HUNGER + HEALTH | FEEDING AMERICA

Food is Medicine

FINAL PROJECT REPORT

RESULTS AND KEY LEARNINGS

2018-2020

RELEASED APRIL 2021

Acknowledgments

Seven Feeding America member food banks participated in the *Food is Medicine* (FIM) project. Teams at each site worked to implement activities with health care partners. Feeding America extends our gratitude to those teams, and to the lead food bank staff who managed local activities and contributed to this report: Annette Ball, Jackie Bouvette, Whitney Cowles, Mary Dubinin, Joy Goetz, Ester Liew, Erin Lingo, Sydney Orgel, Caroline Pullen, Ann Viancourt and Sarah Wilson.

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Most importantly, Feeding America would like to acknowledge and thank the thousands of patients who participated in the project and provided feedback for improving FIM activities and strengthening food bank-health care partnerships.

> “This will change my life.”
>
> Program Participant

About Anthem Foundation

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Contents

Introduction

This report describes results and key learnings from the *Food is Medicine* project, a two-year initiative that supported food bank-health care partnerships and interventions to serve patients who screened positive for food insecurity in health care settings.

Food insecurity is one of many **social determinants of health** that affect individual and population-level health. People living in food-insecure households are more likely to experience poor health across their lifespan and are at increased risk for illness and poor chronic disease management.[1] Relatedly, food insecurity has been linked to over $77 billion in additional health care expenditures each year in the U.S.[2] Food insecurity is present in all **counties**, parishes, and boroughs, with racial and ethnic minorities experiencing disproportionately higher rates contributing to persistent health disparities and inequities in marginalized populations.

Over the past decade, Feeding America and food banks have worked to better understand and address the intersections of food insecurity and health. Feeding America has supported new approaches and conducted research to evaluate the impact of food bank programming and partnerships.

Visit Hunger + Health to view a short video highlighting the *Food is Medicine* project.

Social Determinants of Health

Social determinants of health (SDOH) are conditions in the places where people live, learn, work and play that affect a wide range of health and quality of life risks and outcomes. SDOH domains include health care access and quality, education access and quality, social and community context, economic stability and neighborhood and built environment.[4]

Social Needs

Social needs (e.g., food, housing, transportation, utilities) include real-time gaps that impede one's health, well-being and safety. One's social needs depend on individual preferences and priorities. They are evidence of the impact of the social determinants of health on the community, family or individual.

Feeding America's strategic plan includes a focus on health and prioritizes improving food security, diet quality, and **Healthy Days** for people served by the network. In 2019, Feeding America also developed a food bank-health care partnership strategy to guide the organization and member food banks in working with health care organizations to address food insecurity as a solvable social determinant of health. Additional objectives for this strategy include to:

- **Create a collection of effective approaches** for food bank-health care partnership "screen and intervene" activities with recommendations for adoption in local communities
- **Define program models** and support food banks in operationalizing partnerships
- **Support network capacity for local partnerships** by creating and disseminating resources and tools, providing technical assistance and member grant opportunities, and supporting peer-to-peer networking via a health care partnership community of practice

While Feeding America continues to explore and test effective approaches, food bank-health care partnership activities contribute to strategic objectives to ensure that people facing hunger have the support they need to make healthy choices, ultimately advancing Feeding America's vision for a hunger-free America.

FOOD IS MEDICINE PROJECT OVERVIEW

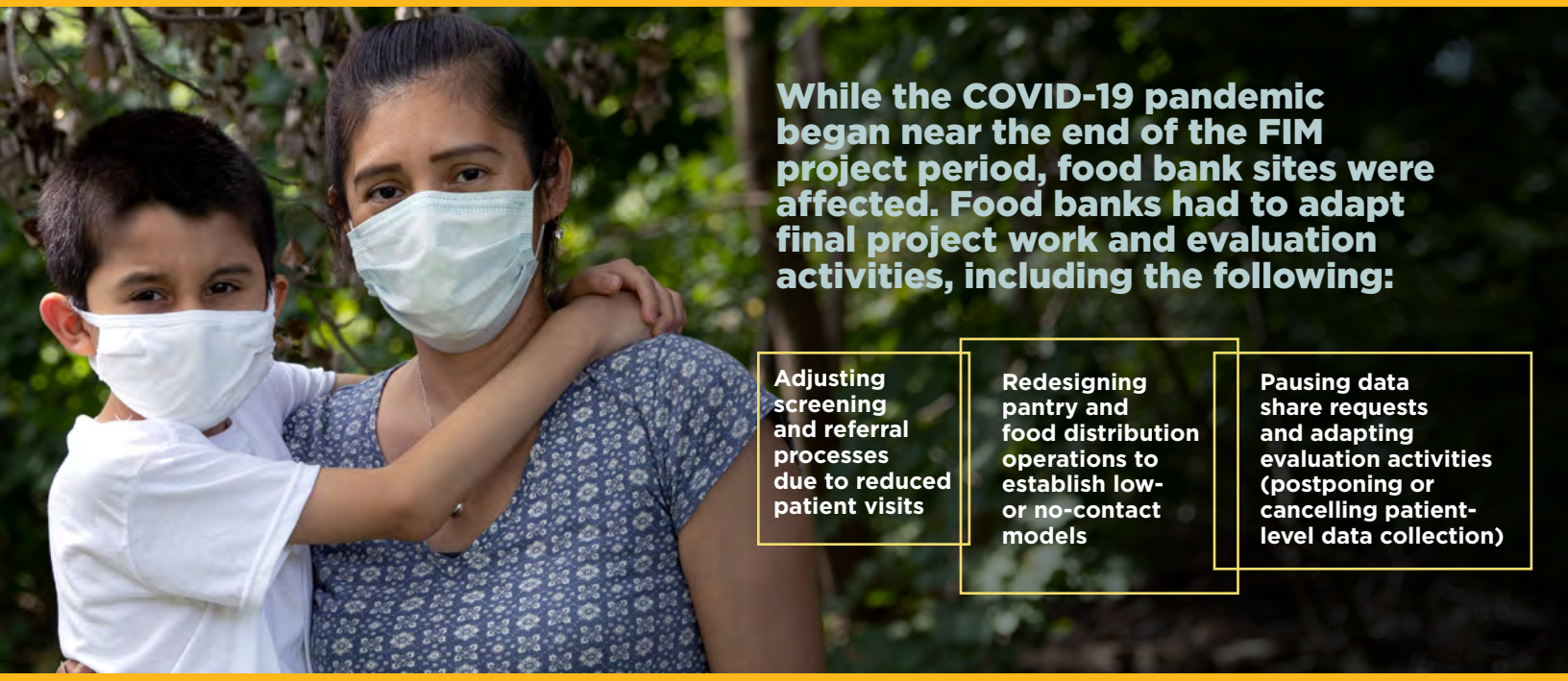
The *Food is Medicine* (FIM) project was informed by evidence and previous work and aimed to advance the Feeding America food bank-health care partnership strategy. This initiative supported food bank-health care partnerships in seven states to:

- Develop and expand food insecurity screening in patient populations during health care visits
- Reduce barriers for patients to access food assistance, in part by establishing food distribution points at health care sites
- Connect patients to short- and long-term nutrition assistance programs, including the Supplemental Nutrition Assistance Program (SNAP) and other community-based programs
- Increase health care provider capacity to incorporate food insecurity mitigation strategies into patient treatment plans

IMPACT OF THE COVID-19 PANDEMIC

Food banks were significantly affected by the emergence of the COVID-19 pandemic in early 2020. In March, food banks had to respond—nearly overnight—by redesigning operational models to protect the health of staff and community members, addressing a surge in need as businesses shut down and unemployment rates skyrocketed, and responding to food sourcing and distribution challenges brought on by severely disrupted national food supply chains.

Existing food bank-health care partnership work was also impacted as many health care organizations paused food insecurity screening activities, cancelled non-urgent patient appointments and shifted resources to focus on COVID-19 prevention and care.



While the COVID-19 pandemic began near the end of the FIM project period, food bank sites were affected. Food banks had to adapt final project work and evaluation activities, including the following:

- **Adjusting screening and referral processes due to reduced patient visits**
- **Redesigning pantry and food distribution operations to establish low- or no-contact models**
- **Pausing data share requests and adapting evaluation activities (postponing or cancelling patient-level data collection)**

Today, food banks that participated in the FIM project are continuing partnership activities with health care organizations, and the COVID-19 pandemic has broadly underscored the need for and importance of these collaborations. Food banks are maintaining COVID-19 programming adaptations that safely meet the increased need in communities. National vaccination distribution is currently underway, and COVID-19 vaccines may be available to much of the U.S. population by the end of 2021. However, as the pandemic continues to significantly affect the country, food banks will need to remain agile with health care partners, be responsive to partner and community needs, and continue an elevated food distribution response. Even with the increased deployment of public health resources, it is likely that the economic fallout from the pandemic will be long-lasting. Food bank-health care partnerships, like those operating as part of the FIM project, will serve a critical need for communities in the decade ahead.

What is an Essential Hospital?

Essential hospitals—also sometimes called safety-net hospitals—provide a substantial volume of care to low-income patients, the uninsured, and others who face social and economic hardships. While many essential hospitals are publicly owned and operated by local or state governments, some are private nonprofits or hybrid structures. Essential hospitals have a mission and commitment to care for vulnerable people.

PROJECT ACTIVITIES

Seven Feeding America member food banks, selected through a directed member grants process, collaborated with the Feeding America health and nutrition team and the CVP to support project implementation and evaluation activities. Food banks worked with outpatient clinics affiliated with essential hospital systems to support clinic staff in implementing processes and procedures for conducting universal food insecurity screening and connecting patients to resources.

Key FIM activities included:

- Supporting and expanding **partnerships** between food banks and essential ("safety net") hospitals and outpatient clinic systems
- Developing **partnership documents**, including Memoranda of Understanding (MOU) and data sharing agreements between health care organizations and food banks
- Supporting health care partners to conduct **food insecurity screening** in outpatient clinics
- Implementing new or maintaining existing food bank service **referral processes and systems** for patients who screen positive for food insecurity
- Building, supporting or expanding **onsite food distributions** at hospital and clinic locations to reduce access barriers for patients
- Supporting patient enrollment in **SNAP**, and connecting patients to additional food assistance programs and resources
- Developing, supporting or expanding **data management and data sharing** procedures
- Participating in data collection and **project evaluation** activities

"The Food Pharmacy helps me with nutritious food that I could not otherwise afford."

Program Participant

EVALUATION

The project evaluation aimed to support food banks in implementing data collection and data sharing processes that would inform continuous quality improvement activities to meet local partnership goals. De-identified, aggregated data from the food bank sites were used for a broader project evaluation.

PROJECT EVALUATION GOALS

- Identify opportunities and challenges food banks may face when developing partnerships and patient referral systems with local health care providers
- Track food insecurity data and health-related metrics, and identify opportunities for assessing impact on health outcomes
- Collect and analyze project and process feedback and insights

FOOD INSECURITY SCREENING AND REFERRAL METRICS

Food bank staff supported health care partners in tracking and reporting screen-related metrics for the project period including:

- Total number of patients screened for food insecurity
- Total number of patients who screened positive for food insecurity
- Total number of patients who screened positive and were referred to an onsite pantry and/or food bank programming
- Total number of patients who screened positive and then accessed an onsite pantry and/or engaged in food bank programming

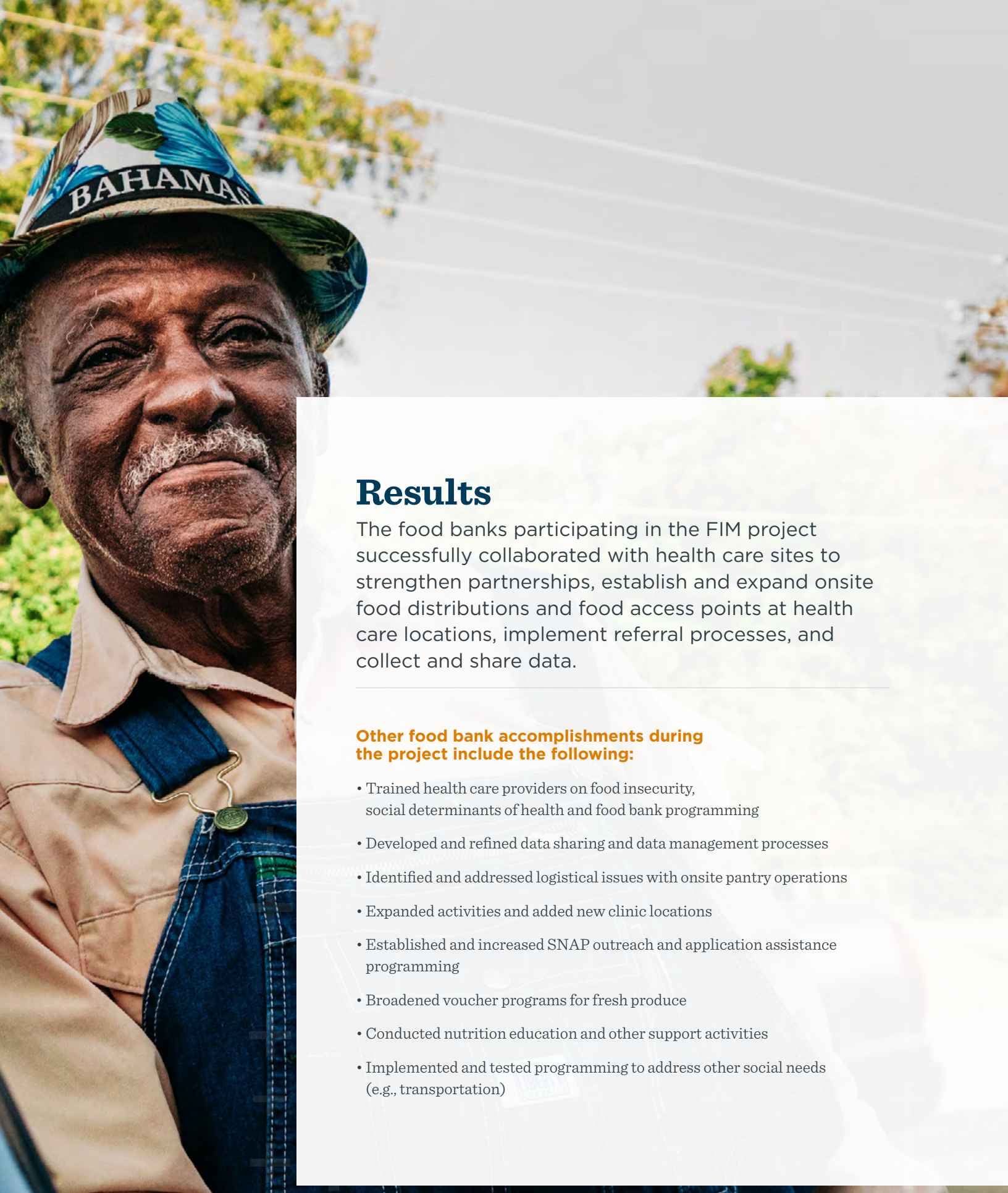
DESCRIPTIVE AND OUTCOME METRICS

As part of local quality improvement efforts, food banks and health care partners identified outcome measures to evaluate partnership activities and inform future partnership priorities. Project food banks worked with their health care partners to prioritize key metrics and report data on at least three metrics from the following list (data reported on adult patients ≥18 years):

- Body Mass Index (BMI)
- Blood pressure (BP)
- Hemoglobin A1c (A1C)
- Health status
- CDC **Healthy Days**
- Emergency room visits or hospital admissions
- Depression screening (**PHQ-2**)

Data for these metrics were shared as de-identified, aggregated totals. No individual patient test results or protected health information (PHI) were shared with food banks, Feeding America, or UCSF-CVP during this project.

> “I am so grateful for this program.”
>
> Program Participant



Results

The food banks participating in the FIM project successfully collaborated with health care sites to strengthen partnerships, establish and expand onsite food distributions and food access points at health care locations, implement referral processes, and collect and share data.

Other food bank accomplishments during the project include the following:

- Trained health care providers on food insecurity, social determinants of health and food bank programming
- Developed and refined data sharing and data management processes
- Identified and addressed logistical issues with onsite pantry operations
- Expanded activities and added new clinic locations
- Established and increased SNAP outreach and application assistance programming
- Broadened voucher programs for fresh produce
- Conducted nutrition education and other support activities
- Implemented and tested programming to address other social needs (e.g., transportation)

Food Insecurity

Food insecurity is a household-level economic and social condition of limited or uncertain access to enough food for an active, healthy life.[3]

SCREENING DATA

During the project period, April 2019 through March 2020, a total of **91,086 patients were screened for food insecurity** at partner health care sites. Partnerships had varying start dates for data collection, so the data presented below may not represent the full project period for each site.

FOOD BANK AFFILIATED WITH HEALTH CARE PARTNER SITES THAT CONDUCTED SCREENINGS	# PATIENTS SCREENED FOR FOOD INSECURITY
Atlanta Community Food Bank	8,871
Dare to Care Food Bank	26,479
Feed More	1,034
Freestore Foodbank	951
Gleaners Food Bank of Indiana	7,828
Houston Food Bank	15,009
Second Harvest Food Bank of Middle Tennessee	30,914
TOTAL	**91,086**

PATIENT FOOD INSECURITY SCREENING DATA (AGGREGATED), **APRIL 2019 – MARCH 2020***	RESULTS
# patients screened	91,086
# patients who screened positive for food insecurity	26,771
% of patients who screened positive for food insecurity	29%
# patients referred to FIM programming	13,816
% patients referred to FIM programming among those who screened positive for food insecurity	52%
# patient visits to onsite pantries (excludes community referrals)**	10,236

**Food bank - health care partnerships had varying start dates, so they did not all collect data for the full project period; one site had additional data from August 2020-December 2020*

***Patient visit totals do not include patient visits to community-based food pantries and food distributions; there may have been a significant number of these types of visits, but data for offsite visits were not consistently or reliably tracked during the project*

SNAP DATA

Four food banks tracked and reported on SNAP activities. SNAP eligibility assessments were completed with 662 participants, and 615 SNAP applications were enabled over the course of the project period. SNAP Application Assistance activities were likely underreported due to challenges with tracking participants (e.g., participants who received SNAP Application Assistance at community pantries were generally not included in the final count).

HEALTH DATA

Food banks and their health care partners selected and reported on additional health metrics. There was alignment among the majority of food banks over the following metrics: BMI, A1C and BP. Health status was also collected by four sites. The data below summarizes aggregated data provided by seven food banks and their health care partners.

> **"If I hadn't started the program, I would have been eating fast foods these past few weeks. Now I am eating fresh fruits and vegetables every day.**
>
> Program Participant

HEALTH DATA REPORTED BY FOOD BANK SITES			
HEALTH METRIC	**MEAN RESULT**	**NORMAL RANGES** FOR ADULT POPULATIONS	**# SITES REPORTING**
BMI (kg/m²)	**30.6 kg/m²**	**18.5 – 24.9 kg/m²**	**4**
A1C (%)	**7.95%**	**7% OR LESS***	**5**
Systolic BP (mmHg)	**128 mmHg**	**120 mmHg or less**	**4**
Diastolic BP (mmHg)	**78 mmHg**	**80 mmHg or less**	**4**
Mean # days where poor health interfered with usual activities	**7 DAYS**	**—**	**2**

** While patient A1C goals are individualized, maintaining an A1C<7% is a goal for most adults with diabetes.*

PATIENT-REPORTED ASSESSMENT OF OVERALL HEALTH (4 food banks reporting)	MEAN %
Excellent	**6%**
Very good	**9%**
Good	**29%**
Fair	**36%**
Poor	**18%**
No answer	**1%**

Although there was less alignment, other metrics captured during the project included the CDC Healthy Days measure, hospital admissions, emergency room (ER) visits and rates of positive depression screenings (PHQ-2).

ADDITIONAL HEALTH DATA REPORTED BY FOOD BANK SITES		
METRIC	VALUE	# SITES REPORTING
CDC HEALTHY DAYS		
Mean # unhealthy days due to physical health	8.5	2
Mean # unhealthy days due to mental health	7	2
Overall mean unhealthy days	15.5	2
Overall mean healthy days	14.5	2
Mean # days where poor health interfered with usual activities	7	2
HEALTH CARE UTILIZATION		
% of patients reporting ≥1 hospital admission in last 6 months	14%	1*
% of patients reporting ≥1 ER visit in last 6 months	26%	1*
DEPRESSION SCREENING		
% of patients with depressive symptoms**	10%	1***

** Baseline data: data reported was collected when patients first accessed an onsite pantry*

*** Based on positive PHQ-2 screening*

**** Data reported on 6,856 individuals screened with PHQ-2 for depressive symptoms*

> **"I have seen at least a handful of patients who participated in our *Food is Medicine* program who are now no longer pre-diabetic.**
>
> Physician

INTERPRETING HEALTH DATA

Project evaluation goals were intended to support food banks and their health care partners in optimizing data collection processes that would be most helpful for the ongoing success of their activities. Because of the nature of the data (point-in-time, cross-sectional), no analyses were conducted on how project activities affected health outcomes. Thus, the health data should not be interpreted as evidence of impact, but rather primarily descriptive for the patient populations that participated in the project.

While there was some alignment among sites on reported metrics, there was considerable variability in populations served. For example, some food banks reported health metric data only for participants who screened positive for food insecurity, regardless of project participation. Other food banks obtained health metrics on a subset of patients, such as those who screened positive, were referred, and met site-specific criteria for project participation (e.g., diagnosed with uncontrolled diabetes). Finally, other sites provided health metrics on all patients screened for food insecurity, regardless of screening results. These aggregated metrics should therefore be interpreted as a *general representation and description* of the populations screened and served.

Key Learnings

Over the course of the FIM project, food banks shared challenges and lessons learned informally during monthly calls and formally through project reports. Several important themes on food bank-health care partnerships emerged during the project beyond the data and results reported above.

Developing partnerships takes time and resources.

The seven food banks participating in this initiative had existing health care partnerships and ongoing activities in place prior to engaging in the FIM project. However, the sites still required several months at the project outset to refine partnership activities, develop data sharing processes, and initiate other project components. It takes time, commitment and resources (particularly staff time) from all parties to develop or expand food bank-health care partnerships. Food banks need to identify the right staff to engage at a health care partner site and be prepared to collaboratively develop partnership goals, objectives, activities and agreements (including MOUs, service agreements, data sharing and data use agreements, etc.).
The **Feeding America Food Bank-Health Care Partnership Toolkit**[6] provides information and readiness assessments for food banks working to engage with health care organizations, and the **Food Banks as Partners in Health Promotion** report highlights several partnership considerations. While many health care organizations—including those that participated in the FIM project—remain interested and committed to addressing food insecurity, the COVID-19 pandemic may influence how they might be able to partner with food banks in the near term.

Data sharing is challenging, but possible.

As with many collaborations, data sharing is a key component for food bank-health care partnerships. Data sharing is critical for reporting on food insecurity screening activities, referring patients screening positive for food insecurity to food bank programming, providing feedback and "closing the loop" with health care partners on how/if food banks engaged with referred patients, and tracking and evaluating outcomes for patients, programs and partnerships.

Data sharing proved to be one of the most challenging aspects of the FIM project. Health care partners initially had questions and concerns regarding patient data and the Health Insurance Portability and Accountability Act (HIPAA), research and the potential need for Institutional Review Board (IRB) approval, and logistical and operational challenges for collecting and sharing data with food bank partners. The evaluation plan was subsequently adapted to have food banks request de-identified, aggregated patient data from each partner. This addressed many of the sites' concerns, but also complicated analysis and interpretation of shared data used in the project evaluation (e.g., results were limited to describing patient populations, and could not be used to follow or describe changes in individuals' metrics over time).

Data sharing continued on next page.

Data sharing continued from previous page.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA)

HIPAA is a federal law that required the creation of national standards to protect sensitive patient health information from being disclosed without the patient's consent or knowledge.[7] For additional information on how HIPAA relates to food bank-health care partnerships, access this resource developed by Feeding America and the Center for Health Law and Policy Innovation.

Institutional Review Board (IRB)

An IRB is a group that has been formally designated to review and monitor biomedical research involving human subjects, and they have the authority to approve, require modifications in or disapprove research. This group review serves an important role in the protection of the rights and welfare of human research subjects.[8] While the FIM project was not deemed "research", some health care sites initially questioned if an IRB was required for participation. (It was not.)

Operationalizing data sharing processes remained challenging throughout the project. Internally, the health care sites did not always assign staff and teams for data management and reporting, and they did not establish rigorous, consistent standard operating procedures to support FIM evaluation activities. Health care partners had significant technical challenges with building reports in their Electronic Medical Record (EMR) systems to select and share metrics of interest in efficient, consistent, or reliable ways, and had difficulty building infrastructure to capture metrics and track patients. Some essential hospital systems may be operating in resource-constrained environments and dedicating scarce resources to food bank partnership activities may not be a possibility or priority for many of these organizations. As more partnership models between health care organizations and food banks (and other community-based organizations) demonstrate success and effectiveness across a range of domains, resources for data sharing in these partnerships may be increasingly prioritized.

Food banks may have success with health care partners when making data sharing a priority at the outset. Food banks should consider the following when co-creating data sharing and data management plans with partners:

- Work to understand how health care partners manage and track patient data, including gathering information about:
  - Health care staff capacity to develop reports and pull data
  - Type of Electronic Medical Record (EMR) or Electronic Health Record (EHR) systems used
  - Data extraction processes
  - Ability to use EMR / EHR system to categorize patients (e.g., all patients with a diabetes diagnosis), and run reports on these patient groups (e.g., recent A1C result for patients who had a positive food insecurity screen in the last 6 months)

  *For additional considerations, see: **Extracting Data from the Electronic Health Record (EHR)** (originally accessed from the **Nutrition Incentive Hub**)*

- Co-develop detailed partnership and data sharing agreements that outline specific actions, expectations and responsibilities, including:
  - Clarification that project evaluation activities are designed for local quality improvement purposes, and are not part of a formal research study
  - Outlining what data will be collected, when and how frequently it will be shared (e.g., weekly, monthly, quarterly)
  - How data will be shared (e.g., via secure email, HIPAA-compliant server, in-person, fax)
  - How the data will be used, stored, secured and shared by each organization beyond the partnership (e.g., for grant reporting)

- Ensure that data sharing plans align with project activity, implementation and evaluation goals, and that data sharing activities include robust and systematic health care site processes

- Identify and address questions or concerns regarding data sharing, protected health information and privacy
  - For detailed information on HIPAA—including template data use agreements—see: **How HIPAA and Concerns about Protecting Patient Information Affect Your Food Bank-Health Care Partnership**

Not all patients who screen positive for food insecurity need or want assistance today.

Nearly a third (29%) of the 90,000+ patients screened in the FIM project screened positive for food insecurity. Of those who screened positive, only half (52%) received a referral to project programming, including onsite food distributions or pantries.

Most health care sites used a 12-month "look-back" period when implementing food insecurity screening. It is possible that a positive food insecurity screen for many patients reflected past food access challenges that patients did not identify as present concerns. The FIM project results reflect similar data observed in other projects where significant differences existed between the number of patients who screened positive for food insecurity and those who accepted a referral for services.[9]

Additional research is needed to understand how food insecurity screening (and screening for other social needs) can identify risks and immediate needs for patients, and then result in effective referrals and connections to appropriate programming.

Additionally, some food bank-health care partner sites participating in FIM considered adding an additional question, "Are you in need of food today?", for patients who had a positive food insecurity screen. While this question was ultimately not consistently utilized, it may be an area for testing in future projects to help identify patients who may have immediate unmet food needs at the time of screening.

"In the past few weeks I have stopped drinking so much soda and eating candy. I have switched to drinking flavored water and have noticed a difference in my blood sugars.

Program Participant

Pantries at health care sites improve food access for patients, but significant gaps exist with completing referrals to community-based resources.

A primary goal of the FIM project was to ensure onsite food access points were available to patients who screened positive for food insecurity during health care visits. Clinic and hospital-based food pantries successfully met this goal and ensured that patients in need of resources could leave the health care site with nutritious foods.

For some sites, the pantries served as a convenient location for patients and other community members to utilize on an ongoing basis to meet household food needs. For many patients, however, these pantries were not convenient or accessible once patients returned to their communities and homes. Food banks worked with health care partners to address access barriers by creating referrals to other community-based food pantries and distributions outside of health care settings. However, completing those referrals and connecting patients to additional services proved challenging to implement and track.

Considerations for optimizing referral processes to offsite, community-based locations include the following:

- Health care providers can request patient consent to share their contact information with food banks so that food bank staff can proactively follow up (e.g., via phone), assess patient needs, and connect individuals with resources in their community
    - Health care staff[10] should clearly explain the referral process and outline next steps with patients. For example, if partnership agreements indicate that food bank staff will call referred patients within three days, health care staff should inform patients to expect an initial call from the food bank during that time period
- "Passive referrals", like providing patients with flyers on community resources, may be less effective than active outreach to patients, and in the absence of robust referral and feedback processes, food banks are unlikely to be able to track when, or if, referred patients access community-based food resources
- Food banks can iteratively test and refine processes around referral systems, feedback loops, data tracking and data sharing; some sites may use food pantry administrative data (**Service Insights**), resource referral platforms (e.g., Unite Us, Aunt Bertha), or other technologies for supporting referrals and connecting patients to services. For an overview of community resource referral platforms, access **this report** published by **SIREN**.

Hospital and clinic pantries may require new operational models for food banks and might require more money, too.

While food pantries located within health care settings can be established and run similarly to agency partner sites (i.e., the health care site oversees all aspects of pantry operation), many of the FIM pantries operated as specialized partnership programs where the food banks played significant roles. For example, food bank teams worked closely with health care partners to manage inventory, place orders and deliver food. Because the onsite pantries typically served a smaller number of people compared to agency partner sites or food bank programming, food banks had to develop new warehouse and operational practices to accommodate smaller orders, and potentially more frequent deliveries, for these programs. For example, an onsite pantry might have enough space to store and distribute one pallet (or less) of mixed product. Thus, these pantries require significant planning and engagement with food bank operations teams.

Health care partners are more selective of the types of foods they want stocked in and distributed from onsite pantries. There is a greater emphasis on fruits and vegetables, whole grains, lean proteins, and limiting processed foods or items deemed less nutritious. This is especially true for those pantries that primarily serve specific patient populations (e.g., adults with a diagnosis of type 2 diabetes). In order to meet partners' specific inventory requirements, food banks had to purchase food for onsite pantries. This required a dedicated funding stream. Food banks should engage with partners and advocate that health care sites allocate funding to support onsite pantry operations.

All FIM sites emphasized nutrition and providing nutritious food items at onsite pantries; however, some sites only had capacity to distribute pre-packed, shelf-stable emergency food boxes, while other sites operated full-service choice pantries with a mix of shelf-stable, fresh, refrigerated and frozen foods. FIM food banks worked with health care partners to establish, maintain or expand onsite food pantries, and all sites needed to develop and refine ordering and delivery practices to meet the needs of the pantry and the patients being served.

FIM sites also supported a range of other pantry activities, including nutrition education, food demonstrations and benefits assistance. At some sites, health care staff managed most or all pantry operations and activities; other partnerships required food bank staff to dedicate time each month to engage in these efforts.

Lastly, food banks collaborating with partners that are building new onsite pantries should prepare for multiple contingencies, including construction timelines and delays, inspection and permitting processes, legal questions and the potential for significant costs. For example, while the Jessie Hill Market (Grady Health System, Atlanta, Ga.) was designed as a state-of-the art Food Pharmacy, permitting and construction challenges resulted in a year-long delay to opening this site.

Nutrition in Food Banking

In 2019, Healthy Eating Research convened a panel of experts in the charitable food system, nutrition, and food policy fields to create clear, specific recommendations for evidence-based nutrition guidelines tailored to the unique needs and capacity of the charitable food system. Feeding America has released a toolkit (2021), with a forthcoming implementation guide, for food banks to use for operationalizing these guidelines in local programming, including in food bank-health care partnerships.

Facilitating SNAP Application Assistance in health care settings is challenging and needs dedicated attention.

SNAP is a proven program that improves food security; as such, SNAP is also a critical lever for improving health outcomes and reducing health disparities across populations.[11] Connecting patients who screen positive for food insecurity to SNAP should be a foundational priority for all food bank-health care partnerships.

While many food banks provide effective SNAP Application Assistance, connecting patients referred from health care settings to SNAP proved difficult in the FIM project. Considerations for enhancing SNAP Application Assistance for food bank-health care partnerships include the following:

- Food banks can educate health care staff on SNAP and state-specific program requirements; health care organizations may be able to assign staff (e.g., patient navigators, social workers, community health workers, etc.) to proactively assess SNAP eligibility for patients screening positive for food insecurity and develop clinical processes to standardize this work flow
    - For additional guidance, review these recommendations for supporting health care partners with SNAP: **Food for Tomorrow: SNAP Application Assistance in Health Care Settings**
- In addition to assessing eligibility, some health care sites may have capacity to directly support patients in applying to SNAP; food banks can assist partners in developing or expanding onsite application assistance
    - Embedding SNAP activities into clinical workflows may be effective; health care staff serving as eligibility workers can meet with patients during health care visits and collect SNAP-relevant information from other program applications (e.g., Medicaid, Medicare) and can potentially reduce stigma associated with enrollment
- While all FIM sites provided onsite access to food, most did not offer regular onsite SNAP Application Assistance
    - Some food banks had staff visit health care sites to conduct SNAP Application Assistance, but these visits were infrequent
    - Other sites provided information on SNAP or relied on referring patients to community-based food bank programs as access points for conducting SNAP Application Assistance; in most cases, there was no consistent process to track patients and determine when or if they ever applied for SNAP
- Food banks that receive patient referrals from health care partners for SNAP Application Assistance should develop workflows that outline the following:
    - When and how patient information will be sent to the food bank
    - How health care staff will inform patients about SNAP and communicate when patients should expect a follow-up from the food bank
    - How the food bank will conduct follow-up and outreach (e.g., all referred patients will receive an initial call within three business days of referral; food banks will make at least four attempts over two weeks to make contact and initiate SNAP Application Assistance)
    - How the food bank will share feedback with partners and close referrals

Project evaluation plans should be feasible, collaboratively developed and tailored to meet local partnership needs.

Originally, the FIM project evaluation planned for analyzing outcomes data, with a goal to demonstrate impact from project activities (e.g., reductions in A1Cs, improvements in blood pressure control, decreased hospital admissions). However, it is challenging to track individual patient data and engagement in nutrition programming over time. The FIM evaluation thus shifted to focus on process data and health metrics that were aggregated across sites and served to describe population-level characteristics. A key learning is that the success of food bank-health care partnership evaluation plans depends on the extent to which they are co-developed to be feasible in implementation, meet well-defined partnership goals and contribute to continuous quality improvement plans.

Other key learnings from the FIM project evaluation include:

- Identify foundational questions and use these to develop appropriate evaluation methods
    - Are we effectively identifying patients who are food insecure?
    - Are we effectively connecting patients to food resources in ways that meet their short-term, dietary, cultural and other needs?
    - Are we effectively connecting patients to other resources to support long-term food security (e.g., SNAP and other programs)?
    - If we are interested in health-related data, do we have clear goals and plans for how to collect, interpret, and use health data to evaluate our work with health care partners?
- Clearly define what measures will be managed by each partner
    - Tracking metrics (food security, dietary intake, healthy days, etc.) directly associated with the work of food banks may be more feasible than collecting health data
    - Food banks can consider using the Feeding America Client Survey (**FACS**)[12] to collect individual-level data
    - Food banks can explore with their health care partners how to track health data, given that food banks don't have easy access to patients' medical data
- Food banks should advocate that health care partners deploy their clinical tools and capacities to manage and track health metrics, including screening results, clinical measures, utilization, etc.
    - Food banks can augment clinical data with information on patient engagement in nutrition programming but should create feasible plans for doing so
- In working with health care partners to track clinical outcomes, be specific and consider feasibility and clinical goals
    - Define patient populations (e.g., patients with a diagnosis of type 2 diabetes)
    - Avoid aggregating data across different populations (e.g., A1C values in pre-diabetes and diabetes populations) because that may make interpreting and reporting data difficult
    - Define specific parameters and timeframes on the metrics to track
    - Account for challenges with tracking health metrics and attributing changes to participation in food programs (for example, tracking individual-level engagement is difficult)

Food bank-health care partnerships can help address food insecurity as a social determinant of health and advance health equity, but more work and research are needed.

The health and social services sectors are increasingly focused on addressing social needs and social determinants of health to improve individual and population-level health. Health care organizations understand that improving patient outcomes requires engagement with partners outside of health care settings. In addition to improving health broadly, these sectors recognize that work to improve social conditions will also contribute to advancing health equity and the elimination of health disparities. Food bank-health care partnerships play a critical role in this work, but these partnerships are one of numerous components needed for sustainable progress.

While more research and engagement from stakeholders (community members, academic institutions, policy makers, government agencies, etc.) are needed, food banks can continue their work in this area by highlighting the strengths they bring to health care partnerships. Food banks can:

- Underscore their operational expertise for effectively responding to communities' food security and nutrition needs
- Emphasize that partnership activities address SDOH and have the potential to improve lives and foster healthier communities
- Share that achievements like increasing access to fruits and vegetables and improving dietary intake can have significant positive implications for public health[13]
- Demonstrate they are embedded in communities and are trusted institutions along with their network pantries and partners
- Engage community members and people with lived experience to elevate their voices, co-design programming and identify solutions
- Build staff capacity to prioritize equity and build cultural competency through trainings, community engagement and other activities
- Pilot and expand new modes of distribution (e.g., home delivery, **OrderAhead**) to meet the needs of participants and to advance equitable access
- Share and disseminate best practices through participation in Feeding America's **Health Care Partnerships Community of Practice**

Conclusion

Food banks have evolved significantly over the last five decades and play vital roles in communities across the United States. In addition to responding to food insecurity, food banks are partnering with cross-sector organizations to address the root causes of poverty and hunger, highlighting the intersectional relationships between food insecurity and other social determinants of health, and prioritizing local initiatives to advocate for equity and justice. As a growing majority of Feeding America food banks collaborate with health care organizations, these partnerships will be a critical pillar of this work.

The seven food banks that participated in the *Food is Medicine* project remain committed to working with their health care partners. These sites will continue evolving their partnerships and activities to meet the needs of the communities they serve. The COVID-19 pandemic and its economic consequences will likely keep food insecurity rates elevated for several years, underscoring the need—and opportunity—for food banks to partner with health care organizations to build holistic, effective responses to meet community needs.

Health care organizations also remain committed to food bank partnerships and continue to support this work through advocacy, thought leadership and funding.

Feeding America, food banks and health care organizations have increasingly prioritized partnerships and interventions that are person-centered, incorporate community perspectives, authentically engage with people experiencing hunger and strive to promote and achieve health equity. This work is challenging and emotional. It is also imperative.

While the dual goals to end hunger and achieve health equity are bold, they are also inextricably linked to one another. The *Food is Medicine* project builds on a decade of food bank-health care partnership initiatives and experiences. As FIM work evolves over the next decade, our collective success will be measured by the courageous steps we must take to achieve these goals and by the extent to which all people have a fair and just opportunity to live healthy lives.

Health Equity

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.[5]

Resources

Feeding America Resources

Health Care Partnerships (HCP) Toolkit

- HCP Toolkit (**Version 1**)
- **Food for Tomorrow: SNAP Application Assistance in Health Care Settings**
- **Extracting Data from the Electronic Health Record (EHR) (originally accessed from the Nutrition Incentive Hub)**
- **Food Bank-Health Care Partnerships and Interventions Evidence Review**
- **How HIPAA and Concerns about Protecting Patient Information Affect Your Food Bank – Health Care Partnership**
- **Food Banks as Partners in Health Promotion**

Health Care Partnerships Community of Practice

Hunger + Health

Additional Resources

Food Insecurity Screening Toolkit (Humana and Feeding America)

Addressing Food Insecurity: A Toolkit for Pediatricians (Food Research & Action Center and the American Academy of Pediatrics)

Hunger Vital Sign™ (Children's Health Watch)

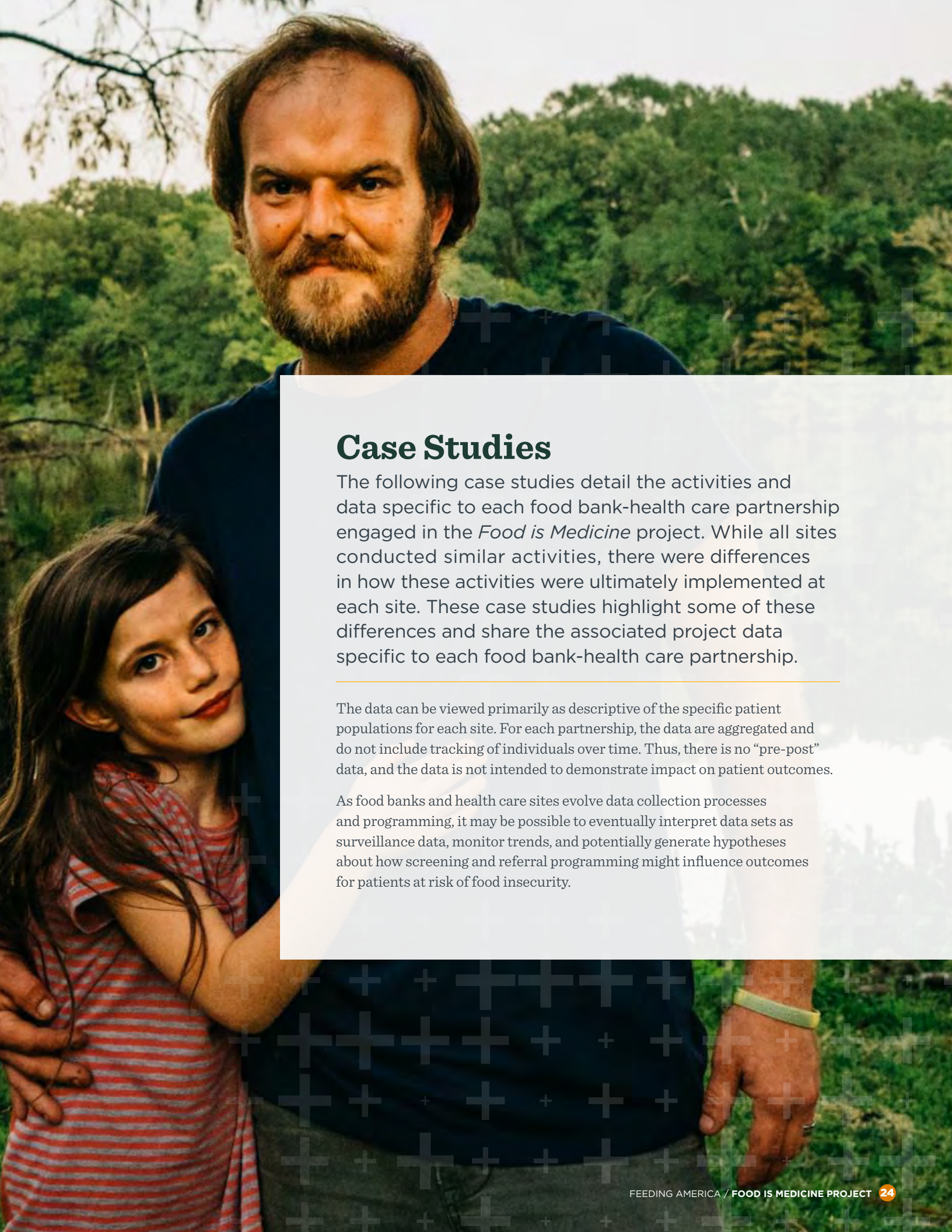
Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (**PRAPARE**) Assessment Tool (National Association of Community Health Centers)

Social Interventions Research & Evaluation Network (SIREN) (University of California, San Francisco)

SIREN guide on resource referral platforms (University of California, San Francisco)

Rooting Food as Medicine in Healthcare: A Toolkit for Primary Care Clinics and other Healthcare Settings (2019) (All In Alameda County)

COVID-19 Social Health Playbook (Kaiser Permanente)



Case Studies

The following case studies detail the activities and data specific to each food bank-health care partnership engaged in the *Food is Medicine* project. While all sites conducted similar activities, there were differences in how these activities were ultimately implemented at each site. These case studies highlight some of these differences and share the associated project data specific to each food bank-health care partnership.

The data can be viewed primarily as descriptive of the specific patient populations for each site. For each partnership, the data are aggregated and do not include tracking of individuals over time. Thus, there is no "pre-post" data, and the data is not intended to demonstrate impact on patient outcomes.

As food banks and health care sites evolve data collection processes and programming, it may be possible to eventually interpret data sets as surveillance data, monitor trends, and potentially generate hypotheses about how screening and referral programming might influence outcomes for patients at risk of food insecurity.

PROJECT HIGHLIGHTS

Atlanta Community Food Bank

ATLANTA, GA

HEALTH CARE PARTNER

Grady Health System

Atlanta Community Food Bank (ACFB) worked with Grady Health at three outpatient clinics, where patients accessed nutrition resources via mobile distributions (Fresh Food Carts)

In late 2019, Grady Health embedded a SDOH screener in the electronic medical record system (EPIC) and included questions on food insecurity and other social needs

A new, full-service Food Pharmacy (Jesse Hill Market) at the Grady Health campus opened August 2020 with a focus on serving food insecure patients with uncontrolled diabetes (A1C > 9%); eight outpatient clinics on campus referred patients

Patients visit the market twice monthly for 3 months (with access renewable for up to 12 months), and complete surveys every 3 months (with questions on food security, healthy days and other metrics)

Pantry activities included food distributions and nutrition and cooking classes at the onsite teaching kitchen

Onsite benefits screener supported patients with applying for SNAP and other programs

Food insecure patients without diabetes received information on local pantries, Fresh Food Carts and were referred to a SNAP screener

Referrals, visits and nutrition and cooking classes were tracked in EPIC

CHALLENGES & SUCCESSES

ACFB and Grady Health had challenges with legal questions, data sharing, and HIPAA, but ultimately advanced the partnership without needing to sign a Business Associates Agreement (BAA)

Without a BAA, Grady Health could not match referrals with SNAP application data to ascertain whether referrals resulted in SNAP enrollment

Tracking referrals to community resources was challenging

Grady Health experienced construction delays with the Food Pharmacy, and had several key learnings related to opening a new pantry and running it as a food bank program

Coronavirus Food Assistance Program boxes were helpful for both the Fresh Food Carts and Food Pharmacy distributions; ACFB adapted to program needs for the Food Pharmacy

ACFB's Benefits Outreach department transitioned to working remotely due to COVID-19; a more passive referral process to offsite assistance may have resulted in fewer patients screened

During COVID-19, the state approved telephonic signatures allowing ACFB staff to process SNAP applications digitally, thus removing paperwork burdens for staff and patients and increased capacity to expand SNAP screening to other health care sites

SCREENING & REFERRAL DATA*

Fresh Food Carts & Jesse Hill Market Food Pharmacy

8,871 TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

36% SCREENED POSITIVE FOR FOOD INSECURITY *3,233*

OF THOSE **49%** WERE REFERRED FOR SERVICES *1,569*

Jesse Hill Market Food Pharmacy

266 REFERRED TO FOOD PHARMACY

148 ENROLLED IN FOOD PHARMACY PROGRAM

308 PATIENT VISITS TO FOOD PHARMACY

HEALTH DATA**

Fresh Food Carts***

28.3 BMI kg/m²

119/72 BLOOD PRESSURE mmHg

6.6% A1C

Jessie Hill Market Food Pharmacy

32 BMI kg/m²

138/80 BLOOD PRESSURE mmHg

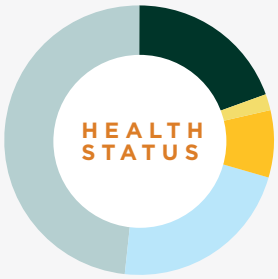
11.2% A1C

11 UNHEALTHY PHYSICAL DAYS

9 UNHEALTHY MENTAL DAYS

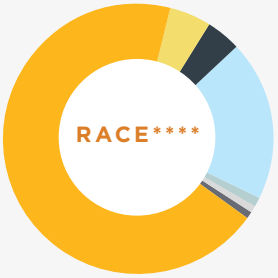
20 OVERALL UNHEALTHY DAYS

10 OVERALL HEALTHY DAYS



EXCELLENT 2% | VERY GOOD 8% | GOOD 22% | FAIR 48% | POOR 19%

DEMOGRAPHIC DATA



HISPANIC 68% | WHITE 5% | ASIAN 4% | BLACK 19% | MULTI-RACIAL 1%

AMERICAN-INDIAN <1% | NATIVE HAWAIIAN <1%

*Includes screening data from clinic sites with mobile food cart programs (reported between 10/1/2019-12/31/2019), and eight Grady departments (8/11/2020 to 12/31/2020) that began referring to the newly opened Jesse Hill Market Food Pharmacy.

**Weighted average of data from 2019-2020; BMI, BP, and A1C are "most recent value" listed in patients' charts and may include data collected outside the project period.

***Data from patients that attended at least one Fresh Food Cart in 2019

****Data may not add up to 100%

ATLANTA COMMUNITY FOODBANK

CONTACT INFORMATION

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Dare to Care Food Bank

LOUISVILLE, KY

HEALTH CARE PARTNERS

University of Louisville Hospital

Family Health Centers

Dare to Care Food Bank

PROJECT HIGHLIGHTS

Health care partners conducted food insecurity screening (using Hunger Vital Sign™ or PRAPARE) during patient appointments at outpatient and community clinic sites

Patients who screened positive received shelf-stable emergency food at the onsite clinic pantry (Prescriptive Pantry), and received a Community Resource sheet with information on additional food resources(within five miles of clinic site) for ongoing access

Onsite resource social worker supported patients in applying for other programs (SNAP, WIC), and shared online map of Dare to Care partner pantries to connect patients to local food resources

Patients also participated in nutrition education classes, including Cooking Matters

Dare to Care ordered food for Prescriptive Pantries and covered all costs; clinics placed orders online to have foods delivered at no cost to health care site

Prescriptive Pantry sites expanded to 23 locations by end of 2020

CHALLENGES & SUCCESSES

Patients did not always receive information on how to access the Dare to Care website to identify additional, community-based nutrition resources

University of Louisville Hospital initially explored implementing "means tests" (e.g., require patients to meet an eligibility requirement based on income or assets) before distributing food, but ultimately opted against doing so

Dare to Care worked to address transportation challenges for patients

Most Prescriptive Pantries could not offer produce or perishable products

Data sharing with partners was challenging, particularly around initial set up of data tracking and sharing systems; Dare to Care is exploring shared access to a secure file

A streamlined process to track unduplicated screens or referrals was not implemented during the project, and there was a lack of feedback loops to determine if referred patients ever accessed community resources

Early successes in effectively and efficiently screening patients and connecting to emergency onsite nutrition resources fueled expansion of new Prescriptive Pantry sites

SCREENING & REFERRAL DATA*

26,479
TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

53%
SCREENED POSITIVE FOR FOOD INSECURITY
14,132

OF THOSE
37%
WERE REFERRED FOR SERVICES
5,291

5,012
TOTAL PATIENT VISITS TO ONSITE PANTRY

4,349
TOTAL REFERRALS FROM CLINICS TO FOOD BANK PROGRAMS

HEALTH DATA**

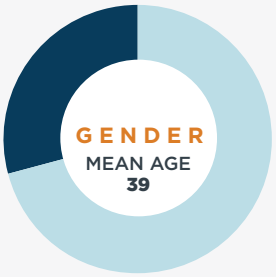
29.78
BMI
kg/m²

121.95
SYSTOLIC BP
mmHg

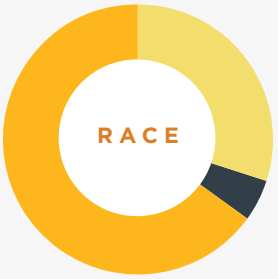
7.48%
A1C

10%
DEPRESSIVE SYMPTOMS
positive screenings on PHQ-2

DEMOGRAPHIC DATA***



FEMALE 71%
MALE 29%



WHITE 65%
BLACK 30%
OTHER 5%

*Data from multiple clinic locations

**Population includes all patients who screened positive for food insecurity

***Data for Family Health Centers only

Dare to Care Food Bank

CONTACT INFORMATION

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Dare to Care Food Bank

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Feed More

RICHMOND, VA

HEALTH CARE PARTNER

Virginia Commonwealth University (VCU) Health

FEED MORE SM

PROJECT HIGHLIGHTS

Community Health Workers and VCU Health Sciences students conducted food insecurity screenings verbally with patients during appointments at one of three VCU Health clinic sites; Medicaid and Medicare patients were prioritized for screening

Patients who screened positive for food insecurity received a referral for food (an emergency box of shelf-stable food) from an onsite pantry and were also referred (via an online "Hunger Hotline" form) to Feed More for connection to a community-based Wellness Pantry (five operate in Richmond)

VCU social workers provided additional nutrition education and assistance, transportation vouchers (via Lyft), menu planning and support for accessing non-food resources

Wellness Pantries provided a high percentage of produce and other nutritious items, a choice shopping model, SNAP Application Assistance and nutrition education

VCU project data was tracked via REDCap (data was not entered in EMR system)

Feed More utilized Link2Feed (a Service Insights platform) to document referral information

CHALLENGES & SUCCESSES

Data sharing and management processes were challenging throughout the project, and the initial MOU between VCU and Feed More did not identify specific metrics to track

Data processes were implemented in a way that made it impossible to disaggregate health data by food insecurity status

VCU did not have space for a food pantry onsite, but Feed More was able to build a new menu and a food box specifically for health care partners

Feed More had to train food bank volunteers to consistently connect patients referred from VCU to Wellness Pantries (as opposed to other community pantries)

Using Link2Feed to manage data and reporting for FIM required tedious, manual processes

SNAP Application Assistance was infrequently utilized at Wellness Pantries (most visitors did not want to spend additional time at pantry)

The Hunger Hotline enabled patient referrals to community pantries, and Link2Feed helped track referrals and pantry visits

VCU social workers selected "FIM" referral on the online Hunger Hotline form, indicating these patients needed a Wellness Pantry referral

SCREENING & REFERRAL DATA

1,034
TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

50%
SCREENED POSITIVE FOR FOOD INSECURITY
521

OF THOSE
83%
WERE REFERRED FOR SERVICES
435

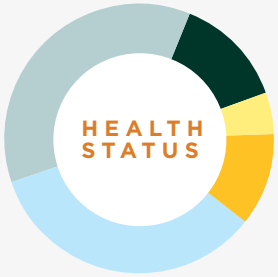
369
REFERRED FROM CLINIC TO FOOD BANK PROGRAMS

423
RECEIVED FOOD BOXES

252
REFERRED TO WELLNESS PANTRIES

24
COMPLETED VISITS TO WELLNESS PANTRIES

HEALTH DATA*



EXCELLENT **5%**
VERY GOOD **11%**
GOOD **34%**
FAIR **36%**
POOR **13%**

11 DAYS
WHERE POOR HEALTH INTERFERED WITH USUAL ACTIVITIES (LAST 30 DAYS)

**Population includes all patients screened for food insecurity*

SNAP DATA

84
SNAP APPLICATIONS ENABLED

FEED MORE℠

CONTACT INFORMATION

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feedmore.org

Freestore Foodbank

CINCINNATI, OH

HEALTH CARE PARTNER

University of Cincinnati Medical Center

PROJECT HIGHLIGHTS

Medical assistants screened clinic patients for food insecurity at every visit using the Hunger Vital Sign™; data was collected in EMR (EPIC)

Patients who screened positive for food insecurity had access to an onsite pantry where they received a three-day supply of shelf-stable food after their appointment and could return monthly for additional food

Onsite pantry was managed by nursing staff and social workers

Patients also received a referral and a $25 voucher for a mobile food bank produce distribution program, Healthy Harvest Mobile Market, which serves 12 neighborhoods around Cincinnati (most within three miles of the clinic); produce is sold at a SNAP match

At the Healthy Harvest Mobile Market, patients received a resource packet with listings of local food pantries and soup kitchens, nutrition education resources, *Seasoned Magazine*, and information on community cooking classes

Each produce prescription had a unique number on it, which the staff noted in the patient's EMR; when the prescription was redeemed, the food bank staff logged the prescription number, date and location, and this information was shared with the medical center

CHALLENGES & SUCCESSES

Freestore was not able to assign an onsite staff for outreach or assist with SNAP applications; patients only received flyers

The site was not able to develop a process for tracking patients who received resource referrals or if SNAP applications were completed and submitted

Medical assistants reported food insecurity screening was time consuming; screening may not have occurred with all patients

Food bank needed to increase food deliveries to clinic pantry due to high demand

Site observed low-redemption rates of produce prescriptions (<30%, 170 of 600+), underscoring challenges with connecting patients to community-based resources

Medical center reported challenges in finding staff time and resources for data sharing and analysis

SCREENING & REFERRAL DATA*

500**
PATIENT VISITS

**Freestore collected data for a maximum of 500 patients who screened positive and were referred to food pantry*

***May not represent the full volume of visits; each participant had at least one visit*

HEALTH DATA

33 BMI kg/m²	**130/77** BLOOD PRESSURE mmHg	**6.6%** A1C	*Health metric data collected for 500 participants enrolled in pantry program (note—not all patients had a value for each health metric)*

Freestore and their health care partner collected data on 500 patients who screened positive for food insecurity during the FIM project. The 500 food insecure patients were referred to the onsite food pantry, and all patients had at least one visit to the pantry. However, it is likely that patients visited the pantry more than once over the course of the project period. The average BMI, blood pressure and A1C results were reported for the population of 500 patients who visited the food pantry.

FREESTORE FOODBANK
FOOD • CONNECTION • HOPE

CONTACT INFORMATION

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freestorefoodbank.org

Gleaners Food Bank of Indiana

INDIANAPOLIS, IN

HEALTH CARE PARTNERS

Eskenazi Health

Eskenazi Health Center Pecar

GLEANERS

PROJECT HIGHLIGHTS

Medical assistants or primary care providers (PCP) conducted food insecurity screenings using the Hunger Vital Sign™, which is embedded in the EMR (EPIC) on a "Social Determinants of Health" tab; patients were also able to complete an online screening ("MyChart" patient portal) prior to a PCP visit

Health center staff referred patients who screened positive for food insecurity to the clinic's onsite Crooked Creek Food Pantry (CCFP) using a Food is Medicine referral slip with a unique tracking number

CCFP is a choice pantry; visitors can shop twice monthly, where one visit is "full shop" (all choices are available) and the second visit is a "quick shop" (more limited options focused on produce and proteins)

Other CCFP resources included flyers on food assistance programs, healthy recipes and food demonstrations

The pantry collected client referral slips, recorded the unique tracking number for each and reported the number of referral slips received to the clinic

Health Center Pecar offered four-week nutrition classes for food-insecure patients living with or at risk of chronic disease (obesity, prediabetes, diabetes, hypertension); the classes covered healthy eating, cooking tips, physical activity and included guided pantry shopping tours

Food bank staff provided monthly food insecurity trainings for Indiana University School of Medicine Pediatric Residents; health center staff also received training on food insecurity and screening and toured the onsite food pantry to become familiar with pantry services

CHALLENGES & SUCCESSES

Gleaners worked with a physician "champion" to increase the health system's focus on SDOH and related metrics

Patients shared health data via pre-surveys at the pantry, but post-surveys were not completed due to COVID-19

The paper referral and tracking system was intensive and difficult to manage; clinic would prefer to build streamlined, digital data management systems in the future

There was low utilization of SNAP application assistance; a new SNAP hotline has been implemented to provide additional client outreach

An increase in food insecurity screenings in patient population resulted in additional use of CCFP resources (food, volunteers, etc.)

Providers anecdotally shared that participants experienced improvements in health and were empowered to make long-term changes

Building on FIM project learnings, Eskenazi Health has initiated new large-scale food distributions

SCREENING & REFERRAL DATA

7,828
TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

32%
SCREENED POSITIVE FOR FOOD INSECURITY
2,477

OF THOSE
34%
WERE REFERRED TO ONSITE PANTRY
848

4,841
TOTAL VISITS BY REFERRED PATIENTS AT ONSITE PANTRY

2,147
UNIQUE REFERRED PATIENT HOUSEHOLDS SERVED AT ONSITE PANTRY

HEALTH DATA

EXCELLENT 15%
VERY GOOD 15%
GOOD 32%
FAIR 29%
POOR 7%

11 DAYS
AVERAGE UNHEALTHY DAYS REPORTED IN THE LAST MONTH

14%
PATIENTS HOSPITALIZED IN LAST 6 MONTHS

26%
PATIENTS WITH ER VISITS IN LAST 6 MONTHS

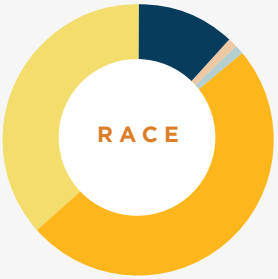
SNAP DATA

21%
RECEIVING SNAP ALREADY

49
SUBMITTED SNAP APPS ONSITE AT PANTRY

Of those who reported not receiving SNAP, 30% reported they were not eligible, 22% reported that they did not know what SNAP was, and 14% weren't sure where to apply.

DEMOGRAPHIC DATA



BLACK 37%
HISPANIC 50%
WHITE 12%
ASIAN 1%
MIDDLE EASTERN 1%

GLEANERS

CONTACT INFORMATION
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Houston Food Bank

HOUSTON, TX

HEALTH CARE PARTNERS

Harris Health System

Strawberry Health Center

houstonfoodbank

PROJECT HIGHLIGHTS

Houston Food Bank's **Food for Change** strategy includes a focus on health-related programming, including **FIRST Link** and **Food Rx** programs; both were part of the FIM project

Clinic nurses administered food insecurity screenings (Hunger Vital Sign™) to patients during clinic appointments using a laminated, reusable screening card

Food Rx patients (diagnosed with diabetes) shopped every two weeks; FIRST Link patients received one-time onsite emergency-food, and were then referred to pantry network

Community Assistance Program (CAP) navigators were stationed at clinic sites and provided SNAP, Medicaid, **CHIP** and **TANF** application assistance, and completed pantry referrals

Clinic nutritionist provided nutrition education and conducted food demos and tastings

Referral and activity data were collected in EMR (EPIC), and Link2Feed was used to track patient visits at food pantries

CHALLENGES & SUCCESSES

The food bank's CAP navigators were not initially approved by Harris Health to operate onsite during the project, so clinic staff referred patients to the pantry network

Nutrition education resources and appointment follow-ups engaged patients; there was a 100% pantry utilization rate and patients redeemed their Food Rx at least once a month

Initial challenges identified with pantry orders ultimately required an increase of food purchases to maintain inventory

Data extraction from EPIC was a capacity/staffing and technology challenge

As the pantry received a higher volume of patient referrals over time, patient wait times at the pantry increased, and there was a need for more volunteers

Houston Food Bank and Harris Health held monthly check-in calls to provide updates, problem solve, and plan for upcoming changes

SCREENING & REFERRAL DATA

15,009
TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

19%
SCREENED POSITIVE FOR FOOD INSECURITY
2,855

OF THOSE
100%
WERE REFERRED FOR SERVICES
2,855

1,982
TOTAL PATIENT VISITS TO ONSITE PANTRY

2,855
PATIENTS REFERRED FROM CLINIC TO FOOD BANK PROGRAMS

FOOD RX PROGRAM (diabetes diagnosis with A1C > 7%)

263
TOTAL PATIENTS ENROLLED INTO FOOD RX

263
TOTAL UNDUPLICATED FOOD RX VISITS

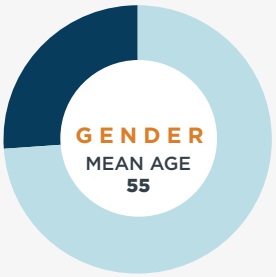
1,409
TOTAL NUMBER OF FOOD RX VISITS

EMERGENCY FOOD DISTRIBUTION

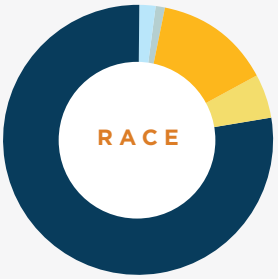
335
TOTAL UNDUPLICATED PATIENTS WHO RECEIVED EMERGENCY FOOD DISTRIBUTION

347
TOTAL NUMBER OF EMERGENCY FOOD DISTRIBUTIONS

DEMOGRAPHIC DATA*



FEMALE 74%
MALE 26%



WHITE 14%
BLACK/ AFRICAN AMERICAN 5%
HISPANIC/ LATINO 77%
WHITE, HISPANIC/ LATINO 2%
ASIAN 1%

** Data collected for Food Pharmacy Patients only*

houstonfoodbank

CONTACT INFORMATION

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Second Harvest Food Bank of Middle Tennessee

NASHVILLE, TN

HEALTH CARE PARTNER

Nashville General Hospital

PROJECT HIGHLIGHTS

Nashville General staff verbally screened all patients for food insecurity during every visit using the Hunger Vital Sign™; results were recorded in EMR (E-Clinical Works)

Patients screening positive received a referral to onsite "Food Pharmacy", where they received fresh produce and shelf-stable foods tailored for chronic disease management, along with nutrition education

Patients were able to return weekly to the Food Pharmacy for 12 weeks

Clinic staff entered referrals into the EMR and the food pharmacy entered every visit into the EMR

Patients with diabetes or hypertension could enroll in health promotion classes

Internally, Nashville General shared a monthly "Food Pharmacy" report with staff for benchmarking and to promote screening

Patients received a resource sheet on community resources and were able to meet with onsite case managers for SNAP Application Assistance

CHALLENGES & SUCCESSES

While the food bank had early buy-in from Nashville General leadership, it took time to engage clinical departments

Nashville General assigned a staff to manage data reporting, which led to successful data sharing

There were early challenges with staff capacity, documentation of screening results, and concerns over verbal screening and stigma

While patients could return to the onsite pantry weekly for 12 weeks, most patients only visited the pantry a few times

The Food Pharmacy was frequently utilized by oncology patients, who were on campus weekly for appointments, but was maybe not as convenient for other patients

Transportation vouchers to aid patients in returning to the Food Pharmacy outside of their appointments were well-received

Kroger gift cards ($20) were used to encourage patients return to the Food Pharmacy; patients received a gift card after six pantry visits

The Food Pharmacy specialist worked weekdays from 10:00 a.m. – 4:00 p.m.; patients often needed access to the Food Pharmacy outside of these hours, which increased workload for other staff

Nashville General staff anecdotally reported several patients who frequently used Emergency Department care improved their chronic disease management after participating in the project

SCREENING & REFERRAL DATA

30,914
TOTAL PATIENTS SCREENED FOR FOOD INSECURITY

10%
SCREENED POSITIVE FOR FOOD INSECURITY
3,053

OF THOSE
76%
WERE REFERRED FOR SERVICES
2,318

1,559
TOTAL PATIENT VISITS TO ONSITE PANTRY

219
PATIENTS REFERRED FROM CLINIC TO FOOD BANK PROGRAMS

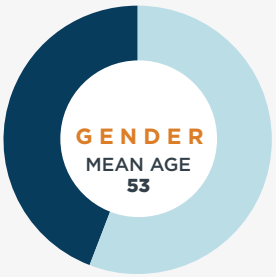
HEALTH DATA

29.1*
BMI
kg/m²

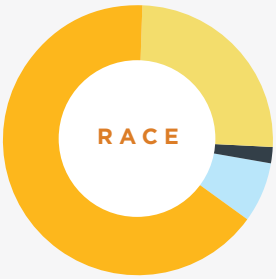
134/78**
BLOOD PRESSURE
mmHg

7.96%***
A1C

DEMOGRAPHIC DATA*



FEMALE 56%
MALE 44%



BLACK 65%
WHITE 25%
AMERICAN INDIAN / ALASKA NATIVE 2%
OTHER 7%

NON-HISPANIC 94%
HISPANIC OR LATINO 6%

*Population is all food pharmacy patients

**Population is all food pharmacy patients with a hypertension diagnosis

***Population is all food pharmacy patients with a diabetes diagnosis

SECOND HARVEST FOOD BANK of MIDDLE TENNESSEE
Feeding Hope

CONTACT INFORMATION

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End Notes

[1] Gunderson, G. & Ziliak, J. 2015. **Food Insecurity and Health Outcomes**. Health Affairs, 34(11), 1830-1839.

[2] Berkowitz, S., Basu, S., Meigs, J., & Seligman, H. (2018). **Food Insecurity and Health Care Expenditures in the United States, 2011–2013**. Health Services Research, 53(3), 1600–1620.

[3] **Economic Research Service**, United States Department of Agriculture.

[4] U.S. Centers for Disease Control and Prevention. **Social Determinants of Health: Know What Affects Health**.

[5] Braveman, P., Arkin, E., Orleans, T., Proctor, D., & Plough A. (2017). **What Is Health Equity? And What Difference Does a Definition Make?** Princeton, NJ: Robert Wood Johnson Foundation.

[6] Note: This toolkit and several other resources linked in this report are posted on Feeding America's intranet and are only accessible to Feeding America staff and member food banks. However, wherever possible throughout this report, links to publicly available resources were used.

[7] U.S. Centers for Disease Control and Prevention. **Health Insurance Portability and Accountability Act of 1996** (HIPAA).

[8] U.S. Food & Drug Administration. 2019. **Institutional Review Boards (IRBs) and Protection of Human Subjects in Clinical Trials**.

[9] Fritz, C.Q. et al. (2020). **Referral and Resource Utilization Among Food Insecure Families Identified in a Pediatric Medical Setting**. Academic Pediatrics, journal pre-proof.

[10] Each health care site implemented screening and referral processes based on their plans, clinical flow, and capacities. Health care staff that engaged in these activities varied and could include: physicians, nurses, medical assistants, social workers, patient care navigators, community health workers, health students, or volunteers.

[11] Center on Budget and Policy Priorities. 2018. **SNAP Is Linked with Improved Nutritional Outcomes and Lower Health Care Costs**.

[12] The **Feeding America Client Survey (FACS)** is a research toolkit of survey measures and learning resources to support consistent local research and evaluation across food banks in accordance with national best-practices.

[13] Coi S.E., Seligman H., and Basu S. (2017). **Cost Effectiveness of Subsidizing Fruit and Vegetable Purchases Through the Supplemental Nutrition Assistance Program**. Am J Prev Med, 52(5): e147–e155.

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