



Moving the needle on health inequities: principles and tactics for effective cross-sector population health networks

Allison Gertel-Rosenberg, Janet Viveiros, Alexander Koster, Georgia Thompson, Bilal Taylor, Kate Burke Blackburn and Cindy Bo

Purpose of review

To summarize elements of cross-sector population health networks to support systems and policy change to achieve equitable access to health services and healthy development opportunities for young children and families, allowing everyone to have a fair and just opportunity to be as healthy as possible.

Recent findings

The principles and tactics of Equity and Inclusion, Readiness, Joint Planning, Governance, and Data can guide cross-sector networks in effectively supporting communities in addressing health inequities. These principles are not linear or siloed, but rather, they overlap and reinforce each other. The principles require equity and the participation of community members to be central in all aspects of cross-sector network work.

Summary

By building strong relationships among community partners, cross-sector population health networks can ensure the network is not a short-term, transactional one-time project, but rather, a sustained collaboration through enduring processes and infrastructure. Networks can gain a fuller understanding of the needs and assets of a community through engagement and leadership by community members than they could gather from data and surveys alone. This approach to serving a community by making members equal partners in the effort helps to place equity at the center of a network's focus, as does embedding equity-related decision-making tools and processes into daily operations of the network. If cross-sector networks build resilient, inclusive structures and procedures, they can utilize them to quickly pivot and adjust to emerging needs or respond to crisis.

Keywords

cross-sector partnership, equity, social determinants of health

INTRODUCTION

Communities and regions across the country face serious population health challenges and significant inequities in health outcomes by race and ethnicity as a result of longstanding structural racism in the United States [1*,2,3**]. Addressing disparities is important from both a social justice standpoint and for improving overall population health. Many healthcare providers, public agencies, and service-and community-based organizations across sectors are committed to helping communities reduce health disparities that stem from widespread inequality. However, they cannot effectively promote population health and reduce health inequities without aligning and coordinating with stakeholders outside their own sector [4*,5]. Pediatric healthcare providers

have historically been limited to using clinical interventions to influence the health of individual children [6]. It is difficult for pediatric providers to address the nonclinical causes of poor health

Nemours Children's Health, Washington, DC, USA

Correspondence to Janet Viveiros, MPP, Senior Program and Policy Analyst, Nemours Children's Health, 1201 15th Street, NW, Suite 520 Washington, DC 20005, USA. Tel: +1 302 650 9827; e-mail: Janet.viveiros@nemours.org

Curr Opin Pediatr 2022, 34:27-32

DOI:10.1097/MOP.0000000000001085

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

KEY POINTS

- This population health network framework can help network members, who often have small budgets and limited capacity to take on additional activities, to make contributions based on their organizational strengths and expertise, allowing for better and more impactful use of limited funding and staffing resources, and avoiding duplication or unnecessary capacity building.
- It can be difficult to sustain network progress and member engagement over the long term without governance structures that facilitate collaboration and require accountability, however, adopting this framework can improve engagement through network alignment and coordination to help communities target and address root causes of health inequities.
- Effective collaboration across sectors requires sharing aggregated and disaggregated data along with network strategies to address issues uncovered in data analyses that are upstream and multisector, however, this may require policy changes to eliminate regulatory barriers to sharing health and other protected information between sectors.

outcomes for their patients and other children in a community. Pediatric providers can expand their impact on child health by engaging in networks comprised of organizations from different sectors that are collaborating to address local population health concerns. When organizations across multiple sectors form networks to work in service to communities to pursue a population health goal, they can enhance their individual work and leverage multiple areas of expertise to address the root causes of health inequities whereas changing systems to help populations achieve their full health potential. Cross-sector population health networks can strengthen their efforts by centering equity within their population health strategies [7*].

The collective impact model is an approach for addressing complex social challenges that cannot be solved by just one sector or organization and entails forming a cross-sector collaborative, or network of organizations, to act in concert to solve a common problem [8]. The body of research on collective action and multisector networks is expanding as the number of cross-sector networks grow. Cross-sector networks need to start with a strong understanding of the problem (e.g., obesity among young children, lack of access to care) they are striving to solve in order to identify and engage stakeholders to effectively engage in collective action [9]. A key step is developing a common understanding of terms and barriers to aligning the different systems across

sectors impacting population health [10*]. Networks should create a governance or supportive infrastructure to align partners and support the creation of common goals and metrics (e.g., a portfolio of shortand long-term goals with measures and accountability) [9]. Research found it effective for partners within cross-sector networks to share accountability for 'integrative activities,' the governance, oversight, and administrative functions that enable cross-sector networks to implement strategies related to the network's shared population health goals [11**]. This includes activities such as creating decision-making processes, developing data-sharing agreements between partners, creating mechanisms for measuring progress and identifying policies to make the network more effective.

Cross-sector networks utilizing collective action principles to address health challenges achieve successes in improving population health. A survey of population health cross-sector networks found that about a quarter reported improved community outcomes related to increased consumption of healthy foods, increased physical activity, reduced body mass index, reduced utilization of emergency healthcare, and improved self-reported health [12]. Other cross-sector networks have achieved broader systems changes that improved outcomes for the prioritized community [13]. However, the intensity of their impact is affected by the degree of alignment within the networks and inclusion of an explicit focus on equity [13].

PRINCIPLES AND TACTICS FOR EFFECTIVE CROSS-SECTOR NETWORKS

The following principles and tactics can guide cross-sector networks in supporting communities in addressing health inequities. These principles are not linear or siloed, but overlap and reinforce each other [14**]. The principles require equity and the participation of community members to be central in all cross-sector network work.

Equity and inclusion

For cross-sector networks to improve population health and reduce health inequities, the network must ensure that equity is central to all its goals. A shared understanding of the root causes of the health and social needs of a community, coupled with concrete skills and tools, enables networks to address the policies, systems, and environmental factors that perpetuate inequity [15]. These root causes exist not just in the health sector in the form of barriers to accessing quality healthcare services, but also in other sectors presenting as a lack of access

to jobs with livable wages, neighborhoods exposed to high levels of pollutants, violence, lack of critical infrastructure, or toxic stress caused by exposure to racism [16]. To gain a full understanding of a community's needs and the factors that shape them, cross-sector networks must engage the community to understand their 'lived experience' [17,18]. When multiple individuals are engaged, lived experience is the firsthand knowledge of the conditions, strengths, and needs of a community, and insight into the systems that impact them. Effective crosssector networks working in service to a community should engage the community to build trust and foster relationships [19]. Cross-sector networks that cultivate intentional and trusting relationships with community members can recruit community members to participate in network decision making and leadership, ensuring their lived experience informs and directs goal setting, data collection, and activity planning efforts [20,21]. For example, a Florida early childhood cross-sector network brought parents into compensated advisory board positions and other leadership roles so that they could inform systems change efforts in the state [22]. Compensation for community members and leaders participating in networks is an acknowledgement of the value of their expertise and time, role as consultants and role in implementation [23"].

Readiness

To maximize the impact of a cross-sector network, partners must assess their individual organizational readiness and ability to participate in the network and its activities [24]. In considering readiness, network partners should cultivate support and commitment within their organizations for changes that will facilitate the network's work, such as securing funding for staff to devote time to participating in the network, creating changes to workflows to carry out or support the networks activities, and/or incorporating changes to organizational policies to align and reinforce the work of the network [25]. This effort can institutionalize policies that prioritize engagement in network activities and goals that outlive leadership and staff transitions, ensuring that participation in the network does not fade when organizations undergo personnel changes. The skills and expertise needed for effective leadership in a network are not static and will depend on the network goals and organizational strengths across partners [26**]. A school readiness coalition in Oklahoma struggled to effectively engage tribal communities until it spent time building the foundation for long-term relationships with tribes and communicated the value that collaborating with the coalition could bring in terms of resources and access to data [27]. These steps helped cross-sector networks deeply engage in network activities and advance group decisions. When partners have the necessary interest, capacity, and staff engaged in the network, the people at the table are empowered to make necessary commitments to the network and its goals.

Joint planning

Networks engagement in joint planning on goals to reduce health disparities and promote health equity, partner accountability, and timelines fosters coordination and accountability among partners. This entails assessing how each individual organization's goals align, identifying the unique strengths and expertise of each partner, and deciding what resources (such as staff time, funding, or data sharing infrastructure) they will each contribute to the network initiatives and activities [28,29]. Differences across partners are identified early on to avoid miscommunication. Although working collaboratively to develop short-term network goals, a maternal mental health coalition in Flathead County, Montana determined that members with lived experience would be better suited to lead the network and successfully executed a leadership transition to advance the work [30]. A traditional project work breakdown structure, or other project management structures, can track and communicate these roles and commitments in as much detail as is needed.

Governance

Integrating the work and goals of multiple organizations into a cross-sector network requires agreements and structures about how network partners and community experts work together and make decisions, as well as how costs and benefits will accrue to individual organizations and the network [31^{••}]. To facilitate buy-in from multiple partners and give voice to all of those around the table, the leadership function must be distributed in a fair, inclusive and equitable way and ensure members lead in areas of their expertise [32"]. Effective governance agreements may range from informal (e.g., sign-ons) to formal (e.g., memoranda of agreement) and provide guidance for all involved. For example, a population health collaborative in Washington, DC re-committed its membership and network leadership by planning and conducting a retreat to develop a 'values document' summarizing core activities and impact on member organizations and partnerships and crafting a strategy to improve alignment with community partners [30].

Many leaders agree that it will take an entire community to address the social determinants of health that contribute to negative and disparate health outcomes for residents. However, there is no standard way to create shared accountability among cross-sector network partners [33]. Partners in networks must establish a leadership table that distributes accountability for achieving network goals [34]. Configurations that have a range of sub-committees and broad representation (as opposed to a single 'lead' or 'anchor' organization whose role is to convene partners and take the lead on establishing goals and tracking progress) can create the buy-in necessary for members to stay committed to the network and systems change work over the long-term [35**]. This creates clarity about roles and responsibilities and unifies competitors and unfamiliar collaborators by allowing each group to do what they do best [36].

Data

Joint sense-making of data shared between network partners and community members can be effective in helping networks identify community needs, measure the impact of network activities, and foster accountability [37]. Sharing and integrating the data collected by network partners across sectors, augmented by engagement of community members with lived experiences, aids networks in developing a full understanding of a community's health and needs to guide the development of their goals and strategies [38]. Aggregated data on the causes of a population health challenge can help a network make a compelling case for system or policy change [39]. As the work deepens and becomes more embedded in the fabric of the community, the network's data sharing efforts may require a more robust infrastructure to integrate data from multiple sectors and analyze its impact on the community as a whole and to measure the impact on equitable outcomes. Disaggregated data allows the network to identify sub-populations in need of targeted resources and specialized strategies to address inequities [40].

Promoting equity through data disaggregation

Analyzing improvements in health outcomes at too high a level (e.g., a whole community or entire patient population) can obscure inequities in access to healthcare and healthcare outcomes related to race, ethnicity, and other demographic characteristics [40°,41,42]. In order to explore health inequities across its patient population, Nemours Children's Health developed a patient equity index to

disaggregate patient data by demographics (race, ethnicity, and language spoken in patient home). Although research on health disparities is extensive, the literature on health system development and utilization of patient equity indexes or dashboards, especially in pediatrics, is nascent [43,44]. Nemours' patient equity index tracks outcomes around prevention, access, and clinical outcomes across patient subpopulations. Patients and families representing varied populations may face different barriers to accessing care including structural (limited transportation, time off work), interpersonal (limited English proficiency or health literacy), and systemic (mistrust of health system recommendations based on historical patterns of institutional discrimination). The goal of the equity index is to provide a platform for deep dives into these areas to understand what impactable factors might drive inequities and can inform the work of networks to address them.

After exploring various clinical measures related to inequitable pediatric health outcomes, three initial pediatric healthcare access and clinical measures were identified:

- (1) Access to Care (Primary Care patients seen at least once in the previous 365 days).
- (2) Arrival Rate (Percentage of patients who showed up for an appointment as expected).
- (3) Flu Vaccination Rate (Percentage of patients receiving one vaccine dose during the flu season annually).

Analysis of health disparities within the Nemours patient population is a step toward achieving health equity among patients and in the community. The patient equity index can be applied to all areas of the pediatric health system. Nemours will share data from its patient equity index within its networks to support the development of shared interventions that address the barriers to equitable healthcare access and disparate health outcomes. The patient equity index advances health system e accountability to both its patients and communities in making measurable progress toward eliminating health inequities. It will also help Nemours and its partners better assess where the expertise and experience of the health system can best be brought to bear and where it makes sense to provide support for other community leads [45**].

CONCLUSION

Cross-sector networks can enhance their impact and improve the sustainability of their efforts by integrating the above principles into their structures and work. By building strong relationships among partners,

cross-sector population health networks can ensure the network is not a short-term, one-time project, but a sustained collaboration through enduring processes and infrastructure. Networks can gain a fuller understanding of the needs and assets of a community through engagement and leadership by community members than they could gather from data and surveys alone. This approach to serving a community by making members equal partners in the effort helps to place equity at the center of a network's focus, as does embedding equity-related decision-making tools and processes into operations of the network. If crosssector networks build resilient, inclusive structures and procedures, they can utilize them to pivot and adjust to emerging needs or respond to crisis.

It is more imperative than ever that population health networks address the causes, not just the symptoms, of health inequities. There are clear behavioral attributes that contribute to the success of cross-sector networks in tackling root causes of inequity. Those that have cultures of learning and embrace opportunities to change and evolve are most successful in working in service to their communities to promote health and wellbeing. As state and local governments, healthcare providers, and community service organizations grapple with reducing inequities and disparities in child health and wellbeing outcomes that span multiple sectors, it is imperative for stakeholders to form networks with equity embedded in their structures and community-driven goals. Leveraging the work of groups that came before them can allow the current partnerships to succeed where others have stalled or failed. The principles and tactics explored above can accelerate and enhance the impact of communities – recognizing that an organized community is an asset that can quickly and effectively respond to new opportunities as they arise.

Acknowledgements

The authors gratefully acknowledge the assistance of Trevor Lee of Nemours Children's Health in gathering information for this article as well as Lavisha Pelaez of Nemours Children's Health in co-developing the Nemours patient equity index. Additionally, the authors want to acknowledge the following partners in informing the content of this article:

Bridgeport Prospers DC Heath Matters Collaborative First 1,000 Days Sarasota Florida Association of Healthy Start Coalitions Ready for School, Ready for Life (also previously known *as Get Ready Guilford Initiative)* Institute for Public Health Innovation Maternal Mental Health Coalition of Flathead County New Jersey Interdepartmental Planning Group

Financial support and sponsorship

This article is informed by findings from projects funded by the Robert Wood Johnson Foundation and the Kresge Foundation.

Conflicts of interest

There are no conflicts of interest.

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest
- 1. Zalla LC, Martin CL, Edwards JK, et al. A Geography of risk: structural racism
- and coronavirus disease 2019 mortality in the United States. Am J Epidemiol 2021: 190:1439-1446.

This article recommends alternative strategies to compare disparities in the risk of COVID-19 mortality to avoid underestimating the magnitude of racial inequities.

- 2. Tan SB, deSouza P, Raifman M. Structural racism and COVID-19 in the USA: a county-level empirical analysis. J Racial Ethc Health Disparities 2021. Available at: https://doi.org/10.1007/s40615-020-00948-8.
- 3. Malawa Z, Gaarde J, Spellen S. Racism as a root cause approach: a new ■■ framework. Pediatrics 2021; 147:e2020015602

This article proposes a framework to guide child health advocates in designing systems change interventions that address racism as a root case of health inequities.

- Mosley JE, Cross-sector collaboration to improve homeless services: Addres-
- sing capacity, innovation, and equity challenges. Ann Am Acad Polit Soc Sci 2021: 693:246-263.

This article proposes utilizing collective action in cross-sector collaboration addressing homelessness to overcome barriers related to lack of capacity, momentum, or equity across populations.

- 5. Fromknecht CO, Hallman VA, Heffernan M. Developing state health improvement plans: exploring states' use of healthy people. J Public Health Manag Pract 2021: 27:S274-S279.
- 6. Council on Community Pediatrics. Community pediatrics: navigating the intersection of medicine, public health, and social determinants of children's health. Pediatrics 2013; 131:623-628.
- 7. Reno R, Warming E, Zaugg C, et al. Lessons learned from implementing a
- place-based, racial justice-centered approach to health equity. Matern Child Health J 2021; 25:66-71.

This article describes the Best Babies Zone initiative's strategies for implementing cross-sector solutions to address neighborhood conditions that create toxic stress and contribute to racial inequities in communities of color.

- Kania J, Kramer M. Collective impact. Stanford social innovation review 2011;
- 9. Hanleybrown F, Kania J, Kramer M. Channeling change: making collective impact work. Stanf Soc Innov Rev 2012. Available at: https://ssir.org/articles/ entry/channeling_change_making_collective_impact_work.
- 10. Riley WJ, Love K, Runger G, et al. Framework for multisector alignment research. J Public Health Manag Pract 2021; 27:E205-209.

This article explored how multisector collaboratives are becoming increasingly recognized as a strategy for combining efforts from medical, public health, social services, and other sectors,

- 11. Gertel-Rosenberg A, Burke Blackburn K, Taylor B, et al. The engine of population health networks: understanding & using integrative activities.
- Nemours Child Health 2021. Available at: https://www.movinghealthcareupstream.org/wp-content/uploads/2021/04/Understanding.And_.Using_.Integrative.Activities_FINAL_4.14.21.pdf.

This brief explores integrative activities for cross-sector population health networks and identifies how they can be implemented to enhance the impact of cross-sector

- 12. Mattessich PW, Rausch EJ. Cross-sector collaboration to improve community health: a view of the current landscape. Health Affairs 2014; 33:1968-1974.
- 13. Stachowiak S, Gase L. Does collective impact really make an impact? Stanf Soc Innov Rev 2018. Available at: https://ssir.org/articles/entry/does_collective impact really make an impact.
- 14. Calancie L. Frerichs L. Davis MM. et al. Consolidated framework for colla-
- boration research derived from a systematic review of theories, models, frameworks and principles for cross-sector collaboration. PLoS One 2021; 16:e0244501

This article synthesizes findings from a systematic review of research on crosssector collaborations and offers a framework of principles to guide design, management, and evaluation of cross-sector networks.

- 15. Maness SB, Merrell L, Thompson EL, et al. Social determinants of health and health disparities: COVID-19 exposures and mortality among African American people in the United States. Public Health Rep 2021; 136:18-22.
- Paul R, Adeyemi O, Ghosh S, Pokhrel K, et al. Dynamics of Covid-19 mortality and social determinants of health: a spatiotemporal analysis of exceedance probabilities. AnnEpidemiol 2021; 62:51–58.
- 17. Petiwala A, Lanford D, Landers G, et al. Community voice in cross-sector alignment: concepts and strategies from a scoping review of the health collaboration literature. BMC Public Health 2021; 21:712.

This article presents various strategies for integrating community voice into community health collaboratives to improve their ability to create systems change.

- community health collaboratives to improve their ability to create systems change. **18.** Campbell DT, Campbell RB, DiGiandomenico A, et al. Using a community-
- based participatory research approach to meaningfully engage those with lived experience of diabetes and homelessness. BMJ Open Diabetes Res Care 2021; 9:e002154.

This article assesses the outcomes of a participatory research project that engaged individuals who have experienced homeless as co-researchers in exploring diabetes management among homeless adults and found that the co-researchers reported improved confidence in their self-advocacy skills.

- Strachwitz RG, Alter R, Unger T. Addressing wicked problems: collaboration, trust and the role of shared principles at the philanthropy and government interface. Trusts Trustees 2021; ttab066. Available at: https://doi.org/ 10.1093/tandt/ttab066.
- Remiker M, Sabo S, Jiménez D, et al. Using a multisectoral approach to advance health equity in rural Arizona: Community-engaged survey development and implementation study. JMIR Form Res 2021; 5:e25577.

This article describes the implementation and findings of a health equity survey for cross sector population health collaborations in Arizona which identify communication, shared vision, and trust as critical elements for collaborations to be successful.

- Hacker KA, Briss PA, Richardson L, et al. COVID-19 and chronic disease: the impact now and in the future. Prev Chronic Dis 2021; 18:E62.
- Nemours Children's Health. Project HOPE: Florida. September 2021. Available at: https://www.movinghealthcareupstream.org/wp-content/uploads/2021/09/Project-HOPE-State-Profiles-FL.pdf.
- 23. Hutson B. Paying community members for their time. Shelterforce 2021.
- Available at: https://shelterforce.org/2021/02/26/paying-community-members-for-their-time/.

This article describes how community-based organizations can compensate community members for their time to participate in community development initiatives in order to effectively incorporate 'community voice' into the decisionmaking process so that it reflects the needs and desires of community members.

- Scott VC, Gold SB, Kenworthy T, et al. Assessing cross-sector stakeholder readiness to advance and sustain statewide behavioral integration beyond a State Innovation Model (SIM) initiative. Transl Behav Med 2021; 11: 1420-1429.
- Heath E, Sanon V, Mast DK, et al. Increasing community readiness for childhood obesity prevention: a case study of four communities in Georgia. Health Promot Pract 2021; 22:676–684.
- 26. Dentoni D, Pinkse J, Lubberink R. Linking sustainable business models to socio-ecological resilience through cross-sector partnerships: a complex adaptive systems view. Bus Soc 2021; 60:1216-1252.

This article describes a framework of organizational components that support sustainable cross-sector collaborations by focusing on creating social and environmental value.

- Nemours Children's Health. Project HOPE: Oklahoma. September 2021.
 Available at: https://www.movinghealthcareupstream.org/wp-content/up-loads/2021/09/Project-HOPE-State-Profiles-OK.pdf.
- 28. Domlyn AM, Scaccia J, Lewis N, et al. The community transformation map: a maturity tool for planning change in community health improvement for equity and well being. Am J Orthopsychiatry 2021; 91:322–331.

This article presents the Community Transformation Map as a tool for cross-sector collaborations to assess their impact on the community they serve and their ability to achieve systems change.

- Barry MM. Transformative health promotion: what is needed to advance progress? Glob Health Promot 2021; 0:1-9.
- Nemours Children's Health. Network Profile: Integrator Learning Lab 2020.
 Available at: https://www.movinghealthcareupstream.org/wp-content/up-loads/2021/01/ILL-Network-Profiles-ALL.pdf.

- **31.** Alderwick H, Hutchings A, Briggs A, *et al.* The impacts of collaboration
- between local healthcare and nonhealthcare organizations and factors shaping how they work: a systematic review of reviews. BMC Public Health 2021; 21:753

This article synthesizes the findings of a systematic review on the health impacts of cross-sector collaborations. It found that few studies documented improved health outcomes, however, there was evidence that they reduce health disparities.

32. Steenkamer B, Drewes H, Putters K, et al. Reorganizing and integrating public health, healthcare, social care and wider public services: A theory-based framework for collaborative adaptive health networks to achieve the triple aim.

J Health Serv Res Policy 2020; 25:187–201.

This article provides a framework of key cross-sector components and subcomponents for effective cross-sector systems change efforts to improve population health.

- DeSalvo K, Hughes B, Bassett M, et al. Public health COVID-19 impact assessment: lessons learned and compelling needs. NAM Perspect 2021. Available at: doi:10.31478/202104c.
- **34.** Towe CL, Leviton L, Chandra A, *et al.* Cross-sector collaborations and partnerships: essential ingredients to help shape health and well being. Health Aff 2016; 35:1964–1969.
- Christens BD, Byrd K, Hartigan LA, et al. Participatory roles in community coalitions: associations with perceptions of influence on decision-making. Commun Dev 2021; 52:365–381.

Commun Dev 2021; 52:365–381.

This article analyzes various kinds of distributed leadership structures in cross-sector substance abuse prevention coalitions and assesses their relationship to

- perceptions of coalition progress and impact.
 36. Evan Vooren NJ, Steenkamer BM, Baan CA, Drewes HW. Transforming towards sustainable health and wellbeing systems: Eight guiding principles
- towards sustainable health and wellbeing systems: Eight guiding principles based on the experiences of nine Dutch Population Health Management initiatives. Health Policy 2020; 124:37–43.

This article outlines principles for forming and implementing effective population health collaboratives based on the experiences of Dutch cross-sector population health collaborations.

Wu E, Villani J, Davis A, et al. Community dashboards to support data-informed decision-making in the HEALing communities study. Drug Alcohol Depend 2020; 217:108331.

This article discusses a data dashboard that was created by researchers and community stakeholders, tailored to understanding community needs, to facilitate implementation of strategies to reduce opioid overdose deaths.

- King RJ, Garrett N, Kriseman J, et al. A community health record: improving health through multisector collaboration, information sharing, and technology. Prev Chronic Dis 2016; 13:e122. Available at: https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC5027852/.
- Dietz WH, Solomon LS, Pronk N, et al. An integrated framework for the prevention and treatment of obesity and its related chronic diseases. Health Aff 2015; 34:1456–1463.
- 40. Kauh TJ, Ghazal Read J, Scheitler AJ. The critical role of racial/ethnic data
- disaggregation for health equity. Popul Res Policy Rev 2021; 40:1-7.
 This article discusses the importance of racial/ethnic data disaggregation and how

This article discusses the importance of racial/ethnic data disaggregation and how it can provide a more accurate picture of health and wellbeing in the United States.

- Montoya-Williams D, Peña MM, Fuentes-Afflick E. In pursuit of health equity in pediatrics. Pediatr X 2020; 5:100045.
- 42. Blagev DP, Barton D, Grissom CK, et al. On the journey toward health equity: Data, culture change, and the first step. NEJM Catal Innov Care Deliv 2021; 2. Available at: doi: https://doi.org/10.1056/CAT.21.0118.
- 43. Tsuchida RE, Haggins AN, Perry M, et al. Developing an electronic health record—derived health equity dashboard to improve learner access to data and metrics. AEM Educ Train 2021; 5:S116-S120.

This article outlined the development of a patient equity dashboard for a hospital emergency department to increase internal awareness of health disparities and guide future discussions on quality improvement.

- 44. Tan-McGrory A, Bennett-AbuAyyash C, Gee S, et al. A patient and family data domain collection framework for identifying disparities in pediatrics: results from the pediatric health equity collaborative. BMC Pediatr 2018; 18:18.
- 45. Hester G, Nickel AJ, Griffin KH. Accountability through measurement: using a
- dashboard to address pediatric health disparities. Pediatrics 2020; 146:e2020024448.

This article describes Children's Minnesota's development of a patient health equity dashboard to identify significant disparities among their patient population and explores their intention to use data transparency to drive accountability for health improvement.