Vol 8 | Issue 1 | Pages 331-335

Annals of Public Health Reports
ISSN: 2642-4924

Research Article

DOI: 10.36959/856/543

Healthcare Equity in the Pediatric Medical Home: Lessons from the COVID-19 Pandemic to Bridge Future Gaps

Erik Fernandez y Garcia, MD, MPH, FAAP[1], Christopher Kim, MD, MPH, FAAP[1] and Hakeem Adeniyi, MD[2]*

[1]Division of General Pediatrics Sacramento, Department of Pediatrics, University of California Davis School of Medicine, California, USA

[2]Sacramento Native American Health Center, 2020 J Street, Sacramento, California, USA

Abstract

The COVID-19 pandemic has necessitated suppression strategies that strain the resources of families and disrupt the pediatric medical home, especially for children in under-resourced communities. For these children, barriers to access to the medical home were present prior to the pandemic, but their inability to access well care is exacerbated by it. The combination of disruptions of families' lives and in-person pediatric care delivery may negatively affect the health of all children, but especially those who live in communities where the pandemic has disparate negative outcomes. We are called to focus on health equity in pediatric services to prevent healthcare and health disparities. Therefore, the recommendations for health systems to redesign how they maintain the pediatric medical home in the context of pandemic suppression strategies must incorporate health equity. The approaches developed during the pandemic to maintain access to care within a health equity framework will have long term implications for redressing pediatric healthcare and health disparities post-pandemic. This discussion article elaborates on this argument. In addition, it provides an example of one health center's efforts to innovatively adapt its pediatric medical home processes to maintain equity through a new type of visit called the "Telehealth Family Support Check-In."

Introduction

The foundation of the pediatric medical home model is a series of longitudinal well care visits. The periodicity of these visits engender trust between families and pediatricians, as well as provide ongoing opportunities to optimize health and coordinate care. The COVID-19 pandemic has caused disruptions in the lives of families and in pediatric well care delivery. Together, these disruptions undercut the foundation of the medical home model. The ever-changing landscape of the COVID-19 pandemic places the health of all children at risk, but especially those in communities where health and healthcare disparities continue to exist. Therefore, nimble adaptation to the delivery of pediatric well care is necessary to mitigate these risks. Commentaries on COVID-19 health disparities have importantly provided guidance for the collection and interpretation of disparity-related data [1] and have provided general areas for intervention [2-4] rather than provide specific clinical recommendations for preventing disparate outcomes. Therefore, there are two objectives of this article. The first objective is to present the argument for centering health equity in maintaining the pediatric medical home during shelter-in-place or physical distancing orders. The second objective is to provide a description of one health equity mission-based health center's innovative approach to meeting that goal.

Reasons for Disruptions in Periodic Well Care during COVID-19

The focus of the public health response to the COVID-19 pandemic by governmental public health offices, health systems, and health professional organizations has largely been to recommend suppression strategies, such as sheltering-

***Corresponding author:** Erik Fernandez y Garcia, MD, MPH, FAAP, Department of Pediatrics, University of California Davis Health, 2516 Stockton Blvd, Suite 334, Sacramento, California 95817, USA, Tel: (916)-734-5387

Accepted: August 07, 2024

Published online: August 09, 2024

Citation: Fernandez y Garcia E, Kim CH, Adeniyi H (2024) Healthcare Equity in the Pediatric Medical Home: Lessons from the COVID-19 Pandemic to Bridge Future Gaps. Ann Public Health Reports 8(1):331-335

in-place and physical distancing. Pediatric providers have had to balance providing classic in-person well care with limiting patient flow through health systems to both support physical distancing and prepare for potential ill visit surges. Preparing for surges requires maintaining urgent visit appointment capacity (both time and personnel) and conserving personal protective equipment. Families have had to balance obtaining necessary well care interventions with the fear of exposure to persons infected with SARS-CoV-2. Furthermore, families' abilities to visit health systems have been complicated by the demands placed on their resources by suppression strategies. These barriers include needing to monitor children's distance learning, lacking childcare for other children who may or may not be allowed into health systems for siblings' visits, working from home, and having limited transportation options.

COVID-19 Disruptions and Published Guidance for Pediatric Well Care

Health systems must determine how access to their services should be modified to comply with pandemic suppression strategies. Professional and advocacy groups, such as the American Academy of Pediatrics (AAP), provide guidelines to assist health centers in incorporating suppression strategies into clinical operations. The AAP [5] provided its first such guidance on March 18, 2020. The suggestions contained there relative to this current article included: To only conduct in-person well care for newborns and infants and younger children who require immunizations; to reschedule well care for those in middle childhood and adolescence to a later date; and to increase capacity to deliver telehealth [5]. The guidance changed slightly on April 15, 2020, focusing on using telehealth to promote well care in the medical home, per Bright Futures periodicity and recommended screenings, and to avoid delays in acute, chronic, subspecialty, and surgical care. In the case of well care, pediatricians were advised to provide portions of well care via telehealth for children over 24 months of age rather than rescheduling them to a later date, as previously recommended, with acknowledgement that parts of the well care will have to occur in timely follow-up [6]. Guidance was updated again on May 8, 2020 to acknowledge that pediatric practices have seen a decrease in visit volume; to reaffirm previous guidance around telehealth; to recommend that pediatricians implement and inform families about the strategies in primary care medical home offices to assure safety; and to proactively identify families who have missed immunizations or screenings and request in-person appointments to update them [7].

Health Equity in Well Care Guidance during COVID-19

Clinical operations are necessarily modified to be compliant with suppression strategies. The guidance provided by public health and professional organizations for such modifications are often qualified based on "specific community circumstances" [5]. Those circumstances are likely interpreted by health systems as solely community risk factors for acquiring and suffering from COVID-19 disease (e.g. local prevalence, protective equipment needs, etc.). Therefore, published guidance fails to specifically consider health equity-a healthcare factor of equal importance to biomedical risk factors-when defining "community circumstances."

The AAP has highlighted the populations at highest risk for health and healthcare disparities, and have implored pediatricians serving children from these populations to incorporate strategies to maintain health equity in planning services [8]. Children from populations at risk for these disparities can present to any clinic, so health equity should guide all health centers when modifying systems of care. However, health centers located in under-resourced communities serve a disproportionately larger number of families experiencing health disparities. Health equity is integral to the mission of these clinics and guides the daily organization and delivery of care. These clinics are often a trusted community hub for assessing the need for and delivery of essential healthcare, while also serving as one important entry into the greater social safety net that can improve health and prevent disparities. From a life course perspective then, any restriction of access to health services in these communities (and more so during times of high social strain) will undoubtedly exacerbate existing health disparities [9]. Therefore, such health centers will need to consider the guidance provided to them by public health or professional organizations through a very different lens than health systems and clinics who do not share mission-based health services. This will often mean that to meet the needs of the most vulnerable children, these health centers will feel tension between expanding in-person access while receiving guidance to instead contract it.

A Case of Integrating a Health Equity Mission and Pandemic-Influenced Well Care Guidance

The Sacramento Native American Health Center (HC) is a federally qualified health center in Sacramento, California. It serves approximately 10,000 patients per year in a predominantly urban, under-resourced (76% at or below federal poverty level with 85% insured by Medicaid and 10% insured by Medicare) community. While HC's historical focus and current organizing principles are rooted in Native culture, the patient population is diverse, with its families being from Native (20%), Black (20%), Latinx (30%), and Asian/White/Other/Multiple (30%) backgrounds. The Sacramento County Department of Public Health issued a shelter-in-place order on April 7, 2020.

HC responded to this order by seeking to maximize access for pediatric well care. This decision was rooted in its role as a community hub and in maintaining its "commitment (mission) to continue and share the legacy of a healthy American Indian/Alaska Native community based on cultural values delivered through a traditional, innovative, and accessible patient-centered health home." Given the high probability that shelter-in-place orders would be cyclically applied until there is vaccination and/or effective antiviral treatments for COVID-19, HC decided from the outset that service delivery and schedules should be quickly modifiable. Furthermore,

the population served by HC faces challenges in adhering to in-person visits for reasons outside of sheltering-in-place (e.g. lack of transportation, lack of childcare, etc.). Therefore, HC decided to focus on being nimble in using any method of access (telephone, video, in-person) necessary to meet patients and families where they are and with the resources they have, regardless of shelter-in-place orders.

The approach that HC has taken to pediatric well care during the pandemic is consistent overall with AAP guidance, but does differ in some ways. Broadening the initial AAP guidance on the priority ages for in-person pediatric well care, HC continued offering in-person visits for all children, beginning with those 0-5 years-old and expanding to older children once processes were in-place to do so safely. Furthermore, HC decided to encourage in-person well care for any age if they were under-immunized. There are two health equity mission-based reasons for this approach. First, HC serves communities already known to have lower rates of immunization than the general pediatric population for a variety of reasons [10]. These delays place children and communities at risk for preventable diseases. In addition, vaccine deficiency affects children's ability to enter school in the mandatory vaccine state of California. Second, children in communities like those served by HC are at a higher risk of lower school readiness and late identification of physical and cognitive developmental delays [11]. Developmental screening, via parent self-report instruments and pediatrician in-person evaluation, and access to programs like Reach Out and Read help prevent and identify risks to healthy development and school readiness. Therefore, limiting access to opportunities to maintain vaccinations up-to-date and to developmental screening would further exacerbate two important health disparities. Vaccinations rates for the most vulnerable children have already fallen during the pandemic [12].

Consistent with AAP recommendations, HC quickly ramped up its ability to provide telephone and video visits. HC used this technology to offer telehealth visits for children 6-18 years-old needing well care without immunizations. However, rather than administering standard pediatric well care interventions via telehealth, HC constructed a specific "Telehealth Family Support Check-In." HC felt that focusing on standard pediatric well care interventions during the visit, while important [7], may not be salient to families with the different priorities during the pandemic. Therefore, the telehealth intervention was designed to focus on priority areas based on the Healthy People 2020 Social Determinants of Health domains [13], while also assisting the family in adhering to chronic medical treatment plans. HC felt that this two-pronged approach would best address health and healthcare disparities by meeting the resource needs of the community it serves despite pandemic barriers and the limits of the technology. This is especially true for children with chronic medical conditions and special education needs, lack of contact with medical providers and their schools can lead to synergistic negative outcomes. HC also offered the visit for children 0-5 years-old whose parents refused or were unable to come in-person. In addition to the goals for children 6 years and older, these visits were also focused on providing developmental screenings and on building trust with families which may improve adherence to subsequent in-person visits [14]. Implementing this new construct via telehealth ("innovative and accessible") that is focused on meeting the needs of patient families ("patient-centered home") during a time of social isolation ("continue and share the legacy of community") best aligns with HC's mission-based approach to AAP care delivery guidelines.

A Case of Integrating a Health Equity Mission and Pandemic-Influenced Well Care Guidance

This intervention was constructed within the context of restrictions in the technology and the goals HC developed for the telehealth visit. First, HC designed the visit to last approximately 15 minutes. This timeframe would allow families to focus their attention on the conversation in the face of multiple parental shelter-in-place priorities. It also would accommodate interpreter use for a large non-English-speaking population within the clinic schedule. Second, although video visits were ideal, the community served by HC faced barriers to video, such as dependable connectivity to support video conferencing, lack of equipment, and stigma around health personnel seeing their living environment. Therefore, the intervention was designed for telephone delivery by default, with video if possible. The topics covered needed to be appropriate for an environment where confidentiality could not be assured. This was particularly relevant for two specific topic areas, adolescent counseling, and familial screening of social stressors. HC chose to not perform routine HEADSS assessments or any sexual health counseling (as is usual in adolescent well care), unless requested to do so by the patient and parent. This approach would allow for parents to be present for the interaction. HC also opted not to screen families for social stressors in favor of universally offering resources for these stressors. The goal of screening for social risk factors is to identify and quantify needs for individual families and provide necessary care to address those needs. Such screening is essential in maximizing child health but it is best handled in-person, where warm handoffs to supports or immediate intervention can be assured [15,16]. In lieu of screening questions, HC decided to offer all families resources for social stressors, using conversation prompts to activate parents and foster their engagement with resources. HC decided to focus on providing resources for social stressors in areas known to be risk factors of child abuse and neglect [16]. This decision was made because COVID-19 related factors may lead to increased child abuse and neglect [17]. Therefore, we limited the discussion and resources to food security, family and partner relationships (including intimate partner violence), child behavior and parenting, and parental stress. HC also considered the cost of the service. While HC's primary focus was family engagement, ensuring appropriate coding and reimbursement for this innovative telehealth intervention supported its mission to provide the service. The special circumstances of the COVID-19 pandemic suppression strategies allowed HC receive reimbursement which did not previously exist for telehealth visits.

A Case of Integrating a Health Equity Mission and Pandemic-Influenced Well Care Guidance

The interaction is scripted to promote fidelity between providers. It begins with obtaining consent after explaining to the family the rationale for the HC providing a telehealth visit instead of an in-person visit; reasons for why the telehealth visit may be ended and the family asked to come in-person; that the telehealth visit does not replace a pediatric well care visit, which would occur at a later time; and the expected duration of the visit. The next step is to elicit parent priorities for the interaction as is recommended in family-centered approaches [18]. We then inquire about healthcare use, including urgent, subspecialty, laboratory or radiologic services, with the goals assisting the family in adhering to ordered referrals and tests and reducing use of unnecessary urgent care. The interaction then shifts to reviewing the medical record by updating current symptoms and treatment plan adherence for chronic medical conditions, reconciling medications and providing refills, and verifying immunization status. If catch-up vaccines are necessary, the parents are invited at that time for an in-person visit. At the time of our implementation, schools in the area had switched to distance learning plans and disparities in benefiting from the educational plans were being recognized for under-resourced communities [19,20]. Therefore, we assist the family in contacting their school if they have not been contacted by the school to initiate that plan; provided with the technology to implement the plan; or received an adapted plan for individualized education or special education needs. For children who are not yet in school, we provide Ages and Stages Questionnaires and MCHAT-R at intervals recommended in Bright Futures [21]. If abnormal, the families are provided with an in-person visit to review the screens with objective evaluations and provide referrals for further evaluation. We then offer resources that are accessible by telephone and free of cost to every parent for the four social service areas linked to child abuse. We introduce the resource topic area with non-judgmental statements or questions (e.g. “Child behaviors during this time can be overwhelming” or “How have you been managing with your child’s behavior?” or “Have you felt like you needed help to parent?”) and then invite the parent to take up the resource with normalizing statements (e.g. “I would like you to have these phone numbers for some immediate help with child behavior, in case you or your friends and family need them now or at another time. Would you like them?”). Since this is not screening, we do not document responses to the questions. We only document which resources the parent accepted, so that we can provide further navigation. Lastly, we end the interaction with reaffirming that an in-person well child visit should occur when the family can accommodate it and send (via email or post) the recommended anticipatory guidance documents commensurate to age. We also recommend in-person visits for any adolescent sexual health care that is requested.

Summary

The COVID-19 pandemic has caused disruptions in the pediatric medical home, both because of shelter-in-place orders and families’ desires and abilities to access in-person clinic visits. Offering in-person pediatric well care, as recommended by public health and professional organizations, is an important part of the solution. However, those appointments may be underutilized, as parents remain wary and have competing priorities. Pediatricians are forced to make innovative changes to how we actualize the medical home and deliver well care. Our modifications to processes around the pediatric medical home must be as fluid as the pandemic itself, with the possibility of physical distancing practices such as shelter-in-place intermittently being applied and parental fears waxing and waning.

Pediatricians must maintain the capability of engaging families in preventive services while allowing for quick return to a pandemic ill visit surge environment. HC’s approach offers an example of a way to maintain child wellbeing and health equity throughout the cyclical pandemic environment. In retrospect, our health center’s “Telehealth Family Support Check-In” should have been implemented prior to the pandemic to complement our in- person well care. This is especially true for our under-resourced families and families with children with special needs for whom travel to our clinic was a hardship. Incorporating the “Telehealth Family Support Check-In” into non-pandemic-influenced services, to assess for social needs and coordinate medical care, would allow HC to focus our efforts and families’ resources on ensuring adherence to our periodic in-person well care visits. While the exact content of pediatric telehealth family support interventions will change from community to community, the overall clinical framework would have generalizable effects in ensuring health equity and are congruent with recommended societal approaches to mitigate disparities of pandemic [22,23]. We are embarking on a quality improvement project to standardize our implementation and collect data to disseminate outcomes. It also remains to be seen is if support, including reimbursement, for such innovative approaches will remain intact [24]. Advocacy efforts should be directed toward that goal.

Acknowledgements

We would like to thank We would like to thank Britta Guerrero, CEO, and staff of the Sacramento Native American Health Center. This team has built the system of services necessary to provide our families support as identified. The SNAHC team has been nimble in its development and implementation of visit templates to aid in real time adjustments. We would also like to thank Drs. Nicholas Gianaris, Samantha Goggin, Ajjya Acharya, Ivan Marquez, and Patrick Morency, pediatric trainees from UC Davis Health whose continuity clinic is at the Sacramento Native American Health Center and who piloted the Telehealth Family Support Check-Ins.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethics Statement

This article reports on a proposed clinical process and is not human subjects research. Therefore, we did not seek oversight from our institutional review board.

References

1. Chowkwanyun M, Reed AL (2020) Racial health disparities and Covid-19-caution and context. N Engl J Med 383: 201-203.
2. Williams DR, Cooper LA (2020) COVID-19 and health equity-A new kind of "herd immunity". JAMA 323: 2478-2480.
3. Dooley DG, Bandealy A, Tschudy MM (2020) Low-income children and coronavirus disease 2019 (COVID- 19) in the US. JAMA Pediatr 174: 922-923.
4. Webb Hooper M, Nápoles AM, Pérez-Stable EJ (2020) COVID-19 and racial/ethnic disparities. JAMA 323: 2466-2467.
5. American Academy of Pediatrics (2020) COVID-19 Clinical Guidance Q&A.
6. American Academy of Pediatrics (2020) Guidance on providing pediatric ambulatory services via telehealth during COVID-19.
7. American Academy of Pediatrics (2020) Critical updates on COVID-19/Guidance on providing pediatric well-care during COVID-19.
8. Cheng TL, Emmanuel MA, Levy DJ, et al. (2015) Child health disparities: What can a clinician do? Pediatrics 136: 961-968.
9. Braverman P, Barclay C (2009) Health disparities beginning in childhood: A life-course perspective. Pediatrics 124: S163-S175.
10. Sabnis SS, Conway JH (2015) Overcoming challenges to childhood immunizations status. Pediatr Clin North Am 62: 1093-1109.
11. Festa N, Loftus PD, Cullen MR, et al. (2014) Disparities in early exposure to book sharing within immigrant families. Pediatrics 134: e162-e168.
12. Santoli JM, Lindley MC, DeSilva MB, et al. (2020) Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration-United States, 2020. MMWR Morb Mortal Wkly Rep 69: 591-593.
13. Office of Disease Prevention and Health Promotion (2010) Healthy People 2020. Topics and Objectives: Social Determinants of Health.
14. Fuzzell LN, LaJole AS, Smith KT, et al. (2018) Parents' adherence to pediatric health and safety guidelines: Importance of patient-provider relationships. Patient Educ Counse 101: 1570-1576.
15. Anda RF, Porter LE, Brown DW (2020) Inside the adverse childhood experience score: strengths, limitations, and misapplications. Am J Prev Med 59: 293-295.
16. Dubowitz H (2014) The safe environment for every kid model: Promotion of children's health, development, and safety, and prevention of child neglect. Pediatr Ann 43: e271-e277.
17. Thomas EY, Anurudran A, Robb K, et al. (2020) Spotlight on child abuse and neglect response in the time of COVID-19. Lancet Public Health 5: e371.
18. American Academy of Pediatrics, Committee on Hospital Care (2003) Family-centered care and the pediatrician's role. Pediatrics 112: 691-696.
19. Parents Together Action (2020) Parents together survey reveals remote learning is failing our most vulnerable students.
20. Dorn E, Hancock B, Sarakatsannis J, et al. (2020) COVID-19 and student learning in the United States: The hurt could last a lifetime. McKinsey & Company.
21. Hagan JF, Shaw JS, Duncan PM (2017) Bright futures: Guidelines for health supervision of infants, children, and adolescents. (4th edn), Elk Grove Village, IL: American Academy of Pediatrics.
22. Kuy S, Tsai R, Bhatt J, et al. (2020) Focusing on vulnerable populations during COVID-19. Acad Med 95: e2-e3.
23. Menendez ME, Moverman MA, Puzzitiello RN, et al. (2020) The telehealth paradox in the neediest patients. J Natl Med Assoc.
24. Shachar C, Engel J, Elwyn G (2020) Implications for telehealth in a postpandemic future regulatory and privacy issues. JAMA 323: 2375-2376.

DOI: 10.36959/856/543