

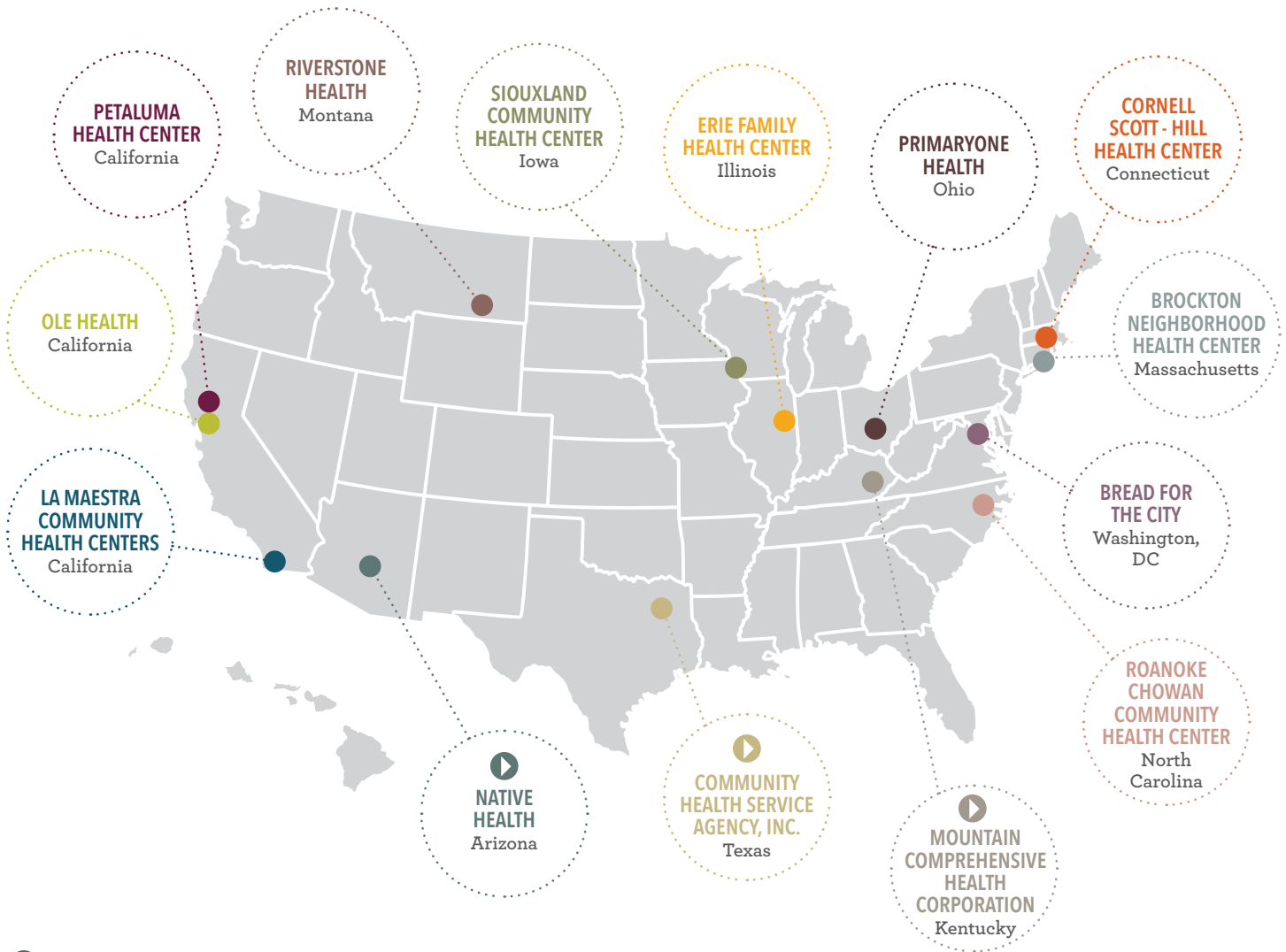


Health Center Case Studies

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.

HEALTH CENTER 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

CASE
STUDY

1

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.

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.

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

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.

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.



INTERVENTIONS

PARTNERING WITH AN AREA FOOD BANK

COLLABORATING WITH A LOCAL UNIVERSITY FARMING PROGRAM

PARTNERING WITH LOCAL SOCIAL SERVICE, LEGAL AID, LITERACY, HOUSING AND OTHER MEDICAL SERVICE PROVIDERS

CREATING ROOFTOP GARDENS AT CLINICS WITH CLASSES IN GARDENING, COOKING AND NUTRITION

PARTNERS

CAPITAL AREA FOOD BANK

FEEDING AMERICA

LOCAL COALITIONS

UNIVERSITY OF THE DISTRICT OF COLUMBIA



Brockton Neighborhood Health Center

BROCKTON, MASSACHUSETTS

COMMUNITY HEALTH WORKERS, GROCERIES, GARDENS AND MARKETS

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.

Brockton Neighborhood Health Center partners with a statewide program, a local grocer, a college and hospitals to comprehensively fight hunger.

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.



GARDENS AS THERAPY

In the course of assisting women with depression, Ginger, a Brockton Neighborhood Health Center (BNHC) social worker, realized the center's Ecuadorean 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.

INTERVENTIONS

**A TEACHING KITCHEN WITH CLASSES
IN COOKING AND NUTRITION**

**A LOCAL GROCERY STORE
PARTNERSHIP FOR FOOD VOUCHERS
AND NUTRITION EDUCATION**

**LEVERAGING SERVICES THROUGH
THE PROJECT BREAD COALITION**

**A COMMUNITY GARDEN
AND THERAPY PROGRAM**

**PARTNERSHIPS
FOR FOOD DONATIONS**

**A MOBILE FOOD MARKET FOR
LOW-COST PRODUCE IN PARTNERSHIP
WITH THE LOCAL COLLEGE**

**HIRING A COMMUNITY HEALTH
PROGRAM MANAGER TO LEAD
FOOD SECURITY EFFORTS WITH TRAINED
COMMUNITY HEALTH WORKERS**

PARTNERS

FALLON HEALTH INSURANCE

PROJECT BREAD

STONEHILL COLLEGE

VICENTE'S GROCERY

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.

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.

Community Health Service Agency, Inc. partners regionally with the North Texas Food Bank to couple food distribution with continuity of health care, addressing health outcomes as well as food quality and access.

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

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

Cornell Scott-Hill Health Center

NEW HAVEN, CONNECTICUT

FOOD FOR HEALTH: 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.

From preschool to old age, inpatient rehab to outpatient assistance, Cornell Scott-Hill Health Center addresses food scarcity in an integrated fashion as part of its mission. With a host of community partners, it is transforming community health.



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

Erie Family Health Center

GREATER CHICAGO, ILLINOIS

ACCESS, NUTRITION, EDUCATION AND PARTNERSHIP

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 elderly-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!

Now celebrating its 60th anniversary, Erie Family Health Center serves 70,000 patients in 13 Chicago area locations. Community-based work is integral to their operations, with schools, kitchens, food depositories and community partners joining together to improve food security and health.



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

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.

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

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.

Literacy, employment, housing and food access have always been integrated into La Maestra Community Health Centers’ Circle of Care. Through 15 years of persistent transformation, the center now offers garden spots, fresh food, a food pantry, holiday meals and resources for immigrants, refugees, homeless and other urban underserved in San Diego.

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.

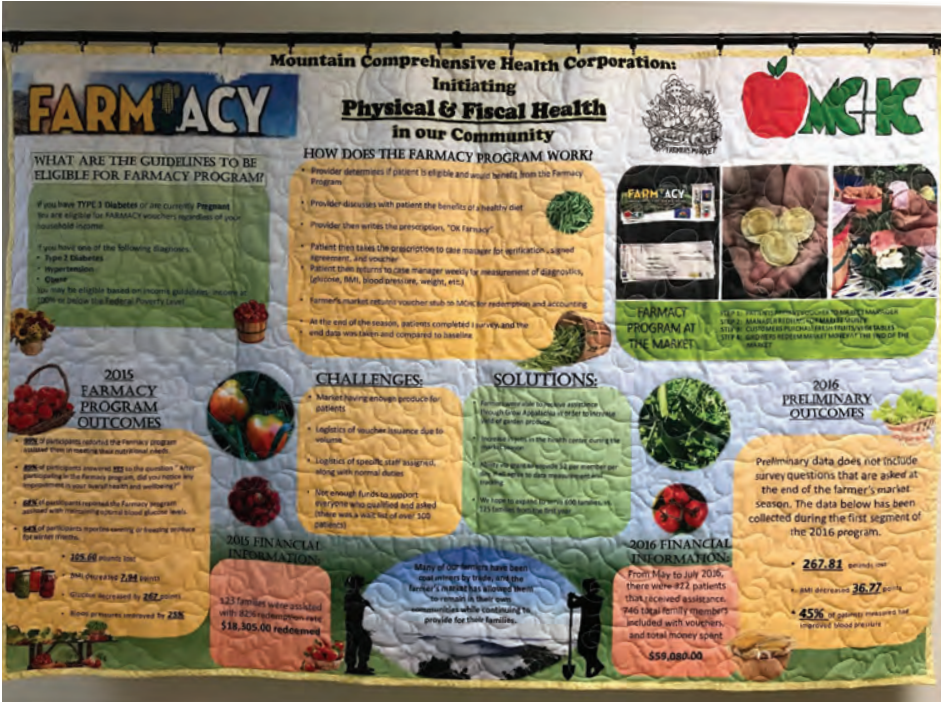
Mountain Comprehensive Health Corporation (MCHC) designed the Farmacy program to overcome these obstacles

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.

The Farmacy program at Mountain Comprehensive Health Corporation provides fresh local produce prescriptions to needy families while helping to sustain area farmers and support community development in rural Appalachia. Health outcomes tracked by University of Kentucky show significant improvements in BMI, HgbA1C and blood pressure control among participants.





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.

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

PARTNERS

COMMUNITY FARM ALLIANCE

GROW APPALACHIA

UNIVERSITY OF KENTUCKY

USDA

WELL CARE

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.

At Native Health, addressing food insecurity is integrated into all center operations. A spirit of innovation, participatory leadership and volunteerism permeates this health center.



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.

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

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

OLE Health has a long history of serving agricultural workers in Napa Valley. Ongoing work includes meal planning with cooks at farmworker housing sites, offering a monthly fresh food market, growing community gardens, accessing area resources and surveying all patients for food insecurity.

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.

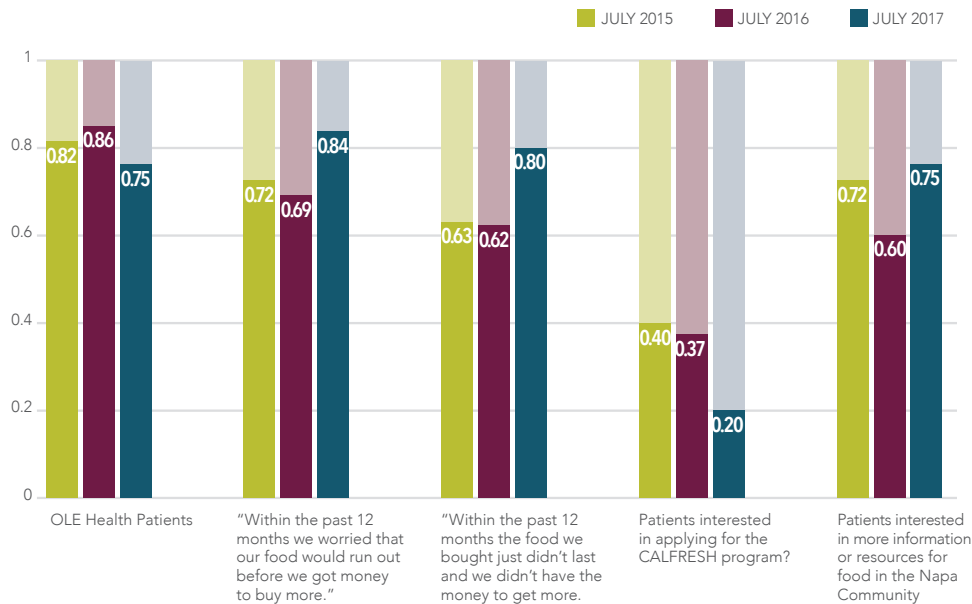
A monthly calendar of food resources is distributed, showing where and when things like hot meals are available and what one needs to qualify. Patients are diverse, with the elderly, homeless, farmworkers, HIV infected, chronically ill and children identified with food insecurity.

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.

FOOD INSECURITY SURVEY RESULTS

July 2015–July 2017



TRANSFORMING THE CULTURE OF FARMWORKER FOOD OPTIONS

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.

INTERVENTIONS

WORKING WITH THREE FARMWORKER HOUSING SITES TO SERVE MORE HEALTHFUL MEAL PLANS

CREATION OF A FOOD SECURITY SCREENING TOOL WITH TWO IMPORTANT QUESTIONS

MONTHLY FREE FRUIT AND VEGETABLE MARKET IN PARTNERSHIP WITH A LOCAL FOOD BANK

NEW PARTNERSHIPS WITH KAISER PERMANENTE FOR FOOD AND NUTRITION EDUCATION

FUTURE HOPES FOR A TEACHING KITCHEN AND COMMUNITY GARDENS

PARTNERS

CALFRESH

CENTER FOR VOLUNTEER AND NONPROFIT LEADERSHIP

KAISER PERMANENTE

MEALS ON WHEELS

NAPA VALLEY FOOD BANK

THE TABLE

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 over-

weight 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 Health Center is countering the reality of high rates of obesity and food insecurity in their farming communities with programs directed at children and their parents that include gardens, play, produce boxes and food preparation.

“ START SMALL BUT THINK BIG.



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

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.

Not only people with diabetes, but all patients at POH are screened for food insecurity using the validated two question form (see Getting Started with your Own Food Insecurity Program, p. 48). The screening is incorporated with other screens such as for depression, dental and visual problems. The center found patients prefer to fill out a paper screening form themselves rather than tell the answers to staff. The self-administered screen is given to the medical assistant who records it in the electronic record.

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. ”

RiverStone Health

BILLINGS, MONTANA

HEALTHY BY DESIGN: MAKING GOOD CHOICES EASY

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 tool¹, 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.

RiverStone Health screens patients for needs, then responds with the community to share garden surplus, integrate programs and help youth and seniors start a greenhouse garden together. Montana is largely frontier, with a climate and geography that harshly challenges food security.

“ 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.

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



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.

Roanoke Chowan Community Health Center

HERTFORD COUNTY, NORTH CAROLINA

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.

The Roanoke Chowan Community Health Center's Farm to School to Healthcare Initiative recognizes that many things from family habits to geographic barriers to poverty and health literacy all impact health outcomes. Through youth-led gardens and markets, integrated nutrition education in the schools and construction of walking trails, the community landscape has literally been changed for good.



After building the garden and cultivating it, participants sell the produce at a student-run market. Early college students learn about small business operations by setting up displays, answering customer questions and preparing samples of healthy recipes from the produce for sale. Community partners assist the student education.

Student-run markets are set up at the health center. Patients in need receive Prescription Produce Vouchers, which allow them to purchase market produce in \$10 increments. Over 226 pounds of fresh produce was sold at the first market and a remaining 146 pounds donated to a local food pantry. Those

shopping at the center market said they'd shop this way again, with 80% stating it leads them to eat more fruits and vegetables and 40% believing it improves their health. Customers expressed gratitude for the market and optimism for the future based on the student-led concept.

Before the market, parents believed fresh produce was more costly than frozen or canned. More than half said they couldn't access fresh produce. With the markets at the center and the gardens at the schools, families in this rural North Carolina area are seeing fresh food options that are accessible and affordable.

CHANGING THE BUILT ENVIRONMENT

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.

INTERVENTIONS

A FARM TO SCHOOL TO HEALTHCARE INITIATIVE WITH SEVERAL SCHOOL GARDENS AND A YOUTH LEAD MARKET BUILT IN A FOOD DESERT

EDUCATIONAL OFFERINGS FOR HIGH SCHOOL STUDENTS IN JUSTICE, BUSINESS, HEALTH, FITNESS AND MORE

PRESCRIPTION PRODUCE VOUCHERS OFFERED TO PATIENTS IN NEED

PARTNERS

ACTIVE ROUTES TO SCHOOLS

COMMUNITY EXTENSION AGENCY

KATE B. REYNOLDS CHARITABLE TRUST

PARTNERSHIP TO IMPROVE COMMUNITY HEALTH

RESOURCEFUL COMMUNITIES

ROANOKE CHOWAN COMMUNITY COLLEGE

ROANOKE CHOWAN FOUNDATION

ROANOKE CHOWAN PUBLIC SCHOOLS

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.

INTERVENTIONS

USING SOCIAL DETERMINANTS OF HEALTH QUESTIONS TO IDENTIFY PATIENTS WHO ARE FOOD INSECURE

THE SIOUXLAND FOUNDATION, CREATED TO RAISE MONEY FOR INTEGRATED SOCIAL AND HEALTH SERVICES

A GROCERY CARD DISTRIBUTION PROGRAM FOR HEALTHY FOOD VOUCHERS

THE GROW AN EXTRA ROW PROGRAM, INSPIRING LOCAL FARMERS TO GROW A LITTLE MORE FOR DONATION

PARTNERING WITH LOCAL SOCIAL SERVICE, LEGAL AID AND HOSPITAL/DENTAL PROVIDERS TO ADDRESS BROAD-RANGING NEEDS

PARTNERS

BUSINESS COMMUNITY

DISTRICT HEALTH DEPARTMENT

FOOD BANK

GROCERS

IOWA LEGAL AID

LEADERSHIP SIOUXLAND

THE LOCAL HOSPITAL

WALMART

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.