

PROVIDING ACCESS TO MENTAL HEALTH SERVICES FOR CHILDREN IN RURAL AREAS

THE DATA

On average, 15% of young children, 2-8 years of age in the United States have a parent-reported mental, behavioral, or developmental disorder (MBDD) diagnosis, which includes attention-deficit/ hyperactivity disorder (ADHD), depression, anxiety problems, behavioral or conduct problems such as oppositional defiant disorder or conduct disorder, Tourette syndrome, autism spectrum disorder, learning disability, intellectual disability, developmental delay, or speech or other language problems.¹ The percentage of children with diagnosed MBDDs is similar for small rural³ and urban areas, at 18.6% and 15.2% respectively.²

ISSUE OVERVIEW

Across the country, people with mental health issues may struggle to get care due to a shortage of providers, and this problem is magnified in rural areas. According to the Health Resources and Services Administration (HRSA), 61% of areas with a mental health professional shortage are rural or partially rural. ³

There is also a gap between the demand for services from child psychiatrists and psychologists and the supply of providers. Experts project that the number of child and adolescent psychiatrists will increase to 8,312 in 2020, but this falls short of the estimated 12,624 that are needed to meet demand. Traditionally, rural areas have fewer of these professionals than urban areas. This shortage combined with the unique socioeconomic and cultural factors associated with rural residence, including higher poverty rates and geographic isolation, make it more challenging for rural children to access behavioral health services. Transportation is also a barrier in accessing mental health care and is often cited "as one of the major concerns reported by rural residents in discussing limitations to their access to health care or their participation in health programs."

Policy options that might help rural children with mental, behavioral, or developmental disorders, have access to behavioral health services include:



Telemedicine



Integration of behavioral health and primary care



School-based care



POLICY OPTIONS



There are many definitions of telemedicine, but the American Telemedicine Association defines it as the "use of medical information exchanged from one site to another via electronic communications to improve patients' health status." Telemental health is the "use of telemedicine to provide mental health assessment and treatment at a distance." This brief will use the term telemedicine to refer to the general use of technology to provide health services. The term telemental health will be used to describe mental health services that are provided at a distance.

Telemental health could increase access for all rural Americans by maximizing the ability of the existing mental health workforce to reach people who may not have access to in-person services. While telemental health has been used more with adults than children, pediatric use is increasing. Although it is a promising option for expanding mental health services, there are several barriers to widespread adoption and use which may also slow increased adoption for pediatric use.

Insurance Coverage for Telemedicine Services

Telemedicine services are governed by federal and state laws. Regulation varies considerably because each state defines telemedicine services differently, and these definitions determine the services that qualify for reimbursement under Medicaid and private insurance.¹¹

The Centers for Medicare and Medicaid Services (CMS) encourages states to use the flexibility built into Medicaid to create "innovative payment methodologies for services that incorporate telemedicine technology." Forty-eight states and the District of Columbia provide some level of Medicaid reimbursement for telemedicine. Thirty-nine states have some form of Medicaid coverage and reimbursement for telemental health services. 14,15

On the private payer side, thirty-two states and the District of Columbia have private payer policies in place for telehealth, but these policies differ considerably in what services are covered and how much providers are reimbursed. Twenty-three states and the District of Columbia require that payments for telemental health services be equivalent to those received for in-office treatment. The payments for the control of t

There is some evidence that when telemedicine is not reimbursed, or is reimbursed at a lower level than in-person services, doctors may not have sufficient financial incentives to provide telemedicine services. To increase adoption of general telemedicine services, states could consider adopting private payer parity laws. In addition, more research is needed to determine the effect that parity laws may have on the adoption and use of telemental health.

CASE STUDY: OREGON

Project ECHO (Extension for Community Healthcare Outcomes) is an innovative program to train primary care physicians to perform enhanced services. To project ECHO connects specialists and primary care physicians via videoconferencing in order to build knowledge and support for providers who see patients with complex conditions, including behavioral health issues. Project ECHO has 75 hubs in the United States.

In Oregon, Project ECHO is training primary care physicians to better care for children with mental health issues. The Oregon Health and Science University is training providers to diagnose and manage these patients. The program, which includes 18 sites around the state, establishes weekly live video sessions that provide lectures and case reviews with child psychiatry specialists. The session topics include ADHD diagnosis and management, depression diagnosis and management, and prescription of psychotropic medications. 38

Overall, Project ECHO has shown promise for expanding and improving care in rural areas, but more research is needed to evaluate outcomes. In 2016, Congress passed the Expanding Capacity for Health Outcomes (ECHO) Act which is intended to integrate "technologyenabled collaborative learning and capacity building models" such as Project ECHO into more health systems. The law requires a study by the Department of Health and Human Services on the models' effect on workforce development and patient care, specifically the "impact on addressing mental and substance use disorders, chronic diseases and conditions, prenatal and maternal health, pediatric care, pain management, and palliative care" and "the delivery of health care services in rural areas, frontier areas, health professional shortage areas, and medically underserved areas." ³⁹

Licensure Requirements

Each state establishes licensure requirements for health care professionals who practice within their borders. The unique nature of telemedicine services could allow doctors and mental health providers to easily provide services across state lines, but many states' licensure requirements limit this possibility. These licensure laws cover physicians as well as psychologists, social workers, nurses, and pharmacists. Some evidence suggests that adding licensing requirements for professionals who practice across state lines may slow or limit the expansion of telemedicine technologies by some health care facilities. 19

To deal with this emerging issue, states have established several options for licensing telemedicine practitioners. Eight states accept conditional or telemedicine licenses from out-of-state physicians. Three states have established registries that permit qualifying out-of-state physicians to practice in the states. Eighteen states have adopted the Federation of State Medical Boards' compact which "enforces an expedited license for out-of-state practice" for doctors, including psychiatrists. Similar multistate agreements that would include other mental health professionals, such as psychologists, are in the early stages of development.

Evidence of Effectiveness

Evidence suggests that telemental health services can be effectively delivered to underserved populations, such as rural Americans. ²² Telemental health can also effectively treat underserved children with specific conditions such as ADHD. ²³ Research suggests that telemental health services could meet the broader behavioral health needs of children and adolescents, and some programs have demonstrated that telemental health can successfully meet the psychiatric needs of rural children. ²⁴

Although these studies demonstrate effectiveness for these specific populations, more evidence is needed to support the use of telemental health for the broader population of rural children with MBDDs. In rural areas, adoption of new interventions and methods often outpaces research into the potential effectiveness of expanding those programs. More rigorous research into these innovative approaches can expand the evidence base and may increase adoption of telemedicine services and interventions for treating rural children with MBDDs.

Other Issues

Another important component of encouraging adoption of telemedicine is ensuring that patient privacy and confidentiality are maintained at the same level as an in-person visit. ²⁶ In order to promote these services, it may be important for telemedicine providers to ensure the security of the data stored and transmitted via telemedicine. The Health Insurance Portability and Accountability Act (HIPAA) created "national standards to protect

CASE STUDY: CALIFORNIA

Westside Park Elementary School Health Center, California

In 1995, Westside Park Elementary School in Adelanto, California, was able to open an SBHC with funding they received from HRSA. Through the 15 years of operation, the SBHC has been able to work with the Adelanto Unified School District to obtain support for the facilities and services. This school also has a partnership with the state school-based health agency, California School Based Health Alliance.

The SBHC serves about 1,300 patients a year "providing basic medical care, immunizations, dental screenings, and counseling services." A bilingual counselor is also present. Ash transportation is an issue for the residents of this community, the SBHC has a van to transport children to health services such as dental appointments. This school has worked with partners ranging from San Bernardino County Public Health to local agencies such as the food bank. Since opening, the leadership of the SBHC has learned that partnerships are needed to sustain the SBHC. ⁵⁵

individuals' medical records and other personal health information (PHI)."²⁷ Because doctor-patient interactions via telemental health may involve PHI, those health care providers are subject to the same HIPAA requirements that govern in-person meetings.²⁸

In addition to privacy concerns, the cost of telemedicine technology may limit adoption. These costs include: 10

- equipment and installation of telecommunications lines,
- rental cost of telecommunications lines,
- salary and wages, and administrative expenses,
- data transmission costs, service fees, and maintaining and upgrading equipment.



Integrating Behavioral Health and Primary Care

Research shows that integrating mental health and primary care services can improve health outcomes and may be an effective approach to caring for patients with multiple, complex healthcare concerns. Practices that implemented a collaborative, fully integrated model for primary care and behavioral health improved children's behavioral health outcomes as well as measures of accessibility and acceptability. Integration may also improve symptoms while increasing retention rates and improving access for children with serious emotional disturbance. Studies have also found that integration may increase access to mental health services in rural areas.

Integration can take many forms, but there are common features. For example, the Substance Abuse and Mental Health Services Administration (SAMHSA) proposed a standard framework for integration with three categories of collaboration – coordinated, co-located, and integrated care – and two levels of development within each category. ³³

The framework identified by SAMHSA focuses on elements of communication, physical proximity, and practice changes, ³³ but some or all of these elements may not be feasible in rural areas where specialists can be scarce. This framework assumes that there are enough mental health providers and support staff to successfully execute these categories of collaboration, and larger metropolitan areas may be better able to provide the mental health professionals and support staff. Rural health care providers and practices may find it more difficult to integrate in these traditional ways.

In addition, traditional models can rely on separate professionals providing discrete services. While this may be possible under some conditions, in some rural areas, shortages and poor distribution of behavioral health professionals could make it difficult for primary care physicians to get a consultation or make a referral.³⁴ In rural and urban areas, primary care physicians will continue to be frontline providers of mental health services.

CASE STUDY: COLORADO

Southwest Open School (SWOS) School-based Health Center, Colorado

Bordering Ute Mountain Ute Reservation and the Navajo Reservation, the Southwest Open School has had a SBHC for 12 years. According to a report from the Colorado Association of School-Based Health Care, SWOS is "the only health care safety net for underinsured/uninsured adolescents in the Montezuma-Cortez school district." A lesson learned from this SBHC is the need for multitasking. Staff in the SBHC often fill multiple roles such as providing patient care, writing grants, and operating the center. Additionally, it was noted that staff such as nurses filled multiple roles. ⁵⁶

Roughly 65% of rural residents get treatment from a primary care physician for their mental health issues.³⁴ There are successful models for integrating behavioral health services into primary care practice where primary care physicians are trained to use evidence-based practices to screen for and treat conditions such as depression.³⁵

While this model may be a more feasible way for rural physicians and practices to combine services, there are still challenges for this type of integration, including physician time constraints and ensuring that the quality of care that patients receive is comparable to care received from a mental health professional. Another challenge is providing ⁴⁸ primary care physicians with training and support they need to feel more comfortable diagnosing and treating pediatric patients who present with MBDDs.



Rural School-Based Health Centers

A model that may address the issue of children's mental health access in rural areas is School-Based Health Centers (SBHC). SBHCs involve on-school site health care delivery by an interdisciplinary team of health professionals, which can include primary care and mental health clinicians. Services can range from wellness exams to mental health services.⁴⁰

Currently from 2013-2014, there are an estimated 2,315 SBHCs located across the U.S., with 34.6% of these facilities located in rural areas. ⁴¹ With the school being the center of services and activities in some rural communities, SBHCs can leverage their influence and work with the school and communities to improve children's mental health. ⁴²

SBHCs Mental Health Services Scope

SBHCs are able to provide services for children with MBDDs. According to a SBHC census conducted by the School-Based Health Alliance, SBHCs screen for the following: depression, anxiety, social skills, and ADHD. ⁴² Additionally, SBHCs can also assist in providing care for children with special health care needs. These children are at a greater risk for chronic, physical, emotional conditions and typically require more services. Common conditions

for these children can include: ADHD, issues with anxiety, and autism. SBHCs are able to monitor medication, review medical records, and assist in the Individualized Education Plans (IEPs) that these children may need.⁴⁰

Accessibility

One study found that though there are more urban students who are enrolled in SBHCs at schools, rural students utilize all SHBC services, including mental health services, at a higher rate. SBHCs are also utilizing telemedicine to increase their accessibility and improve health care utilization. There are 15.8% of rural SBHCs using telemedicine services. In addition, parents of students are able to be involved in services such as a health education class or receive information about community events.

According to the Community Guide, SBHCs typically have the following characteristics:

- SBHCs provide primary health care and may also provide mental health care, social services, dentistry, and health education.
- Services may be available only during some school days or hours, and may also be available in nonschool hours.
- Student participation requires parental consent, and services provided for individual students are sometimes limited for specific types of care, such as reproductive or mental health.
- Services may be provided to school staff, student family members, and others within the surrounding community.
- Services are often provided by a medical center or provider independent of the school system, such as a federally qualified health center or academic institution.

SBHC COST, SAVINGS, AND FUNDING

Cost

A study conducted in Oregon estimated the cost of operating an SBHC. The study found that the cost of starting an SBHC ranges from \$49,750-\$128,250. ^{49,50} The average operating cost ranges from \$90,750-\$152,750 for a SBHC operating during the nine-month school year. The main source of revenue for SBHCs sponsored by Federally

Qualified Health Centers (FQHC) was billing. SBHCs with this particular sponsorship were able to cover an average of 26% of their operating costs. 49,50

Savings and Benefits

SBHCs have also been reported to have financial benefits. Studies have found that SBHCs produce annual benefits "between \$15,028 and \$912,878 per SBHC in averted costs related to treatment, productivity losses, and transportation, combined with other relevant benefits." ⁵¹

Additionally, studies have also shown net savings to Medicaid ranging from \$30-\$969 per visit or \$46-\$1,166 per user. The range in the savings are due to the different services that a SBHC can offer.⁵¹

Funding

In order to operate SBHCs, the funding and financing sources need to be considered. Some of the federal government funding sources may include: School-Based Health Center Capital Program (HRSA), Section 330 Public Health Services Act (PHSA): FQHC Funding, and Title X PHSA: Family Planning. Funding may also happen at the state and local level with financial supports through county and city governments as well as school districts. Corporations and private foundations have also been identified as possible funding sources.⁴¹

Additionally, Medicaid and the State Children's Health Insurance Program (SCHIP) have been common sources of financing for SBHCs. ⁴¹ In December 2014, the Centers for Medicaid and Medicare Services (CMS), drafted a letter that allows for schools to be able to bill Medicaid for services they provide. This policy is known as the Free Care Rule Reversal. ⁵² In order for schools to be able to bill for Medicaid, it must be included in their Medicaid State Plan.

Challenges

Though SBHCs are promising, these facilities are faced with certain challenges. A common issue is that these facilities may not be able to serve as primary care facilities. ⁴⁰ Since SBHCs typically operate during school hours, they may not be able to provide care before or after the school day. Care also may be affected during holidays or breaks when schools are not in session. ⁴⁰

Funding is an issue that SBHCs may face. One study notes that despite the variety of funding sources to run a SBHC, they struggle to provide care for all students regardless if they have Medicaid or another insurance provider. The "volume of currently nonreimbursable educational and preventive services SBHCs provide" may affect the SBHCs sustainability. 40

Similar to telemedicine, SBHCs may be affected by privacy regulations. SBHCs require parental consent in order to obtain services. There are laws such as Family Educational Rights and Privacy Act (FERPA), which protects "the privacy of student education records" and HIPAA, which protects "individuals' medical records and other personal health information."

SBHCs may also be difficult to evaluate based on limited resources. Additionally, studies have noted that the evaluation method is complicated by "difficulty in establishing randomized control designs, confidentiality and consent concerns, diverse school environments, small sample sizes, and attrition within school populations."

Resources

Marshall University's Robert C. Byrd Center for Rural Health in West Virginia adapted a **tool-kit** for starting an SBHC, detailing funding, marketing and evaluation efforts.

Texas has a **list of resources** ranging from general SBHC resources to more specific content such as ICD-9 and ICD-10 coding.

The Colorado Association for School-Based Health Care has **modules and resources** for planning an SBHC, including community assessments, partnership development, and business development.

CDC policy briefs provide a summary of evidence-based best practices or policy options for a public health issue. They also include information on the background and significance of the issue as well as current status and potential next steps. This policy brief is part of a series accompanying **CDC's Morbidity and Mortality Weekly Reports on rural health.**

REFERENCES

- ¹ Bitsko RH, Holbrook JR, Robinson LR, et al.; EdS. EdS. Health care, family, and community factors associated with mental, behavioral, and developmental disorders in early childhood—United States, 2011–2012. MMWR Morb Mortal Wkly Rep 2016;65:221–6.
- ² Robinson L, Holbrook J, Bitsko R, et al. Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2-8 Years in Rural and Urban Areas United States, 2011-2012. MMWR Surveill Summ 2017
- ³ Bureau of Health Workforce, HRSA, U.S Department of Health & Human Services. (January 2017). Designated Health Professional Shortage Areas Statistics
- ⁴ Hoge, M. A., Morris, J. A., Daniels, A. S., Stuart, G. W., Huey, L. Y., & Adams, N. (2007). *An Action Plan for Behavioral Health Workforce Development*. Retrieved from http://attcnetwork.org/find/respubs/docs/WorkforceActionPlan.pdf
- ⁵ Thomas, C. R., & Holzer, C. E. (2006). The Continuing Shortage of Child and Adolescent Psychiatrists. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(9), 1023-1031.
- ⁶ Bird, D.C., Lambert, D., Hartley, D., Beeson, P.G., & Coburn, A.F. (1995). Integrating Primary Care and Mental Health Service in Rural America: A Policy Review and Conceptual Framework. Retrieved from https://muskie.usm.maine.edu/Publications/rural/wp03.pdf
- ⁷ Benavides-Vaello, S., Strode, A. & Sheeran, B.C. Using Technology in the Delivery of Mental Health and Substance Abuse Treatment in Rural Communities: A Review. J Behav Health Serv Res (2013) 40: 111. doi:10.1007/s11414-012-9299-6
- ⁸ Arcury, T. A., Preisser, J. S., Gesler, W. M., & Powers, J. M. (2005). Access to transportation and health care utilization in a rural region. The Journal of Rural Health, 21(1), 31-38. Retrieved from: http://onlinelibrary.wiley.com/doi/10.1111/j.1748-0361.2005.tb00059.x/epdf
- ⁹ American Telemedicine Association. Telemedicine Glossary. Retrieved from http://thesource.americantelemed.org/resources/telemedicine-glossary
- ¹⁰ Hilty, D.M., Ferrer, D.C., Parish, M.B., Johnston, B., Callahan, E.J., and Yellowlees, P.M. The Effectiveness of Telehealth: A 2013 Review. Telemedicine and e-Health. May 2013, 19(6): 444-454. doi:10.1089/tmj.2013.0075
- ¹¹ Blackman, K. (2016). Covering and Reimbursing Telehealth Services. Retrieved from http://www.ncsl.org/documents/health/lb_2404.pdf
- ¹² Center for Medicare and Medicaid Services. Telemedicine. Retrieved from https://www.medicaid.gov/medicaid/benefits/telemed/index.html
- ¹³ Center for Connected Health Policy. Telehealth Medicaid and State Policy. Retrieved from http://www.cchpca.org/telehealth-medicaidstate-policy
- ¹⁴ American Telemedicine Association. State Medicaid Best Practices: Telemental and Behavioral Health. Retrieved from http://dev. americantelemed.org/docs/default-source/policy/state-medicaid-best-practices-telemental-and-behavioral-health.pdf?sfvrsn=4

- ¹⁵ U.S. Health Resources and Services Administration. Increasing Access to Behavioral Health Care through Technology. Retrieved from https://www.hrsa.gov/publichealth/guidelines/behavioralhealth/behavioralhealthcareaccess.
- ¹⁶ National Conference of State Legislatures. (2016). State Coverage for Telehealth Services. Retrieved from http://www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx
- ¹⁷ Pew Charitable Trusts. (2016) How Teletherapy Addresses Mental Health Needs. Retrieved from http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/10/26/how-teletherapy-addresses-mental-health-needs.
- ¹⁸ "Health Policy Brief: Telehealth Parity Laws," *Health Affairs*, August 15, 2016
- ¹⁹ Adler-Milstein, J., Kvedar, J., &.Bates, D.(2014). Telehealth Among US Hospitals: Several Factors, Including State Reimbursement and Licensure Policies, Influence Adoption. Health Affairs, 33(2), 207-215. doi:10.1377/hlthaff.2013.1054
- ²⁰ Telehealth Resource Center. Cross-State Licensure. Retrieved from http://www.telehealthresourcecenter.org/toolbox-module/cross-state-licensure
- ²¹ Thomas, L., & Capistrant, G. (2017). 50 State Telemedicine Gaps Analysis: Physician Practice Standards & Licensures. Retrieved from https://thesource.americantelemed.org/viewdocument/2017-state-gaps-analysis-physician
- ²² Richard J. Bischoff, C. S. H., Craig W. Smith, Paul Flack. (2004). Addressing the Mental Health Needs of the Rural Underserved: Finding from a Multiple Case Study of a Behavioral Telehealth Project. Contemporary Family Therapy, 26(2), 179-198
- ²³ Myers, K., Vander Stoep, A., Zhou, C., McCarty, C. A., & Katon, W. (2015). Effectiveness of a telehealth service delivery model for treating attention-deficit/hyperactivity disorder: a community-based randomized controlled trial. Journal of the American Academy of Child & Adolescent Psychiatry, 54(4), 263-274.
- ²⁴ Ermer, D. J. (1999). Experience With a Rural Telepsychiatry Clinic for Children and Adolescents. Psychiatric Services, 50(2), 260-261. doi:http://dx.doi.org/10.1176/ps.50.2.260
- ²⁵ Warren, J. C., & In Smalley, K. B. (2014). Rural public health: Best practices and preventive models
- ²⁶ National Conference of State Legislatures. (2015). Telehealth Policy Trends and Considerations. Retrieved from http://www.ncsl.org/ documents/health/telehealth2015.pdf
- ²⁷ U.S. Department of Health and Human Services. What does the HIPAA Privacy Rule Do. Retrieved from https://www.hhs.gov/hipaa/for-individuals/faq/187/what-does-the-hipaa-privacy-rule-do/index. html
- ²⁸ Center for Connected Health Policy. HIPAA and Telehealth. Retrieved from http://www.cchpca.org/sites/default/files/resources/ HIPAA%20and%20Telehealth.pdf
- ²⁹ SAMHSA-HRSA Center for Integrated Health Solutions. What is Integrated Care? Retrieved from http://www.integration.samhsa.gov/resource/what-is-integrated-care

REFERENCES (CONTINUED)

- ³⁰ Kolko, D. J., Campo, J., Kilbourne, A. M., Hart, J., Sakolsky, D., & Wisniewski, S. (2014). Collaborative care outcomes for pediatric behavioral health problems: a cluster randomized trial. Pediatrics, peds-2013.
- ³¹ Aupont, O., Doerfler, L., Connor, D. F., Stille, C., Tisminetzky, M., & McLaughlin, T. J. (2013). A collaborative care model to improve access to pediatric mental health services. Administration and Policy in Mental Health and Mental Health Services Research, 40(4), 264-273.
- ³² Health Information Hub. Primary Care Behavioral Health Model. Retrieved from https://www.ruralhealthinfo.org/community-health/services-integration/2/primary-care-behavioral-health
- ³³ Heath B, Wise Romero P, and Reynolds K. A Standard Framework for Levels of Integrated Healthcare. Washington, D.C.SAMHSA-HRSA Center for Integrated Health Solutions. March 2013.
- ³⁴ John A. Gale, D. L. (2006). Mental Healthcare in Rural Communities: The Once and Future Role of Primary Care. North Carolina Journal of Medicine, 67(1), 66-70.
- ³⁵ The Commonwealth Fund. (2014). In Focus: Integrating Behavioral Health and Primary Care. Retrieved from http://www.commonwealthfund.org/publications/newsletters/quality-matters/2014/august-september/in-focus
- ³⁶ University of New Mexico School of Medicine. About ECHO. Retrieved from http://echo.unm.edu/about-echo/
- ³⁷ University of New Mexico School of Medicine. ECHO Hubs & Superhubs. Retrieved from http://echo.unm.edu/wp-content/uploads/2017/04/ECHOSuperHubs_and_Hubs_20170405.pdf
- ³⁸ Oregon Health and Science University. Child Psychiatry. Retrieved from https://www.ohsu.edu/xd/health/for-healthcare-professionals/telemedicine-network/for-healthcare-providers/ohsu-echo/child-psychiatry/
- ³⁹ ECHO Act, Public Law No: 114-270
- ⁴⁰ Keeton, V., Soleimanpour, S., & Brindis, C. D. (2012). School-Based Health Centers in an Era of Health Care Reform: Building on History. Current Problems in Pediatric and Adolescent Health Care, 42(6), 132–158. http://doi.org/10.1016/j.cppeds.2012.03.002
- ⁴¹ 2013-14 Census of School-Based Health Centers: Methodology, Key Report Data Details, and Acknowledgements. Retrieved from: http://www.sbh4all.org/wp-content/uploads/2015/02/2013-14-Census-Data-and-Methods.pdf
- ⁴² National Conference of State Legislatures (2012). The Medical Home Model of Care. Retrieved from: http://www.ncsl.org/research/health/the-medical-home-model-of-care.aspx
- ⁴³ McPherson, M., Arango, P., Fox, H., Lauver, C., McManus, M., Newacheck, P. W., & Strickland, B. (1998). A new definition of children with special health care needs. Pediatrics, 102(1), 137-139.
- ⁴⁴ Child and Adolescent Health Measurement Initiative. (2012). Who are children with special health care needs. Data Resource Center for Child and Adolescent Health. Retrieved from: http://childhealthdata.org/docs/nsch-docs/whoarecshcn_revised_07b-pdf.pdf

- ⁴⁵Wade, T. J., Mansour, M. E., Guo, J. J., Huentelman, T., Line, K., & Keller, K. N. (2008). Access and utilization patterns of school-based health centers at urban and rural elementary and middle schools. Public health reports, 123(6), 739-750.
- ⁴⁶ North, S. W., & Kjolhede, C. (2012). Rural School-Based Health Centers: Enhancing Access to Care by Eliminating Barriers. School-based health care: Advancing educational success and public health, 359-368.
- ⁴⁷ Rural Health Information Hub (2015). Rural Schools and Health. Retrieved from: https://www.ruralhealthinfo.org/topics/schools
- ⁴⁸ Knopf, J. A., Finnie, R. K., Peng, Y., Hahn, R. A., Truman, B. I., Vernon-Smiley, M., ... & Hunt, P. C. (2016). School-based health centers to advance health equity: a Community Guide systematic review. American Journal of Preventive Medicine, 51(1), 114-126.
- ⁴⁹ Nystrom, R. J., & Prata, A. (2008). Planning and sustaining a school-based health center: Cost and revenue findings from Oregon. Public Health Reports, 123(6), 751-760.
- 50 Washington University. Strategy: Establish school-based health centers in high-need areas. Retrieved from: https://forthesakeofall. org/wp-content/uploads/2016/05/SBHC_InformationSummary-1.pdf
- ⁵¹ The Community Guide. Health Equity: School-Based Health Centers. Retrieved from: https://www.thecommunityguide.org/findings/promoting-health-equity-through-education-programs-and-policies-school-based-health-centers
- ⁵² Free Care Rule Reversal. Retrieved from: https://www.medicaid. gov/federal-policy-guidance/downloads/smd-medicaid-payment-for-services-provided-without-charge-free-care.pdf
- ⁵³ Family Educational Rights and Privacy Act (FERPA). Retrieved from: https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html
- ⁵⁴ Health Information Privacy. What Does the HIPAA Privacy Rule Do? Retrieved from: https://www.hhs.gov/hipaa/for-individuals/faq/187/what-does-the-hipaa-privacy-rule-do/index.html
- ⁵⁵ Olson, Aileen. CSHC Spotlight on: Westside Park Elementary School Health Center. Retrieved from: http://www. schoolhealthcenters.org/wp-content/uploads/2011/07/Westside_ Park.pdf
- ⁵⁶ Beall, S. (2009). Rural School-Based Health Centers: A Framework for Success. Colorado Association for School-Based Health Care.
- ⁵⁷ West Virginia School Health Technical Assistance and Evaluation Center. Opening a School-Based Health Center: A How-To Guide for West Virginia. Retrieved from https://livewell.marshall.edu/mutac/wp-content/uploads/2011/08/Opening_a_School_Based_Health_Center_Final_April_2010.pdf
- ⁵⁸ Texas Health and Human Services. General SBHC Resources and Information. Retrieved from https://www.dshs.texas.gov/schoolhealth/SBHC-Resources/.
- ⁵⁹ Colorado Association for School-Based Health Care. Opening a School-Based Health Center in Colorado: Supplemental Tools and Resources. Retrieved from http://www.casbhc.org/toolkit-planning.html.