FROM THE AMERICAN ACADEMY OF FAMILY PHYSICIANS

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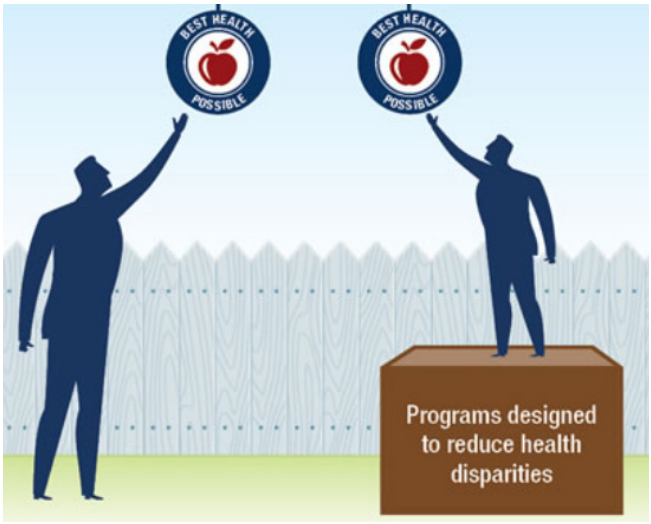
Case Studies in Innovative Community Engagement to Improve Health Equity in Cardiovascular Disease

Cardiovascular disease (CVD) is the leading cause of mortality and morbidity in the United States.[1] Approximately one in five deaths is due to CVD, and the United States spends around $229 billion each year on CVD-related care and productivity losses.[2] Though the mortality rate due to CVD is decreasing, racial disparities in outcomes have persisted, mainly driven by the complex interplay of social determinants of health (SDoH) and structural racism.[3,4]



CDC – Office of Minority Health & Health Equity (OMHHE). https://www.cdc.gov/minorityhealth/strategies2016/

Beginning in March 2021, the American Academy of Family Physicians (AAFP) implemented a two-year project to address cardiovascular disparities in African American communities, with a focus on atrial fibrillation (AFib). The project utilized a clinic-community partnership model within which family physicians and their health care teams explored the needs of their communities and leveraged the resulting information to foster innovative ideas and work with community partners to reduce cardiovascular disparities.

Three family medicine practices participated in the project:

1. Access Healthcare, a direct primary care (DPC) clinic in Apex, North Carolina
2. DePaul Community Health Centers (DCHC), a federally qualified health center (FQHC) network in New Orleans, Louisiana
3. Trenton Medical Center dba Palms Medical Group, an FQHC in Trenton, Florida

A physician expert and the Prevention Institute trained the participating family physicians and their care teams on topics such as AFib detection and management; disparities in cardiovascular care and outcomes; SDoH and health equity; and community engagement. Applying insights from this training, each practice used patient surveys and in-depth interviews to assess their community's needs. They also conducted environmental scans to identify existing community resources (e.g., community needs assessment reports, community health

improvement plans) and possible public health partners. An action planning workshop was held in collaboration with the University of Kansas to help practices develop interventions based on their assessment findings. The practices subsequently implemented these interventions. The AAFP assisted with the institutional review board (IRB) application, design of data collection instruments, and data analysis.

The project was completed in February 2023. While the full impact of this project has not yet been evaluated, the following case studies describe each participating practice's experiences and what they learned on their unique journey from needs assessment to interventions.

CASE STUDY 1:
Access Healthcare, Brian Forrest, MD, and Whitney Kirkman, PBT-ASCP, MA

> *Well, coming as a child living in poverty, I didn't have enough money to see a doctor. But when I got older and started having issues, that's when I started going to health care.*
>
> — *ACCESS HEALTHCARE PATIENT*

Access Healthcare is a DPC safety-net practice, and 40% of our patients are uninsured. Between April and May of 2022, we surveyed 58 patients and conducted in-depth interviews with three patients. It was challenging to get people to complete a patient survey and even more challenging to engage them in lengthy interviews, but it was heartening to get positive feedback about our practice. Through the assessment, we learned that our patients' biggest concern about getting cardiovascular care was out-of-pocket costs for labs, visits, and medication. During interviews, our patients also described the bias they experienced in other health care settings. Learning about ways that discrimination, bias, and lack of food and transportation resources impacted patients' access to care changed our perspective.

We also conducted interviews with local community leaders from the African Methodist Episcopal (AME) Church, the North Carolina Medical Society, and an Alliance for Health Equity Grant organization, as well as with insurance company executives and hospital system CEOs. These interviews focused on finding out how we could more effectively improve health equity and decrease disparities. Fixing a problem starts with innovation, so the ideas generated for this project were aimed at improving in three focus areas.

1. **Improve the structural determinants of health, such as inequities in power or status:** For this focus area, we reimagined and redirected health care media content, such as Access Health Radio, a live AM/FM radio show and podcast focused on cardiovascular topics. To improve health literacy through education, we made this programming available through more accessible platforms. We also convened community-driven educational sessions to increase health literacy and awareness of CVD. For example, we partnered with AME Church leaders to broadcast live question-and-answer sessions on CVD that were available to the public across our state. Additionally, we identified and addressed patients' barriers to accessing transportation, food, and exercise resources by creating a set of standardized screening questions for use during check-in at our practice.

2. **Advocate for policies across all settings that advance greater health equity:** These policies were aimed at increasing awareness and education regarding SDoH and inequities in our community, as well as addressing these issues. We worked with policymakers at the North Carolina Leadership Forum to identify solutions to alleviate inequities, with a focus on food deserts, transportation problems, barriers to access to expanded Medicaid and insurance options, and caps on Supplemental Nutrition Assistance Program (SNAP) benefits for healthy food options. We also advocated for resources to support community-driven transportation solutions, such as free public transportation or rideshare vouchers.

3. **Target service disparities and inequities in health care access and quality:** We started by routinely assessing the affordability of medications and follow-up care and intervening when necessary, and we applied Plan-Do-Study-Act (PDSA) quality improvement cycles to see what impact we were having. One of our ideas was partnering with a national mail-order pharmacy to create a program that offers

a $30 monthly cap on all generic medication shipped at no cost to our patients. This program is now available nationwide for practices that want to participate. We also created a $35 subscription plan in the DPC model[5,6] for patients with AFib and CVD. All coagulation testing and visits and consultations with an in-house clinical practicing pharmacist (PharmD) were made available at no additional charge for medical optimization. We also advocated for lower costs and improved access and quality for all patients, and we continue to look for ways to accomplish these goals.

Through this project, we learned the importance of meeting people where they are rather than where we expect them to be. We also learned that the process of working with community leaders and bridging ideological gaps was more productive than we expected. New legislation, policies, and grant programs are likely to improve CVD disparities. We are now developing a systematic program to assess discrimination bias in health care facilities and reduce it through peer-to-peer coaching and PDSA initiatives that are being funded jointly by Bristol Myers Squibb and Pfizer. We hope to create a self-sustaining nonprofit to offer these assessments and interventions to practices willing to embrace the challenge.

CASE STUDY 2:
DePaul Community Health Centers, Casey Williams, MD, and Marsha Broussard, DrPH, MPH

> *[Developers] are buying up the neighborhood and pricing us out. They call it an improvement, but it's only improvement for certain people. The homes they are rebuilding aren't affordable to the residents. They made it difficult for residents to get a permit to improve or renovate their own home. That bothers me. The family who has lived there [is] just gone, [is] just erased.*
>
> — *DCHC PATIENT*

DePaul Community Health Centers is an FQHC network with ten locations in the New Orleans metropolitan area that serve ten distinct communities. With an enrollment of over 50,000 patients, DCHC provides a comprehensive range of services for all ages, including prevention and primary health care, prenatal and pediatric care, dental and optometry care, and mental and behavioral health care. We also administer the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for families with food insecurity. DCHC serves some of the city's most vulnerable patients, including a majority African American population that experiences disparities in CVD treatment and outcomes. With its focus on reducing AFib health disparities, this project gave DCHC the opportunity to obtain feedback from our affected population and work with colleagues across the country to explore innovations in primary prevention.

Our project began with a community needs assessment that was conducted at one of the DCHC locations and included three components:

1. **A survey of patients experiencing cardiovascular health issues:** The primary objective of the survey was to obtain feedback from our cardiovascular patients regarding the quality of care at DCHC, barriers to accessing care, and concerns regarding their medications. The survey also collected demographic information (e.g., income, education, employment) to inform our analysis.
2. **Interviews of patients with cardiovascular health issues:** A DCHC physician conducted these interviews with his patients to delve deeper into cultural and environmental factors that influence patients' health conditions.
3. **Interviews of community organizations with a mission to address the need for healthy food and promote physical activity:** Two of the project coordinators conducted interviews with seven community agencies to create understanding, promote alignment, and identify local resources available to help DCHC patients improve their cardiovascular health.

The survey showed that our patients' primary concerns in getting cardiovascular care were appointment scheduling issues and out-of-pocket costs for labs/visits, medication, and transportation. The interview findings were very interesting because patients in different age groups had varied perspectives. For instance, patients in their 40s were concerned with the interventions necessary to improve health and prolong longevity. They wanted improvements in neighborhood walkability and access to local parks for exercise. Patients in their 60s had concerns related to navigating the health care system. In particular, they noted that insurance determines what options are available for medical devices (e.g., hearing aids), and there can be drastic differences in the quality of these options. Patients in this age group were also concerned about how the expansion of medical facilities would affect the character of their neighborhood. They wondered how these facilities would benefit the area's long-term residents before and after establishing their presence and whether interventions would be implemented equitably. Patients in their 80s expressed concern about their neighborhood's changing demographics and the impacts of gentrification. Specifically, they mentioned that the types of vendors and options available locally had changed over time, as well as citing increased food prices and a lack of places to park.

Based on our assessments of needs and feasibility, we offered a series of three educational sessions to provide information on the prevention of AFib, which has some modifiable risk factors. We offered information on AFib risk factors, epidemiology, symptoms, and prevention. To support lifestyle interventions, we engaged with several community organizations: the American Heart Association for educational resources; New Orleans Recreation Development Commission for access to exercise facilities; and Sankofa Community Development Corporation for healthy food options, such as fresh produce. Based on the individual patient's determination of their concerns and needs, we provided contact information so they could pursue the opportunities these community resources offered to optimize heart health.

We faced some timing and location challenges when executing our educational events. In consideration of accessibility and patients' schedules, we offered the sessions at the end of the day at our clinic facility. However, the topics and concerns covered could have been more conveniently addressed via a virtual health meeting. In the future, we may implement this change in how we deliver and design our outreach programs for CVD prevention.

We plan to provide more information about the medication assistance we offer and to do more outreach with our health coach program and chronic care management (CCM) team. Steps we have taken to identify patients who may benefit from our health coaches and CCM program include identifying SDoH and overutilization of emergency department services. To sustain our model for the practice, we plan to have sessions that recur monthly/quarterly to reinforce and remind our population about the importance of AFib prevention and the availability of existing community resources.

CASE STUDY 3:
Trenton Medical Center dba Palms Medical Group, Tiffany Hill, MD

> *There is a lot of fast food in my neighborhood and that is where people tend to go. I avoid going out to eat to avoid temptation.*
>
> — *PALMS MEDICAL GROUP PATIENT*

Palms Medical Group is an FQHC with 12 locations throughout northeast Florida, including Trenton Medical Center, which is located on the outskirts of Jacksonville, Florida. The center provides a full range of medical services to patients with commercial and public insurance and to patients who are uninsured. When this project began, the medical group had a partnership with Orange Park

Family Medicine Residency Program, and I had dual responsibility as both a clinician at Trenton Medical Center and faculty for the residency program. My interest in participating in this project stemmed from my desire for both academic development and attainment of a more tangible approach to addressing the community's medical needs.

Assessment of our African American patients' perception of health care was obtained via qualitative measures (i.e., in-depth interviews) and quantitative measures (i.e., survey accessed via QR code) during April and May of 2022. Although the patient survey had a low response rate, we obtained comprehensive perspective through our in-depth patient interviews. As an FQHC, we can provide affordable medications to our uninsured patients through the 340B Drug Pricing Program. But despite measures in place to help them overcome financial obstacles, an overwhelming number of surveyed patients reported that out-of-pocket cost of medication was one of their primary concerns about getting cardiovascular-related care.

Additionally, almost 40% of the surveyed patients stated that concern about adverse effects was a barrier to taking medications. The qualitative data revealed that our African American patients want to focus on mitigating CVD through a healthy diet and physical activity and showed how structural determinants (e.g., community context, living or working conditions) affect their ability to adopt a healthy lifestyle.

In-person interviews offered a useful perspective on the large impact relationships can have on health care. Patients were more inclined to participate and engage with physicians they trusted. Numerous patients repeated the themes of community and education. Motivated by altruism, they wanted to empower other African American individuals. Specifically, they expressed the importance of instilling awareness of early CVD detection and preventive care. For example, one patient with a history of CVD explained their impetus for participating in the interview by saying, "I want to help someone know what to look for before

KEY TAKEAWAYS

- Make an impact on improving health equity by reducing barriers created by SDoH.
- Identify your community's needs and explore community resources in your area. Counties often already have community needs assessment reports and community health improvement plans.
- Connect with patients and listen to their input. It can be an enlightening experience.
- Form community partnerships or engage in existing community coalitions to link your patients with resources.
- Meet members of your community where they are. It is not productive to provide information and patient education via formats or platforms that your patients do not use or see.
- Offer information in a variety of ways (e.g., audiovisual content, paper packets, internet links, text messages) to improve access and maintain awareness.
- Be mindful of patient concerns about access and expense. Modify management based on need, if necessary.
- Establish organizational goals that align with a commitment to building sustainable relationships within the community.
- Be innovative and customize solutions that meet the needs of your community and practice. You can improve the care you provide and your patients' outcomes by improving health literacy, increasing access to affordable care and medications, and advocating locally for policy solutions to help ameliorate the impacts of SDoH. Keep in mind that the same solutions may not work in all locations.

something like that happens, so they don't have to go through what I have." Additionally, the interviewees emphasized the significance of family history, advocacy, and accountability.

Unfortunately, our momentum came to a halt when the relationship between Orange Park Family Medicine Residency Program and Palms Medical Group dissolved, but the project was transitioned to the residency program. To expand our outreach to the African American community, we have partnered with a new free clinic that provides sexually transmitted infection (STI) testing in the inner city of Jacksonville. We will provide screenings for risk factors of CVD, hypertension, diabetes, and hyperlipidemia. Patients will be connected with an insurance broker to help them obtain affordable insurance.

Partnering with local food banks and urban farms will help us facilitate lifestyle changes that can reduce cardiovascular risk. Additionally, we will identify patients whose passion for health and community engagement aligns with ours, and they will serve as liaisons by providing outreach via community events and social media. We hope this will improve trust and intracommunity education. Further education on CVD will occur through small groups conducted by family medicine residents. The residency program has implemented a lifestyle medicine residency curriculum that gives residents the necessary tools for educating and guiding patients.

We did encounter some challenges in strategizing and finding ways to create more community engagement. Development of partnerships and solutions that would create a sustainable construct to address the community's needs did not align with my clinic's goals. Despite my personal passion for this project's focus, organizational buy-in was lacking. However, the formation of a new partnership allowed me to achieve project aims.

References

1. Virani SS, Alonso A, Aparicio HJ, et al. Heart disease and stroke statistics—2021 update: a report from the American Heart Association. *Circulation.* 2021;143(8):e254-e743.
2. Center for Disease Control and Prevention. Heart disease facts. October 14, 2022. Accessed November 18, 2022. https://www.cdc.gov/heartdisease/facts.htm
3. Mazimba S, Peterson PN. JAHA spotlight on racial and ethnic disparities in cardiovascular disease. *J Am Heart Assoc.* 2021;10(17):e023650.
4. Singh GK, Siahpush M, Azuine RE, et al. Widening socioeconomic and racial disparities in cardiovascular disease mortality in the United States, 1969-2013. *Int J MCH AIDS*. 2015;3(2):106-118.
5. Sprey E. New practice models are gaining acceptance in primary care. Physicians Practice. August 20, 2014. Accessed December 13, 2022. https://www.physicianspractice.com/view/new-practice-models-are-gaining-acceptance-primary-care
6. Forrest B. New primary-care models can change the way you practice medicine. Physicians Practice. December 7, 2011. Accessed December 13, 2022. https://www.physicianspractice.com/view/new-primary-care-models-can-change-way-you-practice-medicine

AUTHORS:

Brian Forrest, MD
Casey Williams, MD
Marsha Broussard, DrPH, MPH
Tiffany Hill, MD
Whitney Kirkman, PBT-ASCP, MA
Rajani Bharati, PhD, MPH

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