

Hunger Free Colorado: Connecting Vulnerable Patients to Food and Nutrition Resources

Food insecurity — lack of access to affordable, nutritious food — can be harmful to the health and well-being of children and adults, resulting in negative outcomes such as poor academic performance, chronic medical conditions, such as diabetes, hypertension, and poor oral health, and increased risk of behavioral health conditions, such as depression and anxiety.¹ While Colorado is known as one of the healthier states in the nation,² the incidence of food insecurity in the state is significant.³ To improve access to affordable, healthy food, Hunger Free Colorado is partnering with Kaiser Permanente and other health care organizations to screen patients for food insecurity, as well as connect those who screen positive to food resources. For those identified as food insecure, health care providers connect them to Hunger Free Colorado, which helps to link patients to food resources and federal food assistance programs. Hunger Free Colorado's mission is to end hunger in Colorado, and health care partners are well positioned to help them achieve this mission. From 2011 to 2016, Hunger Free Colorado provided food assistance to more than 36,000 households.⁴

Program At-A-Glance: Connecting individuals to needed food and nutrition services, and benefit programs.

Partners: Hunger Free Colorado, Kaiser Permanente, Children's Hospital Colorado, and Denver Health, and others

Goals: Improve access for vulnerable Coloradoans to nutritious food and nutrition benefit programs.

Partnership Model: Referral services.

Scope of Services: Health care partners refer food insecure patients to Hunger Free Colorado. Hunger Free Colorado follows up with patients to offer food and nutrition services, and benefit application assistance.

Funding: Foundation and government grants, corporate sponsorships, and individual donations to Hunger Free Colorado.

Impact: From 2011 to 2016, more than 36,000 households have received food assistance as a result of Hunger Free Colorado services.

Advancing Community-Based Organization and Health Care Partnerships to Address Social Determinants of Health

Health care and community-based organizations (CBOs) across the country are increasingly working together to better address the root causes of poor health among low-income and vulnerable populations. To assist these efforts, there is a need to identify the financial, operational, and strategic considerations necessary to make these partnerships a win-win for all parties: consumers, the communities being served, health care providers, and CBOs. Through support from Kaiser Permanente Community Health, the Center for Health Care Strategies and Nonprofit Finance Fund collaborated to identify new strategies for advancing effective health care-CBO partnerships, building on work done under the *Partnership for Healthy Outcomes* project funded by the Robert Wood Johnson Foundation. This case study is part of a series highlighting diverse partnerships between CBOs and health care organizations.

Background

Hunger Free Colorado is a statewide, nonprofit organization launched in 2009 by the merging of two anti-hunger organizations (Colorado Anti-Hunger Network and the Colorado Food Bank Association); support from Kaiser Permanente Colorado and The Denver Foundation facilitated the merger. Hunger Free Colorado works on multiple fronts toward its mission to end hunger in Colorado, including: (1) linking individuals to food resources through the statewide, bilingual, toll-free Hunger Free Resource Hotline; (2) promoting programs that provide school-aged children with access to breakfast and summer lunches (to ensure that low-income children continue to receive nutritious meals when school is not in session); (3) connecting eligible residents to benefit programs, such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and (4) creating systems change to improve the overall food system in Colorado, including promoting change at the federal, state, and local legislative and policy levels to ensure food security. Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food, while hunger is an individual-level physiological condition that may result from food insecurity.⁵



Summer lunch programs through Hunger Free Colorado ensure that children have access to nutritious foods year round.

Access to adequate, nutritious food is essential for positive health outcomes.⁶ As seen by the exploration of the “food as medicine” approach in states like California, providers, researchers, and public health officials increasingly recognize the role that access to adequate and nutritious food plays in health outcomes.⁷ For children, healthy food supports brain and physical development, provides energy to excel in and out of school, and reduces the risk of asthma and poor oral health.⁸ Conversely, adults experiencing food insecurity are more likely to experience depression, be diagnosed with chronic conditions, such as diabetes, hypertension, and high cholesterol, and more likely to be hospitalized.⁹ Despite these known outcomes, consistent access to healthy food is not universal. In Colorado, nearly 10 percent of the state’s 5.6 million residents struggle with food insecurity.¹⁰ Nearly one in six Coloradoan households with children have insufficient food, one in 12 families rely on food stamps, and one in 10 older adults struggle to make decisions between buying groceries or needed medications.⁵ In addition, there are large gaps in the state between the number of residents who are eligible for federal nutrition programs like SNAP,

WIC, free/reduced school lunch programs, and summer food programs for children and those who are actually enrolled.

Given the frequent interactions that health care providers have with patients during preventive health care visits, along with the opportunities they have to build trust with patients, they are well positioned to identify food insecurity. However, clinicians often lack awareness of relevant community resources, as well as the time and appropriate training to refer to outside resources that address patient needs. In Colorado, SNAP is administered at the county level with clinicians often serving patients from multiple counties, which adds to the complexity of making effective community linkages for individuals in need of food and nutrition resources. Recognizing this, Hunger Free Colorado sought to engage health care providers throughout the state to screen vulnerable patients for food insecurity and refer those in need to Hunger Free Colorado for support. In 2010, Hunger Free Colorado

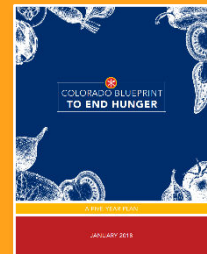
convened several medical providers who were caring for large numbers of low-income individuals to explore opportunities to implement food insecurity screening in clinical settings. Building on these convenings, in 2011, Kaiser Permanente Colorado provided funding to Hunger Free Colorado to create a hotline to help Coloradans navigate and receive application assistance for federal and charitable food programs. Kaiser Permanente Colorado also entered into a formal relationship with Hunger Free Colorado and began to refer patients from two pediatric clinics to Hunger Free Colorado for food and nutrition assistance. Kaiser Permanente has since started to screen patients for food insecurity in multiple clinics across its health system, including gynecology/obstetrics, family medicine, and geriatrics.

Separately, in January 2017, the Colorado Health Foundation convened local stakeholders working to address food insecurity, including Hunger Free Colorado and Kaiser Permanente Colorado, to develop the Colorado Blueprint to End Hunger, a five-year strategy to end hunger in Colorado.⁵ The Blueprint came about after the realization on the part of a number of funders and CBOs that food insecurity was a solvable problem that could only be addressed by a collaborative, coordinated, state-wide effort. This effort aims to provide greater visibility to the issue of food insecurity and hunger and direct resources to tackle the issue (see sidebar). Screening for food insecurity and connecting individuals to resources and benefit programs are central Blueprint goals. Because of Hunger Free Colorado's extensive history and experience in this work, it plays a key role on the steering committee of the Blueprint to guide this work.

This case study examines the collaboration between Hunger Free Colorado and its health care partners, including Kaiser Permanente Colorado and Children's Hospital of Colorado, to address food insecurity throughout the state. These mutually beneficial relationships have helped health care systems achieve their missions to provide affordable, high-quality health care, Hunger Free Colorado with their mission to end hunger, and all partners to make positive impacts on the community's health more broadly.

Blueprint to End Hunger

In 2017, the Colorado Health Foundation (CHF) convened a variety of stakeholders, including Hunger Free Colorado and Kaiser Permanente, to develop the Colorado Blueprint to End Hunger, a multi-year plan to end hunger for all Coloradans. Key elements of the plan, which was launched in January 2018, include efforts to maximize enrollment in SNAP and WIC, and expand the number of Coloradans who can access the food they need through community-based organizations. The five goals of the Blueprint include:



1. Increase public understanding and awareness that solving hunger is vital to the health and well-being of all individuals and families, the Colorado economy, and every local community;
2. Increase the number of Coloradoans who can access affordable, nutritious food in their communities;
3. Increase the number of Coloradoans who can access food assistance and nutritious food through community-based organizations;
4. Maximize SNAP and WIC enrollment to propel Colorado to become a leading state for enrollment in these health and nutrition benefits; and
5. Maximize participation in Federal Child Nutrition programs, moving Colorado to become a national leader in delivery of these vital programs.

Workflow and Data Management



Hunger Free Colorado's staff promote access to food and nutrition resources across the state.

Food insecurity screening is embedded in the well visit protocols within pediatric, OB/GYN, and family medicine clinics in Kaiser Permanente Colorado's medical offices. In addition, screening occurs at the first registered dietician appointment and diabetes care coordination visits, and is part of the Annual Wellness Visit benefit for Medicare beneficiaries. Screening for food insecurity is one part of a broad social determinant screen, and is typically conducted for the household, rather than the individual patient. Clinicians screen patient households on a number of social needs, and those who screen positive for food insecurity are referred to a Kaiser Permanente community health specialist, who then makes the referral to Hunger Free Colorado via secured electronic fax (transmitted through the electronic health record [EHR]).

Patients provide consent to share their contact information with Hunger Free Colorado. A Hunger Free Colorado food assistance navigator contacts the individual to further assess household needs, determines if the person is eligible for food and nutrition benefit programs, assists with enrollment, and makes

connections to local food resources, such as food pantries and congregate meal sites. Food assistance navigators provide "light case management" to ensure that patients are connected to adequate food resources, that benefit enrollment has been successful, and that other social or health needs have been addressed.

The food insecurity screen asks patients to rate the statements below on the scale provided:

- *Within the past 12 months, we worried whether our food would run out before we got money to buy more.* (Often True; Sometimes True; Never True; Don't Know/Refused)
- *Within the past 12 months, the food we bought just didn't last and we didn't have money to get more.* (Often True; Sometimes True; Never True; Don't Know/Refused)

Several process improvements have been made to increase the rate at which patients are connected to food and nutrition services. Initially, if Kaiser Permanente patients screened positive for food insecurity, clinicians provided a written referral to the Hunger Free Colorado Resource Hotline, with the expectation that patients would follow up. However, only five percent of patients who identified as food insecure actually contacted Hunger Free Colorado for support. Now, when patients screen positive for food insecurity, clinicians obtain immediate consent to share patient information with Hunger Free Colorado, which then makes direct contact with patients, in most cases, within 48 hours of the referral. The active nature of the follow-up by Hunger Free Colorado has increased uptake of food and nutrition assistance services to 75 percent.

Provider training has also been an important component of the partnership. When screening was launched, the Colorado Prevention Alliance, in collaboration with Hunger Free Colorado, developed web-based provider education modules that included information on the impacts of hunger and food insecurity and sensitivity training. In addition, Dr. Sandy Stenmark, a Kaiser Permanente Colorado pediatrician and champion of Kaiser Permanente Colorado's partnership with Hunger Free Colorado, worked with the Nutrition and Obesity Network to develop clinical algorithms to assess and manage food insecurity among adults, patients with diabetes, and

households with children.¹¹ The [algorithms](#), which are publicly available and shared with Kaiser Permanente providers and others to support their food insecurity screening efforts, include workflows and effective strategies for linking vulnerable patients to community resources, including SNAP and WIC.

Hunger Free Colorado established HIPAA compliant data-sharing agreements with health care partners and is upgrading its Salesforce data platform to improve referral information and enable real-time communication, including through text messaging. Hunger Free Colorado provides monthly reports to health system partners on referral outcomes, including the number of patients who accepted food and nutrition resources and benefit application assistance. The upgrades to Salesforce will also enable Hunger Free Colorado to develop customized reports to health care partners.

As the partnership matures, partners are considering the best ways to seek patient feedback, such as a patient resource groups, advocacy groups, or follow-up surveys. Patients often feel shame or reluctance in accessing food assistance, and health care partners are mindful not to further stigmatize those who may be hesitant to seek help or discuss their experience accessing resources through the partnership.

Health care partners also noted that Hunger Free Colorado's active referral — reaching out to patients rather than the other way around — has helped to mitigate patient reluctance to seek and/or accept assistance.

Kaiser Permanente Support Launches Food Insecurity Screening at Children's Hospital Colorado

Children's Hospital Colorado (CHC) received one of 13 grants from Kaiser Permanente Colorado to support increasing use of SNAP and/or Summer Food Service Program food resources. CHC used its grant to help launch food insecurity screening within its primary care clinics. The investment in addressing food insecurity aligns with CHC's community health needs assessment, which prioritizes nutrition and access to healthy food. CHC also partners with Hunger Free Colorado, which accepts patient referrals, and helps patients navigate through food systems and pantries.

This grant funding helped provide infrastructure support and secure a designated family navigator to further develop the collaboration with Hunger Free Colorado, and support the development of other food insecurity resources within the hospital, including the development of a hospital-wide food security council, nutrition classes for families interested in making lifestyle changes, and hospital community garden.



Financing and Sustainability

Hunger Free Colorado relies on fundraising, donations and grants to sustain operations, including grants from Kaiser Permanente Colorado and The Colorado Health Foundation, along with local corporations and businesses.³ Some grants are earmarked for Hunger Free Colorado services directly related to SNAP outreach/enrollment. Currently staffed with 24 individuals, seven of whom are food assistance navigators, Hunger Free Colorado and its partners continue to consider pathways to sustainability beyond philanthropy, such as institutionalized funding streams, similar to smoking cessation help lines, for example. Partners noted the need for buy-in from the medical community and health plans to ensure sustainability, and the importance of data to demonstrate the value of screening and addressing food insecurity, as well as the success of referrals resulting in enrollment in SNAP and WIC. Return on investment analyses of Hunger Free Colorado referrals, and detailed impacts on related health care utilization and health outcomes will demonstrate to health care partners why addressing food insecurity at the health systems level is critical. While connecting vulnerable residents to

food and nutrition resources is the primary goal for Hunger Free Colorado, demonstrating cost-savings is also a required component of continued support from health system partners.

To effect sustainable change, Hunger Free Colorado is also engaged at the federal, state, and county levels to promote policy and systems changes designed to help alleviate hunger throughout the state. Hunger Free Colorado is advancing policies and streamlining practices that eliminate barriers to accessing nutrition programs, including legislative efforts to improve access to food stamps and legislation to establish child nutrition programs, such as [Breakfast After the Bell in Colorado](#).

Monitoring and Evaluation

Hunger Free Colorado and its health care partners are evaluating the effectiveness of referrals to Hunger Free Colorado on reducing food insecurity, as well as the program's longer-term impact on improving health outcomes. Currently, Hunger Free Colorado provides a monthly report to each health care partner. Report data include number of patients contacted, number of patients who accepted food and nutrition support from Hunger Free Colorado, the nature of the referral and/or benefit assistance provided, number of households enrolled in SNAP, and the amount of the monthly SNAP benefit for each household enrolled through Hunger Free Colorado. As part of its transition to Salesforce, Hunger Free Colorado's capability to share data with health care partners will improve. Hunger Free Colorado is working to obtain more robust enrollment information from SNAP and WIC to assess the success of their efforts to connect clients with these services; providing patient-level data back to health care systems is key to being able to assess health impact and health system utilization.

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Hunger Free Colorado and its health care partners are collaborating to identify appropriate system and clinical metrics, such as number of successful SNAP enrollments or reduced incidence of diabetes, and strategies to streamline the monthly reports shared among partners. At Kaiser Permanente Colorado, there is a concerted effort to link referral outcomes back into the electronic health record to better inform providers.

metrics, such as number of successful SNAP enrollments or reduced incidence of diabetes, and strategies to streamline the monthly reports shared among partners. At Kaiser Permanente Colorado, there is a concerted effort to link referral outcomes (as assessed by Hunger Free Colorado) back into the EHR to better inform frontline providers.

The Institute for Health Research (IHR) at Kaiser Permanente Colorado conducts evaluation research, including findings on health and outcomes of social service programs such as Hunger Free Colorado. IHR provided evaluation support to Hunger Free Colorado to better understand: (1) where Medicaid- and Medicare-enrolled patients were accessing food and nutrition services; (2) patient satisfaction with the Hunger Free Colorado referral process; and (3) any associated health outcomes. Preliminary results indicate that patients often had difficulty distinguishing who was contacting them about food support, and satisfaction was dependent on whether the need had been

resolved. IHR's researchers pointed out that while saving costs is an important outcome for payers, other outcomes (i.e. quality of life, reduced suffering) might be just as important to justify sustaining the Hunger Free Colorado program.

Hunger Free Colorado and its health care partners noted the importance of embedding evaluation goals into any project scope, budget proposal, and within the information technology and EHR systems to facilitate evaluation efforts. This advanced planning helps support program refinements and sustainability planning.

Lessons Learned

Several key lessons learned emerged through Hunger Free Colorado's partnership with health care systems.

- 1. Internal Champions:** Informants noted that internal champions who are willing to underscore the importance of addressing food insecurity and identifying new approaches to drive the food insecurity agenda was a key component of success. At Kaiser Permanente Colorado and Colorado Children's (CHC) Hospital, for example, the persistence of physician advocates helped elevate the impact that food insecurity has on health outcomes. Eventually, the CHC champion managed to gain support of hospital administration to allow screening within pediatric outpatient practices, and then more broadly throughout the hospital.
- 2. Flexibility in Program Design:** As the partnership continues to evolve, flexibility has been required to address capacity and operational issues that have arisen. Health care partners and Hunger Free Colorado are putting processes into place to increase likelihood that patients will accept food and nutrition services. As with many CBO-health provider partnerships, the partnership has been 'learning by doing,' which requires ongoing communication among partners regarding strategies for improving capacity and operations to ensure the program benefits are clear to patients and responsive to people's food access needs and behaviors. As the program matures and more evaluation results become available (i.e. barriers to uptake), responsiveness to this information will ensure program success. Partners are considering integrating hunger as a vital sign (i.e. similar to blood pressure) into clinical workflows to ensure that food security status is captured and addressed accordingly at every patient visit.
- 3. Data Sharing:** Monthly outcome reports generated by Hunger Free Colorado were cited as a key need so that clinical teams can know whether patients were connected with services and can follow up appropriately at subsequent appointments. Partner access to customized referral outcomes ensures that clinicians are aware of their patients' potential ongoing food insecurity and correlations to health-related outcomes (such as changes in health, number of claims, or frequency of ED visits), which can guide treatment and ongoing support related to social determinant factors. The upgrades to the cloud-based data system, Salesforce, was also noted as an improvement. The increased efficiency of data entry and report availability through Salesforce will help Hunger Free Colorado share richer and more robust data on the results of improving access to food and nutrition services to the range of partners invested in the issue, including medical providers, funders, and community partners. In this particular case, Hunger Free Colorado also weighed the fact that the Colorado Department of Human Services, the state agency that oversees the SNAP program in Colorado, is preparing to convert its benefits management system to the same cloud-based Salesforce platform.
- 4. Outlining Partnership Value:** Part of Hunger Free Colorado's strategy to engage different stakeholders is to look beyond the altruistic goal of helping children and families, and to articulate how this partnership can help health organizations meet their goals, including transitioning to value based contracts, improving health outcomes, and reducing costs. Developing reliable outcomes data that resonate with stakeholders from the business perspective has been (or has become) critical for sustaining investment in the partnership and its mission. Accurate program utilization data, along with health and cost outcomes must be packaged appropriately for different stakeholders.
- 5. Leveraging Existing Partnerships:** Hunger Free Colorado has well-developed expertise addressing food insecurity, and through its partnerships, sought to extend its reach by collaborating with health care providers who are well-positioned to screen for hunger and food insecurity. In addition to health care partners, Hunger Free Colorado noted that close relationships with local, county, and state health departments helped to troubleshoot and facilitate connections with federal nutrition programs. Hunger Free Colorado brings a longstanding commitment to addressing food insecurity to the partnership, with well-

developed connections with other CBOs and state agencies working to the same end. Effective linkages for at-risk patients are improved when health care partners rely on the expertise and connections community based partners already have in place.

- 6. Provider Acceptance, Collaboration, and Education:** Health care providers may require education, tools, and training to ensure effective patient linkages to food and nutrition services. Clinicians may cite ethical concerns around asking patients about social needs without adequate resources to address such needs or may lack an understanding of the full impact of food insecurity on health outcomes. As awareness of the importance of social determinants of health grows, willingness on the part of providers to screen for food insecurity will grow. Clinician recognition of physiological manifestations of food insecurity in the patient population was cited as a potential area for academic detailing. For example, poor glycemic control, hypoglycemia (low blood sugar), anemia (low iron), other nutrient deficiencies, and in children, stunted growth or missed milestones, are all potential indicators of food insecurity.
- 7. Reducing Stigma:** Efforts to reduce stigma around food insecurity have helped to increase the number of patients willing to accept food and nutrition services. Hunger Free Colorado's approach to engaging patients — taking the referral from the health care partner and actively following up with the patient — has helped to eliminate the potential shame of seeking out food and nutrition resources. Hunger Free Colorado staff are also careful to frame assistance so that parents' fears about being viewed as neglectful are assuaged.

Future Plans

Hunger Free Colorado will continue to engage health care providers to screen for food insecurity and seek more sustainable sources of funding outside of philanthropy. For example, Hunger Free Colorado is turning to health care partners to reimburse for referrals. A potential model Hunger Free Colorado is considering is similar to that of smoking cessation help lines, which are managed by states, receive referrals from providers, and are often funded, in part, by health plans that pay based on the number of members who seek the cessation services. Under this model, Hunger Free Colorado would still need to seek outside funding for clients who are uninsured.

Hunger Free Colorado and partnering providers will also continue to pursue robust evaluations of the effectiveness of the referral relationship on reducing food insecurity. Evaluation results will help build a business case for the Hunger Free Colorado-health care organization partnerships and help secure buy-in from additional health care partners, as well as more secure funding.

Advancing Community-Based Organization and Health Care Partnerships to Address Social Determinants of Health

This case study is part of *Advancing Community-Based Organization and Health Care Partnerships to Address Social Determinants of Health*, a project of the Center for Health Care Strategies and Nonprofit Finance Fund, made possible through support from Kaiser Permanente Community Health. Other resources include:

- **Additional case studies** featuring a partnership in Portland, Oregon that is seeking to improve care transitions from emergency and inpatient hospital settings for uninsured and low-income individuals, and a collaboration in San Diego, California that is using an online Community Information Exchange to allow health and social service providers to facilitate care coordination for at-risk community members.
- **Technical assistance resources** that can be used to establish a common language and framework among partnering organizations, articulate the value of collaborative relationships, and determine total costs for cross-sector partnerships.

For more information, visit www.chcs.org/cbo-collaborate or www.nff.org.

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Endnotes

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