OVERVIEW OF NEED
During the first surge of the pandemic, Cambridge Health Alliance (CHA), located in Cambridge, MA, saw thousands of patients with COVID-19. These patients were required to quarantine at home suddenly for two weeks, along with all of their household members. Many of these patients were food insecure - how would they get food for themselves and their families while confined at home? Like many healthcare systems, CHA did not have a process to identify patients who needed this support, and once identified, a way to get them free food delivery. Primary care physician, Dr. Amy Smith, saw this as a complex but solvable problem in a community with high and growing need.

POPULATION AT RISK
According to a May 2021 Greater Boston Food Bank Study, which assessed 3,000 adults between October–January of 2020: 1.6 million adults in Massachusetts struggled to get enough to eat, compared to 1 million in 2019 representing the highest increase in people needing help accessing food in the US.

- People of color and households with children saw the greatest increase in food insecurity.
- Nearly half of people experiencing food insecurity were not using food pantries or SNAP.

In Cambridge, food insecurity was found to be especially high in immigrant and refugee populations, and among people of color.
OVERVIEW OF SOLUTION
Feed to Heal was initially created to address this “crack” in the system and the heightened need brought about by the COVID-19 pandemic. Dr. Smith and her colleague, Timothy Spong, alongside many other collaborators, designed a process to connect food-insecure patients with free contactless food delivery during their quarantine, and then expanded their vision to address the ongoing food insecurity that exists within patient communities. Their goal was to build a solution, which:

• Utilizes health centers as points of contact;
• De-stigmatizes food insecurity for individuals and families;  
• Incorporates food security screening into healthcare screening;  
• Provides an active & automated referral process to partnering community-based organizations (CBOs);  
• Engages in relational coordination with food pantries; and  
• Establishes robust database systems to support partnering CBOs and to inform food insecurity policy and practice at a systems level.

OVERVIEW OF PROJECT
During the height of the pandemic in 2020-2021, Feed to Heal leveraged technology and relational coordination to deepen collaborations between healthcare systems and community food organizations. Their integrated referral platform enables health systems to connect identified food-insecure patients to participating food organizations more quickly, efficiently, and with greater workflow sustainability. The Feed to Heal platform resolves some of the logistical challenges facing community food organizations and health systems so they can focus on getting food to people while collecting data at scale. Specifically, the platform accomplished the following objectives:

1. Be easily used within a regular clinical visit in a way that is fast and efficient for the medical provider.
2. Provide simple and easy access for the patient, who is already overwhelmed by medical and social issues.
3. Leverage technology to integrate health systems, providers, CBOs, and patients—getting the right resources to the right patient in the right location.
4. Build robust database systems that normalize data between CBOs and health systems so that this data can be captured and shared to drive meaningful change for patients and communities who experience food insecurity.

THE FEED TO HEAL REFERRAL ECOSYSTEM
HOW THE PLATFORM WORKS

The graphic below summarizes Feed to Heal’s process of referring patients, receiving referrals, and securing food for patients. For additional information about how Feed to Heal worked during the pandemic, please view their overview video or this lucid chart of their work flow.

**Referring patients (healthcare)**
1. Patient identified as food insecure during a clinical visit.
2. Feed to Heal pulls patient data from electronic medical record (EMR).
3. Data is sorted by demographics.
4. Feed to Heal automatically matches patients with food resources.

**Receiving referrals (CBOs)**
1. Direct automated integration with existing database.
2. Direct population of a database (such as a google sheet or other web-based list) owned by food pantry.
3. Automatic completion of online intake forms for a pantry.

**Securing food (patients)**
1. Automated text notifications follow up with reminders and resources.
2. Patient receives food from pantry, improving nutrition.
3. Text notification and CBO integration closes the loop and tracks receipts of food.

EARLY OUTCOMES

Feed to Heal experienced the following outcomes within 6 months of launching:

- Active referrals through the platform led to a **75% connection rate** with resources, compared to a 5% rate with passive referrals of food resources to patients.
- **25-30% of screened patients** indicated they want to be connected with a free food delivery resource.
- The Feed to Heal platform received **6-15 referrals** daily from Cambridge Health Alliance.
- 6,000 individuals were screened for food insecurity, and **1,900 screened positive**.
- **93% of referred patients** were able to receive food within two business days through one of Feed to Heal’s partnering CBOs.
- A survey of patients indicated the program helped **87% of respondents** learn where to get food in their community.

In the second year of the project, Feed to Heal pivoted away from strictly Covid related food delivery and focused on building an integration with Project Bread (a CBO providing SNAP application assistance) and a more robust food pantry network. This integration eliminated the need for faxed referrals and instead employs an electronic dual referral system to both Project Bread and local food CBO’s. The system also includes feedback loops, allowing information about the patient receipt of services to be pushed back into the electronic medical record. Finally, the Feed to Heal system dashboard collects aggregated information about referrals, patient location, language preferences, connection success rate, completed SNAP applications and food pantry visits.

In the first four months of this enhanced integration, nearly 400 patients screened positive and agreed to share their information with the partnering CBO’s. The data gleaned from the Feed to Heal dashboard has been instrumental in bringing partners to the table to discuss ways to improve connections to patients and identify locations of greatest need. The data suggest that food insecurity continues to exist even when families are receiving federal nutrition assistance through SNAP, demonstrating the need for advocacy and continued support for interventions that help alleviate food insecurity. The next phase of this project includes an expansion outside of the Cambridge Health Alliance system, integrating Feed to Heal technology with another local large hospital system.
KEYS TO SUCCESS
The Feed to Heal team identified critical aspects they experienced as key to their success:

1. Adopt a humble posture of learning, engage in genuine and authentic collaboration and develop collective wisdom and expertise.
2. Identify and patiently work to solve, in innovative ways, fundamental issues built into current systems. For example, in this work, Feed to Heal has identified, and through collaborative processes, is working to solve:
   a. The lack of clarity regarding HIPPA privacy rules
   b. The limited incentives for health systems to connect patients to food resources and to have data demonstrating that connection
   c. The limited funding available to food pantries to invest in operations and technological infrastructure and maintenance, and
   d. The existence of multiple technological solutions but limited incentives for cooperation and coordination among them
3. Apply an iterative process, with all stakeholders contributing at every stage, in which we
   a. Reflect deeply on what has been done to date
   b. Methodically and patiently extract insights on the barriers and facilitators towards our goals
   c. Assess resources (including skills, energy, finances, resources)
   d. Chart out the next few step, and
   e. Go through the cycle again

LESSONS LEARNED
Through this work, founders Dr. Amy Smith and Timothy Spong, have found that food insecurity in this country doesn’t make sense, as it is not about supply. It is a problem of coordination, systems, and values. These challenges require solutions that are community-based, social-network based, and which require long-term commitments to solve system gaps. Specifically,

Normative data is needed that is shareable and analyzed, leading to adjusted interventions

A collaborative process is necessary to achieve deep learning through an actual intervention– not a basic coalition– to keep people solving for the issues through an iterative process of identifying and overcoming barriers, not just staying in communication.

Using the results of an intervention, like Feed to Heal’s system, we collectively need to use findings to address upstream causes and achieve policy reform.

ABOUT THE PARTNERS/CONTACT INFORMATION

Amy Smith, MD, MPH
Founder
Feed to Heal
amy@feedtoheal.org

Sarah Mills, MPH, RD
Program Manager, Health Strategies
Share Our Strength
smills@strength.org