COMMUNITY HEALTH CENTERS AS FOOD OASIS PARTNERS:
Addressing Food Insecurity for Patients and Communities
THERE’S NOT FOOD THAT’S FRESH AND AVAILABLE WITHIN 5–10 MILES, AND IT CAN BE EXPENSIVE TO HAVE HEALTHY FOOD.

—Sophie Birdwell, Nutrition Services Coordinator, North Texas Food Bank
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Executive Summary</td>
</tr>
<tr>
<td>06</td>
<td>Background</td>
</tr>
<tr>
<td>08</td>
<td>Health Center Case Studies</td>
</tr>
<tr>
<td>38</td>
<td>Food Oasis Partners At a Glance</td>
</tr>
<tr>
<td>44</td>
<td>Reflections and Recommendations from Health Centers</td>
</tr>
<tr>
<td>48</td>
<td>Getting Started with Your Own Food Insecurity Program</td>
</tr>
<tr>
<td>50</td>
<td>NACHC Food Oasis Glossary</td>
</tr>
<tr>
<td>52</td>
<td>References</td>
</tr>
</tbody>
</table>
FOR OUR PATIENTS IT COMES DOWN TO:

‘I’ve gotta’ pay the rent or have heat, vs. I’ve gotta’ have food,’ so they buy things that are cheap and fix it in a cheaper manner, which turns out to be fast food, fried foods, fatty foods that aren’t beneficial to their health.

—Van Breeding, MD, Mountain Comprehensive Health Corporation
FOOD INSECURITY, defined as difficulty in accessing affordable nutritious food, affects approximately 14% of our nation’s population and is linked to poor health and economic outcomes. Acute problems like hunger, anemia and poor school attendance are connected to food insecurity. Chronic health problems like diabetes, obesity, heart disease and pediatric developmental delays are also related. Like other disparities, food insecurity affects people of color, immigrants, homeless populations, farmworkers and the urban poor more than others.

Millions of people receive their primary care from the national network of America’s Community Health Centers. Since their inception in the 1960s, health centers have recognized the important role they can play in identifying and addressing food insecurity as an integrated component of patient care, and have taken their own steps to help. Increasingly, these health care organizations are screening for social determinants of health, including identifying hunger as a basic “vital sign.” Screening models such as the Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE) tool have been tested to include food insecurity with other health indicators. As health centers learn more about the problems of food insecurity within their communities, they are more frequently offering unique solutions to help.

The “Community Health Centers as Food Oasis Partners” initiative has identified and documented interventions at health centers that are responsive to food insecurity problems and present opportunities for replication and expansion. With funding from the Medtronic Foundation, the National Association of Community Health Centers (NACHC) queried health centers around the country to analyze their food security efforts and document how they may help to reduce health disparities. Responses from 67 health centers show a substantial variety of interventions (with 98 types of programs identified). From these questionnaires, 14 centers were selected for in-depth case studies highlighted in this guide and three sites were chosen to be featured in a video. NACHC also interviewed national and regional organizations working to reduce hunger for possible collaboration with health centers.

This guide offers promising practices and features partnership opportunities for successful food security programs at and with health centers. These examples take place in urban, rural, homeless, immigrant and migrant settings. Model interventions range from culturally specific community gardens, farmers markets, groceries, cafes, kitchens, food prescriptions, mobile markets and more. The collection offers exciting ideas and resources to initiate and refine food assistance efforts at health centers nation-wide, with tools to evaluate the health impact of these efforts and validate their importance.

1The PRAPARE tool is a national standardized patient risk assessment protocol designed to engage patients in assessing and addressing social determinants of health. The tool was developed by the National Association of Community Health Centers (NACHC), the Association of Asian Pacific Community Health Organizations, the Oregon Primary Care Association and the Institute for Alternative Futures. For more information, visit www.nachc.org/prapare.
THE NATIONAL ASSOCIATION OF COMMUNITY HEALTH CENTERS (NACHC) began the “Community Health Centers as Food Oasis Partners” initiative with an online questionnaire to learn how health centers are addressing food scarcity within their communities. Sixty-seven (67) health centers responded “yes,” they are engaged in food program interventions. Among these 67 centers, 98 food insecurity programs were identified.

The chart to the right summarizes some of the overall findings.

Fourteen (14) centers were selected to interview further and are presented as individual case studies in the pages that follow. They have diverse characteristics to reflect the diversity of America’s Health Centers, including region of the country, urban/rural setting and populations served. They also reflect different types of food program interventions and partnerships to give the reader more food for thought. Most of these centers actively integrate their food security efforts into their comprehensive primary care services.

› Bread for the City, Washington, DC
› Brockton Neighborhood Health Center, MA
› Community Health Service Agency, Inc., TX
› Cornell Scott-Hill Health Center, CT
› Erie Family Health Center, IL
› La Maestra Community Health Centers, CA
› Mountain Comprehensive Health Corporation, KY
› Native Health, AZ
› OLE Health, CA
› Petaluma Health Center, CA
› PrimaryOne Health, OH
› RiverStone Health, MT
› Roanoke Chowan Community Health Center, NC
› Siouxland Community Health Center, IA
SUMMARY OF FINDINGS

ANSWERS
- Community garden
- Collaboration with farmers market
- Collaboration with food bank
- Food vouchers
- Cooking/kitchen programs
- Food prescriptions
- Food pantry
- WIC/SNAP
- Youth meals
- Other (please specify)

LOCATION OF RESPONDENTS TO FOOD OASIS QUESTIONNAIRE
NACHC conducted telephone interviews with key stakeholders at 14 health centers represented in the following case studies. Interviews revealed examples of promising practices that are replicable and sustainable and how interventions impact health outcomes in target populations. Stakeholders described how their food program was initially created, who is served, how the program is funded, how leadership and community members are involved, how surprise encounters have been managed, hopes for the future and advice for centers that wish to embark on similar efforts.

NACHC visited three of these health centers for deeper understanding and to video record their work to share with health centers nationwide. The site visits provided a richer appreciation of the patient experience. The NACHC team visited the Community Health Service Agency, Inc., in Greenville, Texas; Mountain Comprehensive Health Corporation in Whitesburg, Kentucky; and Native Health in Phoenix, Arizona. NACHC is grateful to these centers for their time, insight and support in assisting with the development of these case studies.
The food security programs hosted by these health centers include but are not limited to:

- Community and native gardens
- Food vouchers and food prescriptions
- School-based programs
- Youth camps
- USDA meal programs
- Community supported agriculture distributions
- Food demonstrations and cooking classes
- Immigrant and culturally specific interventions
- Partnerships with farmers markets and/or grocery stores
For over 40 years, Bread for the City has provided the urban poor with a food pantry and access to tools that assist community development and health justice. Community gardens, produce bags, gleanings and connections to social services are fundamental to the health care at the center.

Bread for the City
WASHINGTON, DC

FOUNDED ON FOOD ACCESS, WITH ROOFTOP GARDENS, GLEANINGS, PANTRIES AND A FARM

Its name reflects its origins. Bread for the City (BFC) started as a hunger relief organization over 40 years ago. Partnering with Capital Area Food Bank in 1976, it opened a food pantry serving Washington DC’s low-income families and elderly. The medical clinic started in 1974, standing alongside the pantry. The organization grew to include legal, social and educational services, becoming a Health Resources and Services Administration (HRSA) funded health center about five years ago.

The food pantry operates five days a week, eight hours a day. Patients and community members may access it once per month, with about 5000 families using it monthly. Most families visit the food pantry six to seven times per year.

The pantry is designed as a supplement to assist families to make ends meet. Originally, three days worth of food was given, but this has increased to five. It bridges the gap between Supplemental Nutrition Assistance Program (SNAP) benefits, which typically last 3.1 weeks, and the end of the month. Staples are included, so there is always a meat, fresh food and some shelf stable food.

In recent years, BFC increased its ability to provide fresh food by leasing a three-acre portion of a farm operated by the University of the District of Columbia (UDC). Staff and volunteers grow orchard fruit, including pears, apples and berries.

George Jones, CEO, says the farm has become a laboratory for volunteers and patients to work together just outside of the city, enjoying the fresh air, building garden skills and participating in alleviating food insecurity. About 10-15,000 pounds of produce has been harvested for the pantry from the farm (UDC also contributes extra produce from some of their field).

Rooftop gardens have also been added at both clinic sites. Volunteers, including patients, tend the plants. Classes are held on the rooftop, covering topics such as nutrition, food preparation and garden skills.

Glean for the City is a program started by the center that is in partnership with metro area farmers markets. Volunteers pick up donated food from the markets that didn’t sell. They receive 1-2000 pounds of donated food on these weekend gleanings, adding it to the week’s pantry offerings.

Despite all the success, Jones wishes they could grow more and do more. He notes that the farm food costs more to produce than it would to simply buy. But BFC is about transformation, and that process requires more than simply handing out food. Bread for the City lives up to its name.
PROMOTING EQUITY WITH CHOICE

Bread for the City (BFC) promotes economic and racial justice. Addressing food insecurity is one piece of that effort. They also provide legal, housing, medical, literacy and other social services. As they examine ways in which structures deter equity, Jones says they are also looking at how BFC might have unrecognized implicit bias in its practices.

Giving clients power over their choices is one way BFC tries to promote equity. Clients select what they want from the varieties of produce, meat, grains and shelf stable items available. They have a distribution allotment, but if they prefer all their vegetables to be broccoli, that is their choice. This simple act changed the way food transactions are perceived by staff and clients.

The center also avoids offering non-nutritious foods. Their gardens, gleanings and farm allow them to limit pantry food to about 60% of the total. Patients with literacy problems are assisted reading labels and making their own choices without being stigmatized.
Two years ago, Brockton Neighborhood Health Center (BNHC) opened a new site with a teaching kitchen. Just next door, Vicente’s Market opened a new grocery store. A collaboration to reduce food insecurity flourished as they shared resources. Vicente’s is a well-known market that caters to Cape Verdean immigrants but also has a wide variety of foods that are part of the diets of the health center’s diverse cultural groups. BNHC is an urban clinic with a long history of addressing food insecurity through food vouchers, public programs and charitable partnerships.

One of those partnerships is Project Bread, a statewide coalition that raises funds to help area organizations meet the food security needs of their communities. BNHC has participated with Project Bread for 13 years, receiving funds on an annual basis.

Providers refer patients to a social worker who determines their needs and links them with community resources. Food vouchers are given to meet immediate hunger needs and can be spent at Vicente’s. Vicente’s gives store credit for healthy choices and displays nutritional content of foods. Sample recipes are shared using products from the store cooked in BNHC’s teaching kitchen. Funds also allow the purchase of several Community Supported Agriculture (CSA) subscriptions. The produce is brought to the center and used in the kitchen as well as given away.

Alexandra Avedisian, Community Health Program Manager, leads the food security initiatives. She says the key to success is using community health workers (CHWs). Trained in health promotion and case management, they represent the distinct cultural communities of the patients. As one CHW put it, “We work with, not for, the patients.”

Stonehill College is another partner to BNHC. It has a campus farm, and the manager brings produce from that farm to sell at BNHC during the summer months. This mobile market supplies fresh produce at low cost to patients at the center. Some of the patients also receive vouchers from Project Bread monies to assist their purchases. Patients learn about foods they might not find familiar and enjoy learning from the Stonehill manager. This mobile market plans to expand to a public housing site that BNHC serves.

Avedisian has a word of caution. A hospital partner wanted to double their vouchers because they recognized BNHC’s good work. However, that strained the capacity of the CHWs in other areas. Sometimes you have to limit even successful ideas until funding supports infrastructure.
In the course of assisting women with depression, Ginger, a Brockton Neighborhood Health Center (BNHC) social worker, realized the center’s Ecuadorian women immigrants all shared a common longing. They missed farming the land and contributing food to their family’s table. Ginger got permission to use some of the land associated with Vicente’s Market as a garden plot and a group therapy project was sown in that soil.

Groundbreaking was on a wet rainy Sunday in April. Women not only came, but brought their young children dressed in Sunday suits. The work became a celebration. An elderly woman lent a hand from her wheelchair, eager to do her part.

Every Friday they met, working for an hour in the garden and then gathering in group therapy in the teaching kitchen. Harvests were plentiful, with food brought home weekly to the women’s families. When the weather turned dry, members of the group showed up during the week to water and tend the plants.

It may not be Ecuador, but these women have a new sense of home and land. Strong community bonds are forming along with a sense of purpose and pride. Mental health needs are met with physical health activities and new opportunities for work. The center hopes to replicate this idea in the coming years.
Community Health Service Agency, Inc. | GREENVILLE, TEXAS

FOOD 4 HEALTH: NUTRITION ASSISTANCE IS PREVENTIVE HEALTH CARE

Serving five areas in rural northeast Texas, Community Health Service Agency, Inc. (CHSA) confronts many obstacles when facing the issue of food security. These rural areas are spread out with few services between them. Public transportation is limited and many of the patients have language barriers as well. Despite the presence of some local food pantries, there are limited local resources to assist patients.

The North Texas Food Bank (NTFB) approached CHSA about partnering to identify and address food insecurity in these rural locales. Rather than just add extra food delivery sites, the NTFB designed the Food 4 Health program, which includes screening for needs, tracking health outcomes associated with nutritional practices, distributing fresh healthy foods and educating about healthy food choices that are budget friendly. The goal is to assist patients to overcome food insecurity through a three-month program intervention.

Outreach and enrollment workers at health center sites screen patients for food insecurity using a standardized brief assessment (see Getting Started with your Own Food Insecurity Program on page 48). The screening is done in Spanish and English, with positive answers qualifying patients for the program. Health data are collected after the patient is enrolled in the program.

Staff identified 25 patients in just the first day of screening. About half of the enrollees were Spanish speaking and most were in young families. Family size is a factor in determining food needs.

After enrolling, patients are given vouchers to use at the NTFB distributions. Distributions are coordinated with patient tracking, which includes information on body mass index (BMI), chronic disease status, blood pressure and glycated hemoglobin level (HgbA1c). NTFB staff visit the site weekly for three months.

The weekly food packages include shelf stable foods such as rice and beans, as well as fresh produce. Recipes are included and patients get a weekly gift, like an oven mitt. If they attend all distributions they get a graduation gift and additional resources.

CHSA is rolling the program out to all of its sites, 25 patients at a time. They are already seeing real change. Patients report less food insecurity, healthier selections and increased fruit and vegetable consumption. Complete data isn’t in, but one woman dropped her HgbA1c from 12 to 8 percent and also lost 20 pounds.

CHSA hopes to expand and show how food assistance impacts the overall well-being of their patients.
IMPROVING FOOD INSECURITY LEADS TO IMPROVING HEALTH OUTCOMES

Community Health Service Agency, Inc. (CHSA) has been serving patients and community members for close to 40 years in Northeast Texas.

Among those served is a patient by the name of *Bobby. Bobby has lived in Northeast Texas most his life. Once Bobby was diagnosed with diabetes a few years ago, he knew he had to make some lifestyle changes.

Bobby began coming to CHSA in 2015 where he quickly learned how to manage his diabetes through care coordination that included education and self-management. He was screened in 2016 for the Food 4 Health program and anticipated the start date in early 2017.

Bobby began his weekly distributions with the North Texas Food Bank and quickly made friends with the staff. He enjoyed discussing the various healthy food topics and new recipes provided by the staff. Sometimes his wife would even tag along to hear the good news.

Bobby saw a dramatic decrease in his glycated hemoglobin level (HgbA1c) levels from before the program at 13.5 in late 2016 to end of the program at 10.8 in the summer of 2017.

He says he’s feeling great and has really enjoyed the new recipes and will continue with this lifestyle change even though the program has ended for him.

*Name has been changed for anonymity.

INTerventions

Using food security screening tools tied to vitals

Creating a 3 month “Food 4 Health” program with education and services (in Spanish and English)

Offering food vouchers and nutrition education

Partnering with local food bank

Partners

Baylor University

Hope Clinic piloted the program in 2015

North Texas Food Bank
Food Insecurity: Inpatient, Outpatient, Mobile and Festive

Homeless, working poor, HIV infected, mentally ill, elderly, chronically ill, school-based, immigrant: Cornell Scott-Hill Health Center (CSH) serves all of these subpopulations and more in inner city New Haven, Connecticut. The diversity of their patients is matched by the diversity of their food security efforts.

CSH brought food to 4400 patients through its multiple programs last year, collectively called Food For Health.

CSH believes food security is central to its mission. Because it manages two inpatient treatment facilities, it has an industrial kitchen and a chef. That has helped CSH spread food interventions throughout the organization.

The center has a number of wellness food initiatives where patients learn nutrition and food preparation. Cooking Matters is one course used. Many of the patients have not been previously taught how to prepare fresh food and lack food preparation tools. CSH also enrolls patients in Supplemental Nutrition Assistance Program (SNAP) as part of eligibility assistance.

Healthy Snacks for Children started when behavioral therapists realized children were hungry after school. They needed to eat before they could focus on the appointment. At first, therapists supplied the food. Now the program is funded by grants and donations.

Child and family guidance centers have a snack closet, which every child visits when they arrive. Staff believes it builds retention and enables visits to be more effective.

The Grow Truck is an intervention aimed at preschoolers and their families. The center partners with the Connecticut Food Bank and the University of Connecticut to bring this supermarket on wheels to the center January through May. Parents are allowed to select fresh fruit, vegetables and meat. They are given education on food, budgeting and reading to their children as part of the intervention.

CSH started the Summer Supper Meal Truck and the Connecticut Mobile Food Pantry collaborative in partnership with public schools and United Way. Each summer weekday, the truck delivers hot meals to children between 4:30 and 5:00 pm. Staff report the children come running when they see the truck. The mobile pantry accompanies the truck four times during the summer, giving parents the chance to select groceries while their children get supper.

CSH looks forward to evaluating the health impact of these programs. Last year they offered services to 4428 patients, 1444 SNAP enrollees, 2984 summer meals, and 50 holiday baskets. They estimate 279 employee hours per year on their food initiatives.
INTERVENTIONS

KITCHEN-BASED CLASSES IN FOOD PREPARATION, SAFETY AND NUTRITION

A HEALTHY SNACKS PROGRAM FOR CHILDREN AND A SNACK CLOSET

A MOBILE FOOD PANTRY IN PARTNERSHIP WITH A LOCAL UNIVERSITY AND FOOD BANK

A SUMMER MEALS TRUCK IN PARTNERSHIP WITH LOCAL PUBLIC SCHOOLS AND THE UNITED WAY

A HOLIDAY FOOD-BASKET PROGRAM

RECOGNIZING FOOD CHALLENGES DURING HOLIDAYS

For many families living paycheck to paycheck, the end of the month is marked by scarcity. So it is especially difficult that our biggest holidays are also at month’s end. Thanksgiving, Christmas and Kwanzaa are tough for Cornell Scott-Hill families to navigate. Food resources are often stretched in favor of a little gift or travel money.

For several years, the center sponsored an employee and community food drive, donating all collections to a local charity. Last year, they decided to focus on patient families and put together 50 large baskets of food. Each basket supplied a full holiday feast.

Families are nominated by staff at the 20 sites. Volunteers deliver the baskets to patient homes. The response has been overwhelming. The personal aspect of care from center to patient family has kept it from feeling like a handout—instead it is received as an embrace. Next year’s goal is to serve 100 families with baskets.

PARTNERS

CITY SEED MOBILE MARKET
CONNECTICUT FOOD BANK
COOKING MATTERS
FAITH COMMUNITIES
NEW HAVEN PUBLIC SCHOOLS
SENIOR CITIZEN HOUSING
STATE OF CONNECTICUT SOCIAL SERVICES
SUMMER SUPPER MEAL TRUCK
UNITED WAY
WALMART FOUNDATION
During any given week, Erie Family Health Center’s (EFHC’s) calendar is filled with Zumba, swimming, line dancing, walking, low impact aerobics, yoga, meditation, cooking classes and more. Patients, staff and community find health care is a lot more about well-being than diagnostic codes and exam room encounters. Food security activities flow naturally from this design structure.

When EFHC CEO Lee Francis, MD, MPH, responded to NACHC’s survey, he remarked that seeing all of their food activities in one listing helped him see the breadth and depth of what they are doing. Like many community health centers that are fully engaged with their communities, it was easy to see the trees but not the forest they are growing. Food security efforts at EFHC include almost a dozen interventions that span child-centered to elder-based activities. Building on existing strengths with their school-based health centers, EFHC started a community garden in a district designated as a food desert. The garden is part of the school health program, introducing children to new foods while also building in nutrition and exercise components. As others with school gardens have said, sharing in the growing, cooking and eating of the food has transformed the children’s food experiences.

Top Box Foods (see Top Box Foods in Food Oasis Partners At a Glance, p. 42) partners with EFHC to deliver boxes of fresh produce and frozen meat at deeply discounted prices. Patients, staff and community members preorder boxes, which are then delivered on a regular route every month. The center’s kitchen is used to create sample meals from the boxed food selections. This mobile food program brings high quality grocery items into food deserts and is supported as a social enterprise. Future plans are to have a mobile food bank delivery route as a complementary food source.

Other food programs include Cooking Matters and diabetes prevention classes for Hispanic women. These programs include grocery store visits and meal planning. Children are offered the BALANCE program, focusing on nutrition education and the prevention of childhood obesity. Fun events such as mini marathons are also sponsored by EFHC.

With care like EFHC’s, doctors may become obsolete!
A SHIFT IN FOCUS

With 25 years’ experience at Erie Family Health Center (EFCH), including work as an internist, CMO and CEO, Dr. Francis has seen special initiatives in health centers come and go. Health Disparities Collaboratives, Patient Centered Medical Homes, electronic health records and social determinants of health have all been in fashion. But in interviewing Dr. Francis, it’s clear he sees wellness and health promotion as a community-based effort that encompasses the best of these initiatives and that outlasts any jargon-laden concepts.

An MPH trained staffer directs patient programs and support services. This includes most of the food security efforts. It also encompasses the many exercise and mind-body fitness programs available, as well as nutrition and cooking classes. Programs are designed to be inclusive of all the different cultural groups at the center, from Hispanic women, to schoolchildren to African-American seniors. The fact that teaching kitchens are being incorporated into all new facilities enhances these efforts.

Like most centers, many staff are from target communities. By empowering the whole community, health outcomes are optimized for patients, staff and local families with children in local schools. Health promotion is not limited to a chronic disease or an age group but seen as the fundamental work of primary care.

PARTICIPATING WITH TOP BOX FOODS IS A COMMUNITY AFFAIR FOR BOTH STAFF AND PATIENTS.

INTERVENTIONS

SCHOOL & COMMUNITY GARDENS WITH CLASSES
FOOD BOX DELIVERY SITES
FOOD DEPOSITORY MOBILE PILOT
MULTIPLE WELL-BEING PROGRAMS THAT TARGET PATIENTS OF DIFFERENT AGE GROUPS
TEACHING KITCHENS AND COOKING MATTERS

PARTNERS

CHICAGO FOOD DEPOSITORY
CHICAGO SCHOOLS
TOP BOX FOODS
CASE STUDY

La Maestra Community Health Centers
SAN DIEGO, CALIFORNIA

CIRCLE OF CARE JOINS FOOD, FAMILIES, HEALTH

From its beginning as a community-based literacy project, La Maestra Community Health Centers (LMCHC) has rooted care in the social determinants of health. Now serving low-income residents of San Diego, with a population that includes homeless, refugee and immigrant patients, LMCHC has a design model it calls “Circle of Care.” The focus is on compassion and self-sufficiency through community advocacy, community development, community promotions, networking and collaboration.

The “Circle” has individual health at its center, growing outward into well-being. It includes the recognition of housing, job training, food assistance, medical care, eligibility assistance and legal aid within the model.

The food pantry began when LMCHC realized their patients needed more consistent access to donated food and that they could ensure quality and availability. Formally registered in California, it operates three mornings a week and includes special services to assist those with homeless situations and chronic diseases or dietary needs. Health educators and volunteers link pantry users to other needed services.

Zara Marselian, founder and CEO, shares that the pantry requires a lot of oversight and paperwork. Despite coordinating with churches and farmers, the food still was not always available or fresh. That changed when they partnered with Feeding America. (see Feeding America in Food Oasis Partners At a Glance, p. 40)

La Maestra collaborates with a church to provide food for a hot meal, which then gives them access to Feeding America resources. The food quality is consistently high and they supplement with donations from bakeries and other garden food producers.

Community gardens are the newest features. LMCHC has the only true garden in their designated food desert. Patients and community members can lease one of the 36 plots for $36 per year. Gardeners feed their families and also use produce in local restaurants and sell it in the local farmers market. Micro-enterprise is another of LMCHC’s emphases, and this combination of food production with marketing fits right in.

Education, nutrition, business skills, exercise and community building are all benefits of the gardens. Children, mothers and seniors all participate and share cultural favorites, explaining the uses of different herbs and spices. What has been labeled a desert is flourishing with growth and health.
SENIORS FIND SUPPORT AND COMMUNITY AT FOOD PANTRY

One of the surprises to La Maestra staff is how the food pantry has become a social venue for the area’s seniors. The doors don’t open until 9:00 am, but by 7:30 am there is a group of people in line. They aren’t just waiting—they are visiting, sharing recipes and, sometimes, sharing secret concerns.

La Maestra staff notice that a number of seniors will not mention problems like elder abuse to a doctor, but they do tell their neighbor. They share with volunteers and staff who mingle with them at the pantry. Many of the seniors also serve as volunteers at the pantry and are trained to facilitate helping anyone in need of clinic care get connected into the center through a warm hand off. It is a safe and culturally appropriate setting for those in need.

Health educators assist clients in food selections from the pantry that are tailored to their housing and health conditions. Recently, a man walked up to staff at the pantry who were discussing health selections and told them they had changed his life. Despite a 4th grade education and homelessness, he said he now understood how to manage diabetes and lost 45 pounds while receiving integrated food and health care from La Maestra. He felt hopeful and healthy.

The pantry produces more than meets the eye.

INTERVENTIONS

STRENGTHENING A LOCAL FOOD PANTRY IN COLLABORATION WITH OTHER FOOD AND SOCIAL SERVICE PROVIDERS, AND LEVERAGING THE COMMUNITY BUILDING THAT HAPPENS THERE (ESPECIALLY FOR SENIORS)

FOOD DELIVERY IN PARTNERSHIP WITH A LOCAL CHURCH

COMMUNITY GARDENS IN FOOD DESERTS, WITH PRIVATE LEASING PLANS (36 PLOTS/$36 YEAR)

EDUCATION IN NUTRITION AND HEALTH, PLUS BUSINESS DEVELOPMENT CLASSES

PARTNERS

FAITH COMMUNITIES
FEEDING AMERICA
FOOD BANK

“I WANTED TO LET YOU GUYS KNOW YOU CHANGED MY LIFE.”
Mountain Comprehensive Health Corporation
WHITESBURG, KENTUCKY

THE FARMACY FOOD PRESCRIPTION PROGRAM

In the southeastern Kentucky coal fields, rates of diabetes, obesity and cardiovascular disease are among the highest in the nation. Communities are isolated by the mountainous terrain, with few local health and human services available in the sparsely populated towns. High chronic disease can be tied back to deeply embedded cultural habits like frying most food, smoking and being sedentary.

Mountain Comprehensive Health Corporation (MCHC) designed the Farmacy program to overcome these obstacles to health. Now in its second year, the Farmacy program has documented significant improvements in family health while also providing financial incentives to local farmers. The farmers market has become a community gathering spot that relieves isolation and renews local pride in Appalachian made goods.

From June to September, MCHC provides food prescriptions for patients to use at the local farmers market. These are worth $2 per day per household member, meaning a family of four gets a prescription worth $56/week. Providers write prescriptions for those who have a chronic disease, Type 1 diabetes, pregnancy or poverty. Patients bring their prescription to a case manager who determines level of family need. Wooden tokens serve as currency.
INTERVENTIONS

**FOOD PRESCRIPTION PROGRAM (THE FARMACY PROGRAM) OFFERS DISEASE SPECIFIC FOOD VOUCHERS FOR THE LOCAL FARMERS MARKET (322 PATIENTS AND 784 TOTAL PEOPLE IN 2016 AND $117,000 INVESTED IN THE WORK OF LOCAL FARMERS)**

**LOCAL UNIVERSITY PARTNERSHIP HELPS TRACK HEALTH OUTCOMES FOR PARTICIPANTS**

(CUMULATIVE BMI DROPPED BY 37 POINTS, 268 POUNDS CUMULATIVE WEIGHT LOSS)

**NUTRITION EDUCATION PROGRAMS HAVE LED TO 70% OF USERS CANNING OR FREEZING PRODUCE FOR THE OFF SEASON**

**PARTNERSHIP WITH THE USDA SUMMER FEEDING PROGRAM HELPS KIDS WHEN SCHOOL IS OUT**

ONE FAMILY’S STORY

*Bill and *Alice were sweethearts who traveled together on truck routes before settling again into the Kentucky foothills. Changes in the economy led to multiple job changes for them both, from trucking to coal to unemployment. A combination of scarce resources and despondency sapped their reserves, with Bill becoming morbidly obese and diabetic, and Alice obese and sedentary.

The Farmacy program turned their lives around. Faced with insulin dependence and a deteriorating lifestyle, Bill enrolled in the program. He thought it would just help his family afford some food. But nutrition education helped him choose to grill or bake food rather than fry. Vegetables at the market were unfamiliar, but Bill found he enjoyed trying them. He learned to eat okra as a fresh food, snacking on it when hungry and becoming satisfied. Meanwhile his body mass index (BMI), blood pressure, cholesterol and glycated hemoglobin level (HgbA1c) all dropped dramatically.

Bill found himself taking more walks and leading his family to a healthier lifestyle. He no longer needs insulin. Alice has a new sense of community and looks forward to seeing folks at the Saturday market, swapping stories of recipes, canning and feeling healthy. The family puts away food for the winter and looks forward to many healthy years ahead.

*Names have been changed for anonymity.*

**PARTNERS**

COMMUNITY FARM ALLIANCE

GROW APPALACHIA

UNIVERSITY OF KENTUCKY

USDA

WELLCARE
Native Health

PHOENIX, ARIZONA

NATIVE AND COMMUNITY GARDENS, READ-IT-AND-EAT, FOOD BACKPACKS, KIDS CAFÉ, WELLNESS WARRIORS AND MORE

On a bright February day, preschoolers sprawl on the floor in the community room as they listen to a story about corn, beans and carrots. “Corn grows UP, carrots grow DOWN, and beans grow ROUND and ROUND,” says the librarian, teaching hand motions to the children.

Meanwhile, the adults sit at tables, listening and joining in. As story time ends, fresh produce is distributed, along with today’s recipe for lunch: tuna apple salad and raw veggies with dip in a bell pepper bowl. Children help prepare the food while parents learn about healthy eating on a budget.

Read-It-And-Eat is Native Health’s latest innovative food project. Linking literacy and healthy food, the Phoenix library staff host story time every Wednesday while the center staff educate about nutrition and food preparation. A meal is prepared and shared, and everyone leaves with library resources and a bag of fresh produce.

This is just one of the many ways Native Health serves as a food oasis. Serving urban tribal members as well as other underserved Phoenix residents, the center is in a food desert with a 30 minute drive to the nearest grocery stores.

Native Health invited leaders from the U.S. Department of Agriculture (USDA) to examine the needs of their population, becoming the first health center to offer Summer Meals. Partnering with St. Mary’s Food Bank, breakfast, lunch and dinner are served. Called “Kid’s Café,” cold meals are prepackaged and handed out on site to any child requesting one. No eligibility is required, and not all recipients are patients of the center. A Sharing Basket in the lobby allows families to put in extra food they don’t want so that it is available for others. A refrigerator on-site holds all the meals.

The Backpack Program is typically done at schools, but Native Health is piloting it as a health center activity. Nonperishable food provided by the food bank is given to families for weekend and emergency use. Any child in need may receive a backpack.

Cooking Matters, a national program, is linked with Read-It-And-Eat as well as other classes. Kitchen supplies, cooking classes and produce are shared with participants.

What are their keys to success? Susan Levy, the staff person overseeing these projects, credits CEO, Walter Murillo, with vision and a spirit of collaboration. The leadership allows staff to try ideas, even if they fail. Native Health grows not just food, but community, health and innovation.
INTERVENTIONS

PARTNERING WITH A LOCAL FOOD BANK TO OFFER A SUMMER MEALS PROGRAM (SERVING 35,000 MEALS) WITH “KIDS CAFÉ” BACKPACK MEALS

AN AFTER SCHOOL MEAL PROGRAM (SERVING 5000 MEALS) CREATED WITH PARTNERS

WEEKLY READ-IT-AND EAT IN PARTNERSHIP WITH THE PHOENIX PUBLIC LIBRARY

A WELLNESS WARRIORS PROGRAM WITH CHILDREN WHO LEARN HEALTHY LIFESTYLE LESSONS

A TRADITIONAL NATIVE GARDEN WITH INDIGENOUS PLANTS (SOME ARE WHEELCHAIR FRIENDLY) CREATED IN FOOD DESERTS. NUTRITION AND GROWING CLASSES ARE OFFERED.

A “SHARING BASKET” OFFERED IN THE CLINIC LOBBY

TRADITIONAL AND COMMUNITY GARDENS AND ADAPTATIONS

Native Health partnered with the city of Phoenix and Native Seed Search to plant a half acre traditional garden using indigenous seeds such as Hopi corn and beans. The same site also contains many community gardens, over 30 of which are sponsored by Native Health and open to the community. Several are designed for wheelchair access.

Garden-based activities include plant and nutrition education, Wellness Warriors meetings, indigenous recipes and cooking classes. A walking path is adjacent to the beds and passive exercise equipment is planned.

The gardens are part of a downtown beautification project and directly across from the center. When the land suddenly became slated for urban development, the gardens had one week to relocate before being removed. Native Health tried to intervene, and then got busy preserving the gardens. In the space of one week they had secured a new site, and with volunteers, were able to relocate their work!

A site visit showed this vision permeates the center, with every staff member a part of making a difference.

PARTNERS

AZ DEPARTMENT OF ECONOMIC SECURITY
AZ DEPARTMENT OF EDUCATION
NATIVE SEED SEARCH
PHOENIX PUBLIC LIBRARY
SPROUTS GROCERY
ST. MARY’S FOOD BANK
USDA
OLE Health
NAPA VALLEY, CALIFORNIA

ADDRESSING DIVERSE PATIENT GROUPS THROUGH CENTER MARKETS, COMMUNITY GARDENS, CAMP COOKS AND COMBINED AREA RESOURCES

Most health center staff recognize that their patients face barriers to care, but the extent of the problems becomes clearer after asking a few simple questions. That’s what OLE Health learned when they surveyed about food security challenges faced by their community.

Using a validated food security instrument (see Getting Started with your Own Food Insecurity Program, p. 48), patients were asked if they were worried their food would run out before they had money to buy more, and if they actually had run out of food for a period of time. An overwhelming 84% of patients responded that they faced these situations in the previous 12 months. The same number desired more resources to help them acquire food.

OLE Health responded. Every third Friday of the month patient services staff host a free fruit and vegetable market at center sites. The market is a festive occasion, used also as an outreach and health screening event. There they feed about 180-200 people per month. Screenings are repeated at each market to track current needs. No identification card is required at the market, which increases access for patients often facing barriers as immigrants.

A monthly calendar of food resources is distributed, showing where and when things like hot meals are available and what one needs to qualify. Patients are diverse, with the elderly, homeless, farmworkers, HIV infected, chronically ill and children identified with food insecurity.

Staff said they don’t identify needs if they aren’t committed to responding to them. Social determinants of health are increasingly collected around the country, but OLE Health is concerned any data collected that identifies problems should be acted upon. One surprise for staff was how many resources were actually available in the community. The efforts to provide resources resulted in stronger collaborations between the center and a number of outside organizations. The Food Bank donates food for the market, medical residents from Kaiser Permanente teach about healthy food options and volunteers from the community assist with the food distribution.

Plans for the future include building a teaching kitchen in a new clinic site, gathering needs from patient-centered focus groups and expanding community gardens.
Despite working in the fields from sunrise to dusk, agricultural workers are often trapped in their own food deserts. Seasonal workers may live in rural locales without access to markets selling fresh food. Migrant workers face greater barriers, including unfamiliarity with local resources, inadequate transportation, uncertain migration plans and housing that is often unsafe and without kitchen access. Groups of farmworkers still depend on shared housing with cooks who supply all the food and meals.

OLE Health is working with three farmworker housing sites serving about 180 men. They are coordinating meal plans with cooks, facilitating community gardens and inviting the farmworkers to participate in all food security efforts.

Health screenings done at the housing sites showed many problems associated with poor diets. Having the survey data allowed the center to collaborate with cooks and housing staff to improve well-being in a collaborative fashion. Farmworkers now have the self-management skills to continue this change as they migrate.
Petaluma Health Center
PETALUMA, CALIFORNIA

INTEGRATIVE MEDICINE PROMOTES WELLNESS THROUGH GARDENS, FARMACY AND PLAY

When most people think of a California-based wellness and integrative medicine center, a community health center serving low-income farmworkers may not come to mind. Yet, Dr. Fasih Hameed is changing stereotypes as well as health outcomes at Petaluma Health Center (PHC) in Northern California. Since starting a small garden program eight years ago, PHC has grown an innovative array of food interventions for the families they serve.

Located in a rural food desert, Petaluma school district data show a third of children are food insecure. Over 50% of youth are overweight and obese. Low quality filling food meets caloric needs but not nutritive ones. The situation is more tragic because many of the families are current or past migrant farmworkers. Surrounded by produce fields, they lack access to fresh food for themselves.

The original clinic garden started as a community effort. PHC volunteers dubbed themselves the Gang Green! Produce was given away to patients and used to conduct nutrition and cooking classes. Youth took part through PLAY—Petaluma Loves Active Youth. Overweight children helped garden and also took part in food preparation and in eating together.

When the center relocated, its small gardens were replaced by a huge 10,000 square foot garden. Many volunteers helped with this effort, acknowledging its impact on food security. Produce is distributed to families, used in the pediatric and diabetes programs, and harvested by patients. Anyone can pick ripe produce as long as they don’t uproot the plants.

The new site has a teaching kitchen that uses garden produce to demonstrate healthy cooking. Staff worked with the area food pantry to tailor donations to include only healthy choices. Donated food boxes are opened so clients can be shown how to prepare unfamiliar foods. The center even has an online cooking show!

Dr. Hameed started PHC’s FARMACY food program several years ago. The PHC FARMACY is an organic food market set up in the health center in partnership with Petaluma Bounty, a community organization that provides multiple programs to expand the community’s capacity to feed its members today and into the future. Produce originates from Petaluma Bounty’s local nonprofit farm that sells shares to the center as a Community Supported Agriculture (CSA). Gleanings from area farms are also donated. Produce is sold on a sliding fee scale, with CalFresh benefits and Electronic Benefit Transfer (EBT) cards and food stamps accepted.

PHC’s keys to success? Start small but think big. See gardens as symbols of beauty and plenty, and let that be conveyed to your patients as a symbol for the goodness of their own self-care.
PETALUMA LOVES ACTIVE YOUTH: PLAY

The PLAY initiative aims to reduce childhood obesity by emphasizing behavioral change, food access and education. Collaborators with PHC include Petaluma Bounty, nutritionists, exercise instructors, college students, neighbors and Kaiser Permanente. Weekly groups held with children and parents have activities that support family change.

The program started with the realization that obtaining labs on an obese child, or referring him to an endocrinologist, didn’t fix the problem at the root. Specialty help was two hours away and culturally foreign. Sustainable change required a program that would be acceptable to the child and his or her parent.

Borrowing from the style of an organization called Centering Pregnancy, Dr. Hameed planned group medical visits for the children. Visits include a variety of activities: gardening, food preparation, fun exercise and healthy snacking complement weight and blood pressure checks.

Real change is a slow process, but body mass indexes (BMIs) are trending down. The words of an eight year old: “I like the program because I’m eating healthy foods, and it’s helping me lose weight... it’s changed my life, so I can be healthier in the future.”

INTERVENTIONS

USING COMMUNITY “CLINIC GARDENS” FOR NUTRITION EDUCATION, TO REDUCE FOOD INSECURITY AND TO FIGHT OBESITY

STARTING THE “PLAY” INITIATIVE (PETALUMA LOVES ACTIVE YOUTH) TO BRING PHYSICAL ACTIVITY, THROUGH GARDENING, TO YOUTH

PRESCRIBING GROUP MEDICAL VISITS FOR WELLNESS EDUCATION WITH CHILDREN AND THEIR FAMILIES

USING A TEACHING KITCHEN IN THE CLINIC FOR COOKING DEMONSTRATIONS AND NUTRITION EDUCATION

PARTNERING WITH LOCAL FOOD BANK TO OFFER MORE HEALTHY OPTIONS

USING A “FARMACY” PROGRAM WITH SLIDING FEES OFFERED AT A FARMERS MARKET ORGANIZED AT THE HEALTH CENTER

PARTNERS

BAKER CREEK SEED BANK
CITY OF PETALUMA
COTTAGE GARDENS NURSERY
DAILY ACTS
GREENSTRING FARMS
INTELISYS GREEN TEAM
PETALUMA BOUNTY
PETALUMA COMMUNITY GARDENS
ROGER GADOW
SONOMA COMPOST

“START SMALL BUT THINK BIG.”
PrimaryOne Health
COLUMBUS, OHIO

UNIVERSAL SCREENING AND FOOD BANK COLLABORATION IMPROVE HEALTH OUTCOMES

It started with a student internship in dietetics. Patients with diabetes were taught self-management and given food baskets in collaboration with the Mid-Ohio Food Bank. Tracking health outcomes, the student showed the positive impact of the nutrition education coupled with food.

PrimaryOne Health (POH) calls that model “produce pass outs.” The Food Bank decided to further couple food distribution with health outcomes, and expanded its partnership with POH to include produce prescriptions. Any patient found food insecure is given a “produce prescription” to receive food from the Food Bank.

Produce prescriptions are then faxed to the Food Bank and put in its PantryTrak software system. The prescriptions are viewable at any of the 10 partner food pantries where patients receive their food. Use of the prescriptions is tracked and patient outcomes can be associated with pantry use.

Produce pass outs are not prescription-based and occur at the center sites. Tents and tables are set up outside for a food market. The Food Bank delivers fresh produce to both patients and community members. The center tracks patients who use the market and invites community members to receive health care as new patients.

Same day and walk-in appointments are available at the markets. Enabling services, including enrollment assistance, are also provided. Health education is offered as well as food demonstrations.

The center has hired more dieticians and is expanding the food programs. Dieticians also use screening to refer patients to Meals on Wheels. More partnerships are in the works.

Outcomes are impressive. Over 300 patients have been screened as food insecure, with 54% of these using the produce prescriptions. Of those filling the prescription, 74% showed a decrease in glycated hemoglobin level (HgbA1c), weight loss or both. Over 12,000 individuals have been fed through POH food programs. One quarter of market attendees enrolled in health care while at the markets.

PrimaryOne Health incorporates screening for food insecurity into all visits. Through collaboration with the Mid-Ohio Food Bank, Ohio State University and local partners, they feed over 12,000 people a year and have an evidence-based practice showing improved health outcomes in food recipients.
LESSONS LEARNED

Staff credit their program success to the depth of relationships they have in the community. Investment in student education, collaboration on grants and participation in area events has strengthened their ties with the Ohio State University, Mid-Ohio Food Bank and community members.

The produce pass outs have drawn large numbers of community members to the center. Over half of market users are not current patients. The center enrolled over 600 families into care through market attendance.

Patient preference in screening design is important. Self-administered screens were more successful in identifying and responding to need. Using one central location for the faxed food prescriptions also helped tracking. Originally, faxes were sent to the ten participating pantries, but the data were lost or discarded. The Food Bank is able to track using its software, which streamlines data collection and follow-up.

Staff learned how much hunger exists in their own area. They tell the story of an unkempt man who appeared homeless and refused all medical services. He did accept produce from the pass out. After receiving a bag of food, he sat on the curb, cracked open a watermelon, and devoured the whole thing. His hunger was raw. He’s not a health statistic, but his outcome is real.

INTERVENTIONS

PARTNERING WITH A LOCAL FOOD BANK TO PROVIDE FOOD BASKETS TO 12,000 PEOPLE

OFFERING A PRIVATE, SELF-ADMINISTERED WRITTEN TOOL FOR PATIENTS TO RECORD FOOD INSECURITY AMONG OTHER MEASURES

TRACKING THE IMPACT OF FOOD PROGRAMS TO RECORD A 74% IMPROVEMENT IN HEALTH OUTCOMES AFTER FOOD PRESCRIPTION PROGRAMS WERE INTRODUCED

RECRUITING NEW PATIENTS AT 18 FOOD MARKETS

OFFERING SAME-DAY WALK-IN CHECK-UPS AT MARKETS, WITH 6 CENTER SITES PARTICIPATING

PARTNERS

10 FOOD PANTRIES
MEALS ON WHEELS
MID-OHIO FOOD BANK
OHIO STATE UNIVERSITY
UNITED HEALTH CARE

WE WERE SUCCESSFUL BECAUSE OF THE RELATIONSHIPS WE HAD IN THE COMMUNITY.
A few years ago, some home gardeners brought in surplus squash to share at RiverStone Health. Informal offerings became regular donations to a table in the lobby. This mini gardeners market grew bigger and moved to the parking lot. A natural way to assist patients with food insecurity was born.

Like most city farmers markets, the one in downtown Billings charges a fee to vendors. Small gardeners didn’t find it practical to sell there, but were happy to offer their overflow produce to RiverStone when asked. RiverStone’s center-based gardeners market soon became too large for their space. So they partnered with the parks and recreation department in Billings to start a gardeners market in the park across the street.

The project grew with a partnership called Healthy By Design and other community agencies wishing to combat obesity and address food insecurity. Master gardeners joined in, teaching community members how to cultivate their food. Supplemental Nutrition Assistance Program (SNAP) and Women, Infants & Children (WIC) vouchers became accepted at the market as well. Informal in approach, the market is held on Wednesday evenings during the summer, with food available for purchase and for donation.

A booth at the gardeners market gives youth a $2.00 voucher to use if they try fresh produce. Recipes and cooking classes are also on display, helping consumers try unfamiliar fresh foods.

RiverStone currently uses a paper screening tool to screen patients for social factors that affect their health. Their goal is to screen every patient annually. By using the social risk screening questions from the PRAPARE tool, they ask if patients have had trouble accessing food in the past year. Those with difficulty are referred to case managers who help them with resources such as the food bank, SNAP, meal programs and produce markets. In addition to annual screens, case managers ask about food needs at every encounter with high-risk patients.

RiverStone staff scan paper screening forms into patients’ electronic health records to facilitate team-based management of patients’ social needs. However, staff hope to routinely integrate social risk screening using information technology strategies, such as having patients independently complete electronic screening forms prior to visits so staff could better plan for their visits. RiverStone remains committed to screening patients and expanding health care to include interventions for social factors.

RiverStone advises patients about resources available in the community. Slowly but surely they feel confident that needs can be addressed in collaboration with others.
EVERY PATIENT IS SCREENED ANNUALLY FOR SOCIAL DETERMINANTS OF HEALTH.

A GREENHOUSE FOR YOUNG AND OLD

The latest development in RiverStone's work with Healthy By Design is a greenhouse project. Three South Side neighborhoods in Billings have been without a single grocery store for over three years. The only place to buy food without leaving the community was a Family Dollar store.

Obtaining a small neighborhood planning grant from the Kresge Foundation, a community coalition that included a youth program, senior center and the health center considered what would best fit the community's needs and culture. Establishing a greenhouse adjacent to the community center appealed to them as it would both build community relationships and offer community-driven solutions to food insecurity.

Children in after school, summer and preschool care join in with elders at the Senior Center, learning how to plant fruits and vegetables and making friendships with seniors who have much experience to share. Master gardeners offer advice and support. Families learn the joy of eating home grown food, and new habits are born.

This next step in combating food insecurity is one that has the potential to create generational change. Melissa Henderson of RiverStone Health says the key is to move forward methodically.

The PRAPARE tool is a national standardized patient risk assessment protocol designed to engage patients in assessing and addressing social determinants of health. The tool was developed by the National Association of Community Health Centers (NACHC), the Association of Asian Pacific Community Health Organizations, the Oregon Primary Care Association and the Institute for Alternative Futures. For more information, visit www.nachc.org/prapare.

INTerventions

A COMMUNITY-DRIVEN FARMERS MARKET WITH MANY SUPPORTIVE PARTNER ORGANIZATIONS

SCREENING FOR SOCIAL DETERMINANTS OF HEALTH WITH THE PRAPARE TOOL

AN INTERGENERATIONAL GREENHOUSE PROJECT TO BRING FOOD TO UNDERSERVED AREAS, TEACH GARDENING AND OFFER NUTRITION EDUCATION

PARTNERS

BILLINGS FOOD BANK
FRIENDSHIP HOUSE
SENIOR COMMODITIES
GARDENERS MARKET
HEALTHYBYDESIGNYELLOWSTONE.ORG
KRESGE FOUNDATION
MASTER GARDENERS
SOUTH SIDE COMMUNITY CENTER
FARM TO SCHOOL TO HEALTHCARE

When Catherine Parker asked a class of high school students if anyone had ever been to a farmers market, only three students raised their hand. Then she asked how many students had eaten at a fast food restaurant that week. Every hand went up. In fact, they had all been twice.

Parker and her team at Roanoke Chowan Community Health Center (RCCHC) changed those statistics this year with the implementation of Farm to School to Healthcare. In coordination with the schools as well as a host of community partners, RCCHC helped create and implement a food oasis in rural northeast North Carolina. Unlike most interventions, this one integrates youth into every aspect of the work.

Parker is the Director of the Hertford County Student Wellness Center, a school-based program of RCCHC. High school and early college students learn about food security as a social justice and a health issue. School gardens at primary and high school levels are designed and constructed by the students. Literacy and writing classes incorporate farm and garden knowledge into the curriculum.

Approximately 125 students helped to build the gardens, earning credit for physical education hours. Volunteers from the community pitched in with materials and labor. Almost 100 students work to maintain the gardens.
As health centers increasingly address social determinants of health in their populations, they are becoming innovators beyond the walls of the clinical buildings. From her office window at Roanoke Chowan Community Health Center (RCCHC), Catherine Parker could see three schools. However, none of the schools could be reached on foot. Ravines and other obstacles prevented anyone from walking between the schools and the center.

RCCHC received a grant to create an Americans with Disabilities Act compliant walking trail between the schools, the center and the Main Street sidewalks. True to their youth-led emphasis, the center had students name the trail. They chose P.A.W.—Promoting Active Wellness—which also incorporates their school mascot, the Bears.

A school-wide Walk Day celebrated the trail construction. Approximately 775 students participated, logging over 500 combined miles. The primary school is building a garden alongside the trail, which will be incorporated into the garden-market program.

Not only school children, but also community patients of the center benefit from the trail. As there is a connection with Main Street, many patients can now walk to the center rather than drive. This example of changing the built environment is one that can have an enormous impact on improving health outcomes.
Siouxland Community Health Center
SOUTH DAKOTA, IOWA, NEBRASKA

INTEGRATING SOCIAL DETERMINANTS OF HEALTH AND GROWING AN EXTRA ROW

When many of us think of South Dakota, Iowa or Nebraska, we don’t think of refugees, HIV and immigrants. But where these three states meet, so do these special populations. Siouxland Community Health Center serves them as well as other rural residents in the heartland of the United States.

Siouxland has a large number of Somali refugees and immigrants who work in meatpacking. They often arrive with nothing but a few clothes and do not have formal organizational support. The center has responded with a clothing program as well as grocery gift cards. They purchase discounted grocery cards from a number of area grocers, and case managers then give these to patients in need. Mari Kaptain-Dahlen, who leads food security efforts at Siouxland, reports that cards are given away on a daily basis.

Siouxland’s system goes beyond free grocery cards. It addresses the social determinants of health that lead to hunger. Kaptain-Dahlen recognizes that the populations they serve need more than food and clothes. They may lack safe housing or equipment with which to cook a meal. Language, literacy and transportation are real obstacles.

Siouxland has its own foundation to address the unmet needs of their community. If transportation is a barrier, food is delivered. If housing is an issue, legal aid is available. For patients living with HIV, additional supports are available. Partners from the community assist the foundation: Walmart gives discounted clothing and a local union adopted them as their holiday charity. Emergency dental needs are supported by the local hospital.

Siouxland encourages local gardeners and farmers to sign up and “grow an extra row” of produce to assist those in need. The food is collected and distributed to participating community agencies.

The Grow an Extra Row initiative is done in collaboration with the district health department. It is now in its third year at the center. Patients in need receive food prescriptions from staff. Food is delivered seasonally from May through October, transforming the lobby of the health center into a mini farmers market. Patients, staff and growers are enthusiastic about the benefits of this program.

Siouxland Community Health Center recognizes food security as integral to health and is responding in a coordinated fashion that allows them to track and respond to their patients’ needs. This Tri-State area has a short growing season, harsh winters and a diverse rural population.
INTEGRATING SOCIAL DETERMINANTS OF HEALTH INTO ALL ASPECTS OF CARE

Siouxland Community Health Center was an original pilot site for the Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE)\(^1\), incorporating social determinants of health data into patients’ electronic health records using GE Centricity. Siouxland is now aiming to screen all patients using PRAPARE, which includes food security, transportation issues, language used, educational level and other social risk factors. The health center also documents which patients report needing legal aid assistance. Needs related to this information are flagged for the care team to see.

In addition to food issues, the center has realized how many needs there are related to substandard housing for their populations. Iowa Legal Aid is partnering with them to find solutions to problems such as mold, faulty heating and safety hazards. The response has been powerful, with many more patients now sharing needs that have previously been hidden. The providers have stated they had no idea their patients were facing so many problems that clearly impacted their ability to be healthy.

The center plans to examine next the relationship between meeting some of the social needs and impacting health outcomes. Iowa Legal Aid is working with a children’s hospital, tracking emergency department use and hospital admissions as it relates to asthma and substandard housing. The center hopes to collaborate with them on a similar model.

\(^1\)The PRAPARE tool is a national standardized patient risk assessment protocol designed to engage patients in assessing and addressing social determinants of health. The tool was developed by the National Association of Community Health Centers (NACHC), the Association of Asian Pacific Community Health Organizations, the Oregon Primary Care Association and the Institute for Alternative Futures. For more information, visit www.nachc.org/prapare.
NACHC interviewed some of the national, regional and local organizations leading the way to address food insecurity in the United States. The purpose of these interviews was to learn about promising practices and identify mechanisms for collaboration between food security programs and community health centers. Programs were selected based on literature reviews, health center recommendations, media coverage and word of mouth. Nine programs are highlighted here. Thank you to these organizations for providing NACHC with the information below.

**AMPLEHARVEST.ORG**

**DESCRIPTION/MISSION**

A web-based organization to encourage and enable fresh food donations from local gardens

**REACH**

Serves all 50 states

Sharing about 277 pounds of food per gardener per year

Almost 20% of US gardeners know of AmpleHarvest.org for donations

**KEY ACTIVITIES/SUCCESES**

» AmpleHarvest.org connects food pantries and feeding programs together so that area gardeners can share their food programs to be recognized locations where area gardeners can share their food

**HIGHLIGHTS**

✓ Food waste in home and community gardens exceeds 11 billion pounds annually — this could be shared!

✓ Reducing waste can also reduce hunger
**Canstruction**

**DESCRIPTION/MISSION**
Canstruction combines art and food security by hosting free events in communities where donated cans of food are fashioned into imaginative sculptures

**REACH**
Events have helped raise over 40 million pounds of food to local foodbanks since 1992

**KEY ACTIVITIES/SUCCESSES**
» Events include youth focused efforts as well as community-wide competitions to build the best sculpture

» Some Citywide Can Art Exhibition participants compete to win titles for the best structures

**HIGHLIGHT**
✓ Recognized for commitment to art, innovation and hunger relief and art exhibitions

**Arcadia Center for Sustainable Food & Agriculture: Arcadia Mobile Market**

**DESCRIPTION/MISSION**
Non-profit dedicated to creating a more equitable and sustainable local food system in the Washington, DC area

**REACH**
Clients are mainly African American (8,000 – 10,000 households)

Now in its fifth season, it serves 14 regular weekly stops and sold nearly $450,000 in fresh, wholesome, local and sustainably raised food

Arcadia’s Mobile Markets serve about 30% of all SNAP transactions and 15% of all Produce Plus Program benefits (a $10 free fruit and veggie voucher from DC)

**KEY ACTIVITIES/SUCCESSES**
» Brings farm food to low-food access neighborhoods

» School bus fit with refrigerators, freezers and racks for produce

» It doubles the value of SNAP, WIC and Senior FMNP credits

**HIGHLIGHT**
✓ They hope other retailers will compete for their customers’ business so they can move to new food deserts and begin the process again
**FEEDING AMERICA**

**DESCRIPTION/MISSION**
The nation’s largest domestic hunger relief organization

**REACH**
Serves over 46 million Americans each year
- Provide over 4 billion meals
- Work with 200 food banks and 60,000 plus partner agencies nationally

**KEY ACTIVITIES/SUCCESSES**
» Source foods from large food manufacturers for food banks

» The Washington DC office works with Congress to support hunger relief programs

**HIGHLIGHTS**
- Addressing the meaning of living with a comprehensive approach
- Closing the “map the meal gap,” (a research project examining state and county food insecurity rates)

**MEALS ON WHEELS AMERICA**

**DESCRIPTION/MISSION**
The oldest and largest national organization supporting the more than 5,000 community-based senior nutrition programs across the country that are dedicated to addressing senior hunger and isolation

**REACH**
Coordinates more than 2.4 million meals annually to homebound adults age 60+ through home delivery or by congregate meals to senior centers and other senior gatherings

**KEY ACTIVITIES/SUCCESSES**
» Coordinate health activities like immunization campaigns into their meal events

» More health organizations are starting to get involved, and NACHC’s survey shows that health centers are indeed partnering with them

**HIGHLIGHT**
- More integration with the health care community to show the health impact of this social and nutritional service
**DESCRIPTION/MISSION**
A chronic disease community-based program in Minneapolis, MN that incorporates access to food and nutrition as part of a focus on wellness

**REACH**
North Minneapolis (mostly African Americans)

**KEY ACTIVITIES/SUCCESES**
» The work includes community gardens, family meals at a community center, a grocery store and community health worker engagement

**HIGHLIGHT**
✓ Social determinants of health must be addressed to change long-standing chronic diseases within communities

---

**SECOND HARVEST HEARTLAND**

**DESCRIPTION/MISSION**
One of the nation’s largest, most efficient and most innovative food banks

**REACH**
Over 500,000 lbs. of food distributed

Somali immigrants, Hispanics, Caucasians, African Americans and other urban poor in southern MN and western WI

Serves about 530,000 people per year, with 1500 food Rx referrals

**KEY ACTIVITIES/SUCCESES**
» Expanded to include food resource referrals (Food Rx)

» Patients are screened for food insecurity in the Hennepin County Medical Center electronic medical record

» Staff can order a food Rx to Second Harvest, which intakes patient food needs and triages them to sign up for SNAP, food pantry resources and other available programs

**HIGHLIGHTS**
✓ Also known as Food Rx
✓ Interventions must be patient-centered and individually tailored but also easy on the health system workflow
### SHOP HEALTHY NYC*

**DESCRIPTION/MISSION**
Increases healthy food options and engage residents and organizations to support sustainable food retail in the community

**REACH**
Serves 86,468 residents in Brownsville, 83,268 in East Tremont and 120,511 in East Harlem

**KEY ACTIVITIES/SUCCESSES**
- Works with the community, stores and food distributors so healthy food options are optimized
- Helps retailers display healthy options well, assist distributors in identifying healthy options and work with community members to promote those options

### TOP BOX FOODS*

**DESCRIPTION/MISSION**
Offers fresh produce and frozen meats to fill the gaps in food deserts

**REACH**
Serves 8,000 people, mostly working poor elderly who raise grandchildren.

Primarily targets Chicago but are expanding to New Orleans and Atlanta.

About 3,000 produce and protein boxes are sold each month

**KEY ACTIVITIES/SUCCESSES**
- Sells affordable fresh produce and proteins to people living in food deserts through a network of local partners
- Sells fresh produce and high quality frozen meats which are difficult to find in food deserts. Most food banks have limited supplies.

### HIGHLIGHTS

- Putting healthy items into corner stores in underserved areas
- Use market-forces to address a societal problem at the root

*partners with health centers
REACH OUT TO THOSE LOCAL RESOURCES AND THEN JUST BUILD THOSE RELATIONSHIPS AND CONTINUED PARTNERSHIPS.

—Audrey Ketchum, Compliance Officer, Community Health Service Agency, Inc.
COMMUNITY HEALTH CENTERS respond in diverse, creative and sustainable ways to issues of food insecurity within their communities. Some have been doing it for over 40 years, while others are just getting started. A number of centers are able to tie food program use to health outcomes and hope to show real benefits over time. While there is great variety in methods used to combat food insecurity, a number of common recommendations and words of wisdom have emerged that contribute to success.

**ENGAGE LEADERSHIP**

Health centers repeatedly reference the importance of having health center leaders endorse food programs so they can be prioritized for implementation. Leaders typically aren’t involved in the operational side of things, but they do have a deep knowledge of program goals, methods and needs. They can serve as ambassadors for the programs as well as guides.

**COMMIT TO COMMUNITY HEALTH**

Successful health centers see their mission as one that extends beyond the walls of clinics. The goal is to engage in measuring and addressing community health needs with similar energy and resources used to engage individuals in the exam room setting.

**KNOW YOUR COMMUNITY RESOURCES**

Health centers describe the importance of knowing community resources and how to leverage them. Many centers find that there are food resources readily available so they don’t need to replicate what’s there, but they can collaborate with them and link people in need with existing services. With stronger community partnerships, a variety of center activities can be enhanced. The “ownership” of innovative programs is often shared with others, with every partner playing to its strength.
CONSIDER THE STRENGTH OF INNOVATION AND RISK

The health centers profiled here are risk-takers. They start programs based on need without being certain of success. They have, in fact, admitted failure at a number of points. But they keep trying. They are open to change and to testing ideas. They allow champions of the project to run with an idea to explore possibilities. They transparently document their mistakes so they can learn. Unlikely partners, such as libraries, emerge in these settings.

FOCUS ON PROGRAM INTEGRATION

For a health center, the staff must learn to incorporate screening for food insecurity and improve food security program(s) as a regular function of care. It is not contained to nutrition, health education, outreach or other such departments, but integrated throughout the organization. Staff has opportunities for participation, whether programmatically or through volunteer efforts.

PATIENT-CENTERED CARE MEANS CHOICE

Old methods of giving pre-packaged food are largely discarded by these health centers. Creating opportunities for patients to make their own food selections and participate in food preparation based on their interests yields improved use of resources. Patients collaborate with each other as well as staff as they choose food, share recipes, comment on likes and dislikes and learn new skills. Food is an important social connector and element of identity.

CONSIDER SCALE, BIG IS NOT ALWAYS BETTER

As with anything, rapid expansion can hurt a food program. Sustainability depends on being realistic about the time, effort and resources needed to accomplish the goal. Several health centers had early success that sparked interest among partners but found they couldn’t expand without dramatically changing their departments. They chose to continue to do well in their committed roles while meeting some, but not all, food needs. Successful centers have well-organized program directors who avoid burnout and manage multiple demands with competence.
HEALTH IMPACT IN ITS INFANCY

Most health centers want to measure the health impact of their efforts but don’t have the tools and resources to do so. Even those who incorporate food insecurity screens into their electronic records have difficulty associating food receipt with health outcomes. Those that have been successful have university and large health care organizations as partners. Clear relationships between changes in food insecurity and changes in obesity, hypertension and diabetes control are non-existent. Still, a number of centers are collecting data that associate changes in health conditions with changes in food access and these efforts will assist future development of measures.

NAYSAYERS ARE THERE

Not everyone is positive about food resource development. Health centers face opposition both in the community and in the organization. Some food pantries compete with each other, some staff think patients take advantage of programs, and some people think efforts are too small to matter in the long run. Successful centers handle negativity without being compromised by it.

HUNGER IS MORE PRESENT THAN MOST CENTERS KNOW

Every health center interviewed said that although they knew patients were medically underserved, they did not know how extensive the problem of hunger is in their community. Most centers commented that many staff also experience food insecurity and need better resources in their food desert communities. Hunger is often hidden and stigmatized. Obesity is misunderstood as a sign of food security rather than of malnutrition based on inadequate food availability. The end of the month is particularly difficult for many, when food money competes with bills and other obligations. Benefits such as the Supplemental Nutrition Assistance Program (SNAP) do not last all month. School programs are interrupted seasonally. Weekends can be times of particular hunger. Holidays can be as well, especially when they occur at the end of a month and include extra expenses for travel and gifts. Every successful center tries to incorporate staff, patients and community into food programs to improve access in an inclusive way.
Medical staff is asked to screen on more issues every year. Screenings that require patient questionnaires, such as depression, food insecurity, housing and smoking status, burden the office visit at the front end. Patients often don’t understand why these personal questions are being asked and staff are pulled away from more typical medical tasks. If findings do not have an organized resource intervention available, all are frustrated by positive findings. Successful health centers use patient-administered screens and have clear processes for responding to positive findings. Before adding a new screen, centers must be assured it will be efficient, effective and culturally acceptable.

Most successful health centers have multiple methods of alleviating food insecurity. They blend gardens, pantries and markets. They offer U.S. Department of Agriculture (USDA) meals on site and sponsor innovative literacy and nutrition classes. They target youth and elderly. Centers start with one intervention but build on it so that food programs can reach any patient at any point of need. These centers show no signs of stopping or diminishing their programs, but are constantly looking for ways to grow.

“AT FIRST WE WERE WORRIED: Was it going to be difficult? Would it work? Yet, it has been so simple and our staff has been so awesome at this. It takes very little staff time and no extra money. It has shown amazing results over time. Partners come forward and want to help and want to get involved. This is what solves the problems – people coming together and working together.

—Susan Levy, Communications and Community Relations Director, Native Health
Without a doubt, individual health center and partner food organization efforts to address food insecurity and related health effects are innovative, productive and show positive results.

The following recommendations are offered to health centers that wish to take steps to address food insecurity in their communities:

**COLLECT DATA**
- Create a map of existing food distributors/resources in your community
- Include food insecurity and food desert measures in your Community Needs Assessment
  - We (I) worried whether our food would run out before we (I) got money to buy more
  - The food that we (I) bought just didn’t last and we (I) didn’t have money to get more
- Create a database to measure desired outcomes in any food intervention started at the center
- Track food resource usage and link to health outcomes
- Show the medical economics argument for the cost of food programs as they reduce risk for cardiovascular, endocrine and mental health morbidity and mortality

**PLAN**
- Engage community partners in problem solving
- Contact regional and national food security organizations for assistance
- Offer staff a chance to develop food resource solutions
- Contact successful health centers for mentorship and advice

**ADVOCATE FOR FUNDING AND PARTNERSHIPS**
- Advocate for policies that allow health centers to fund food resources for patients through national, state and local departments of education, agriculture and labor
- Link food security efforts with health, racial and economic justice activities in your community for better state and national policy and program development
FOCUSING ON FOOD INSECURITY AND THE FACTORS THAT MAY CAUSE ILLNESS, OR THE SOCIAL DETERMINANTS OF HEALTH, HAS ALWAYS BEEN THE MISSION OF COMMUNITY HEALTH CENTERS SINCE THEIR INCEPTION SOME 50 YEARS AGO.

—Malvise A. Scott, Senior Vice President for Partnership and Resource Development, NACHC
COMMUNITY GARDEN
A piece of land gardened collectively by a group of people, which can have various therapeutic, lifestyle and educational benefits.

COMMUNITY HEALTH CENTERS
Community health centers serve as the primary medical home for nearly 26 million people in more than 10,400 rural and urban communities across America. Health centers, sometimes called Federally Qualified Health Centers, are community-based and patient-directed organizations that deliver comprehensive, culturally competent, high-quality primary health care services. Most health centers receive Health Center Program federal grant funding to improve the health of underserved and vulnerable populations. Some health centers that meet all Health Center Program requirements do not receive Federal award funding. These are called Health Center Program look-alikes.

COOKING/KITCHEN PROGRAMS
Programs aimed to teach patients how to replicate low-cost, healthy recipes at home; offered as a holistic approach to health and wellness.

ELDERLY
Any individual over the age of sixty-five.

FARMERS MARKET
A regular event in which farmers come to a defined location to sell their local and sustainable products.

FOOD BANK
A non-profit organization that collects and distributes food to hunger relief organizations.

FOOD DESERT
Geographic area lacking affordable fresh fruit, vegetables, and other nourishing whole foods within walking distance or simple bus travel of residential spaces. This is largely due to a lack of farmers markets, grocery stores, and affordable healthy food providers. A food desert may be rural or urban.

FOOD INSECURITY
The state of being without reliable access to a sufficient quantity of affordable, nutritious food.

FOOD OASIS
A place where self-sustaining and innovative practices are developed to empower inhabitants of food deserts to have better access to healthy eating environments and foods.

FOOD PANTRY
An independent facility that receives, buys, stores and distributes food directly to those in need in their community.

FOOD RX
A prescription for healthy food, often with financial incentives, intended to provide nutrition education, to connect patients to local resources and to promote behavior change.

FOOD VOUCHERS
A type of healthy food assistance; often used as an incentive to participate in healthy living programs.

HIV
Human immunodeficiency virus. If left untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition.

HOMELESS
Multiple definitions, but inclusive here as those who are unsheltered; residing in charitable sheltered spaces; doubled up in a household with another family; or living in a residence without tenant rights, exclusive of parent-child relationships.
MIGRANT/SEASONAL AGRICULTURAL WORKERS
A person who, for purposes of employment, must travel across geographic boundary lines to obtain work in agriculture, resulting in the necessity to change residences while working; a seasonal worker obtains their principal income through agricultural labor but does not have to move in order to do so.

MOBILE MARKET
A farmers market on wheels that delivers local, sustainable, and fresh food to underserved communities.

NATIONAL ASSOCIATION OF COMMUNITY HEALTH CENTERS (NACHC)
Founded in 1971, NACHC serves as the national health care advocacy organization for America’s medically underserved and uninsured and the community health centers that serve as their health care home. NACHC works in conjunction with state and regional primary care associations, health center controlled networks and other public and private sector organizations to expand health care access to all in need.

» Serves as the national and unified voice to advocate on behalf of medically uninsured and uninsured populations.

» Advocates for growth and development of health centers and the needs of all medically underserved and uninsured populations.

» Provides training and technical assistance to health center staff and boards in operational, financial, clinical and governance areas.

» Conducts research — independently and in collaboration with others — to advance the body of community healthcare knowledge.

» Develops strategic partnerships in both the public and private sectors to support the work of health centers and improve the health of patients and communities nationwide.

PROTOCOL FOR RESPONDING TO AND ASSESSING PATIENTS’ ASSETS, RISKS, AND EXPERIENCES TOOL (PRAPARE)
The PRAPARE tool is a national standardized patient risk assessment protocol designed to engage patients in assessing and addressing social determinants of health. The tool was developed by the National Association of Community Health Centers (NACHC), the Association of Asian Pacific Community Health Organizations, the Oregon Primary Care Association and the Institute for Alternative Futures. PRAPARE is available as templates for the following four Electronic Health Records: NextGen, eClinical Works, GE Centricity and Epic. For more information, visit www.nachc.org/prapare.

PUBLIC HOUSING
Program established by the U.S. Department of Housing and Urban Development to provide rental housing for eligible low-income families and individuals, the elderly, and persons with disabilities.

RURAL
An open countryside with population densities less than 500 people per square mile and areas with fewer than 2,500 people; refers to a population type served by health center food assistance programs or activities.

SCHOOL-BASED
Population served by health center food assistance program or activity.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)
A federal aid program of the Food and Nutrition Service (FNS) of the United States Department of Agriculture, that provides nutrition education, federal grants to states for supplemental foods and healthcare referrals for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and to infants and children up to age five who are at nutritional risk.

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)
A federal aid program of the Food and Nutrition Service (FNS) of the United States Department of Agriculture that provides nutritional assistance benefits for low- and no-income people living in the United States. SNAP helps supplement monthly food budgets of these individuals and families to buy the food they need to maintain good health and allow them to direct more of their income toward essential living expenses.

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)
The federal executive department that develops national laws related to agriculture, forestry, food, and farming. The department aims to meet the needs of farmers and ranchers, work to assure food safety, promote agricultural trade and production, foster rural communities, protect natural resources and to end hunger in the United States and internationally.

URBAN
Densely settled area of 50,000 or more people; refers to a population type served by health center food assistance programs or activities.
References


This publication was funded by the Medtronic Foundation.