shoben, A., Chisolm, D., Biehl, J., & Phelps, L. (2016). Patient-Centered Medical Homes and the Health of Ohio's Adults and Children. *The Ohio Colleges of Medicine Government Resource Center*.

FOR MORE INFORMATION

To view more information about OMAS and the findings in this policy brief, please visit the OMAS website at the Ohio Colleges of Medicine Government Resource Center www.grc.osu.edu/OMAS.

