Increasing Access to Healthy Food and Exercise in Public Housing Communities:

EXAMPLES FROM PUBLIC HOUSING PRIMARY CARE GRANTEES

National Center for Health in Public Housing

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The health problems associated with poor diet, physical inactivity, and obesity affect most population segments. However, there are marked disparities in the impact that these problems have on public housing residents. Adults in HUD-assisted housing have higher rates of chronic health conditions and are greater utilizers of health care compared to the general population[i]. (See Table 1) Among HUD-assisted children, 5.2% had fair or poor health, compared to 2.4% of the general population[ii].

Table 1. Prevalence of Disease for HUD-Assisted Adults

Condition	HUD-Assisted	All Adults
Fair/Poor Health	35.8%	13.8%
Overweight/ Obese	71%	64%
Disability	61%	35.4%
Diabetes	17.6%	9.5%

Source: A Health Picture of HUD, 2006-2012

Adults with housing assistance from HUD are nearly twice as likely to have diabetes and have higher rates of obesity[iii]. One of the most challenging parts of treating type 2 diabetes is identifying and maintaining a nutritious diet, particularly since there is not a one-size-fits-all model for eating healthy. In overweight and obese patients with type 2 diabetes, modest weight loss, defined as sustained reduction of 5% of initial body weight, has been shown to improve glycemic control and to reduce the need for glucose-lowering medications.

However, public housing residents face the additional challenge of living in communities with poor access to healthy foods and safe places to exercise. Therefore, Health Centers often must offer diet and exercise programs or refer patients to community programs to address chronic conditions and support a healthy lifestyle.

The National Center for Health in Public Housing convened two learning collaboratives in 2018-2019 comprised of Public Housing Primary Care Grantees to explore strategies and programs that increased access to healthy food, exercise and weight control models. Approximately 15 participants discussed ways to manage diabetes and obesity through programs that address education and support, nutrition, and physical activity. Findings from those discussions are summarized in this report.

Access to Healthy Food

Areas with insufficient access to fresh food, called food deserts, frequently include

neighborhoods with public housing developments. Low-income neighborhoods often lack full-service grocery stores and farmers' markets where residents can buy a variety of high-quality fruits, vegetables, and low-fat foods[iv].

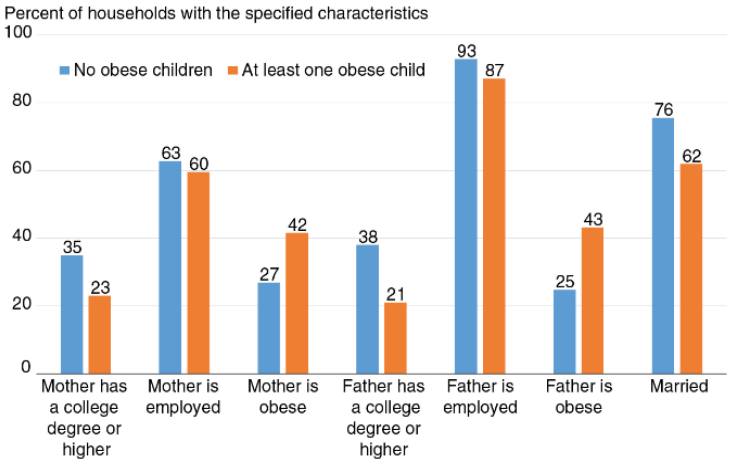
Approximately 15% of the population in PHPC counties are food insecure, which equates to 19.6 million individuals[v]. Food insecurity is defined as a disruption of eating patterns because of a lack of money or resources[vi]. Additionally, around 5% have limited access to food, or approximately 3.9 million individuals[vii]. Limited access to food refers to the percentage of the population who are low-income and do not live close to a grocery store[viii].

Roughly, 56% of children living in PHPC counties are eligible for free or reduced-price lunches[ix], although in some counties it can be as high as 92% such as in the urban area of Washington, DC and 91% in the rural town of Edgecombe, North Carolina[x]. A child is eligible for a free or reduced lunch if they are in a low-income household, defined as 130-185% of the federal poverty level[xi].

To better understand childhood obesity, the USDA's Economic Research Service examined how households with at least one obese child (obese-child households) differ from those without obese children (non-obese-child households). Using USDA's National Household Food Acquisition and Purchase Survey (FoodAPS), the researchers found that children from obese-child households are more likely to have parents that are unmarried, less educated, unemployed, and obese themselves[xii]. (See Figure 1.)

Figure 1. Characteristics of Obese Child Households

Children from households with at least one obese child tend to live in a more disadvantaged environment than those from households with no obese children



Notes: An obese child is one whose body mass index (BMI) is at or above the 95th percentile of the sex-specific U.S. Centers for Disease Control and Prevention BMI-for-age growth chart. Obese adults are those with a BMI of 30 and above.
Source: USDA, Economic Research Service using data from USDA's National Household Food Acquisition and Purchase Survey, 2012.

Around three-fourths of HUD-assisted children live in single female-headed households compared to 27% of the general population, while approximately 76% of children with HUD-assistance lived at or below the federal poverty level[xiii]. These factors make children living in public housing particularly vulnerable. However, living in public housing can sometimes be a protective factor when it comes to being food insecure. A study from the Children's Sentinel Nutrition Assessment Program (C-SNAP) showed that families that are enrolled in public housing do not have the same pressures on their food budget as those who do not receive housing subsidies[xiv]. Therefore, they are more likely to report having children at

healthy weights than other low-income renters[xv].

Analysis of FoodAPS data also revealed that children from obese-child households had slightly lower access to healthful foods[xvi]. In rural areas, obese-child households were more likely to reside in areas with less availability of superstores and supermarkets, while in urban areas, they were more likely to reside in areas with convenience stores, where high-calorie snack foods make up most of the food offerings[xvii].

Research Methodology

Given these barriers, NCHPH conducted two learning collaboratives with participants from PHPC Health Centers to gather best practices on addressing access to healthy foods and strategies to tackle diabetes and obesity in their communities. Approximately 15 Health Centers engaged in hour-long discussions. Findings were synthesized and described below.

Findings from the Learning Collaborative

The Medical Director from TCA Health, Inc. in Chicago, IL, discussed the efforts of the health center to offset childhood obesity through programs that improve access to fresh fruits and vegetables, including the Green Veggie Bus, a mobile van that sells vegetables once a week at the health center. The health center is located directly on the housing development site, so the van provides healthy foods predominantly to public housing residents and accepts WIC coupons as payment.

La Maestra Health Center has a community garden and a full-time health educator that teaches patients how to plant and grow their own food. The Health Center provides nutrition and cooking education to the members of the community and has a Food Pantry for the homeless that exclusively stocks healthy foods, nothing with high salt or sugar contents.

The pediatricians at the El Rio Health Center in Tucson, AZ started a farm program. Patients travel by bus from the Health Center to the farm where they can grow food and attend family cooking classes. The Health Center also offers a Park Prescription Program in collaboration with the National Parks Service. Patients travel to parks in the area for exercise.

Food Prescription Program

The El Rio Health Center collaborates with a community food bank and a university to provide a Food Prescription Program to patients. Residents that receive a prescription for healthy food can purchase items at a discount price in local grocery stores and farmers markets. The Health Center also works with the National Park Service to prescribe parks and guided activities to public housing residents. The Health Center has secured funding for transportation and admission fees for their patients.

Health Education

The Community Healthcare Center in Wichita Falls works closely with the local health department. The health department offers a comprehensive diabetic education and cooking class. Patients that attend the class learn how to cook healthy foods, then eat those prepared meals together and then exercise as a group. The health department sends a link with the time and place for the classes to health center providers, who then refer their patients to the classes. Patients are very happy with the classes offered at the health department.

The El Rio Health Center in Arizona found that attendance in their nutrition classes was low; however, their exercise programs were very popular. They decided to combine the two programs to improve their reach to diabetic patients. The first 30 minutes of the program is dedicated to patient education. Dieticians, clinical pharmacists, and behavioral health specialists come to the class on a rotating basis to provide education, motivational interviews, and engage with the patients. Afterwards, the class performs 45 minutes of exercise together as a group. According to the Clinical Director, the key to driving people to the class is the content and having a dynamic leader that connects with the patients. Their exercise instructor is bilingual and bicultural and has a strong connection to the community.

The Health Center also uses an evidence-based weight management program that integrates lifestyle, medication, and surgery. The program sets realistic goals for patients, recognizing that a 5% weight loss can be very impactful to health. The Clinical Director states the most important thing they do as an organization is using a Weight First approach. About 10% of overweight is caused by prescribed medications, so she advises providers to seek alternatives to care when appropriate. The Health Center also offers medical weight management for diabetic and prediabetic patients that is carried out with primary care providers through intensive weight management groups. Patients alternate between one-on-one visits with a doctor and a comprehensive team of practitioners. She believes this system will lead to better results in the long term.

Prescription Assistance

Community Healthcare Center also works with Interfaith Outreach Services to provide financial assistance to patients to help pay for their medications. The program helps patients address their health needs as well as allows them the option of spending their limited resources on purchasing healthy food.

Patient Follow Up

Health Centers are aggressive in identifying pre-diabetic patients and providing appropriate follow up care. Progression from prediabetes to type 2 diabetes can be offset by incorporating a healthy lifestyle, eating healthy foods and exercising regularly[xviii]. At the La Maestra Health Center, a nurse case manager serves patients that are diagnosed with prediabetes. The case manager assesses patient knowledge and determines if more health education is needed. If appropriate, patients are enrolled in a six-class program that provides diet and

exercise education on topics such as how to read labels, count calories, and lose weight. Patients report that the program has been helpful.

At the Community HealthCare Center in Wichita Falls, a behavioral health specialist contacts patient who are diagnosed with uncontrolled diabetes, to provide education and counseling over the phone and in person. Patients with A1c>9 are required to follow up after 3 months. If those patients miss their appointments, a nurse calls them. As a result, the health center was able to report a decrease in patients with A1c>9.

Using Data

Community Healthcare Center in Wichita Falls has applied for a grant from American Family Medicine to perform research on diabetic patients. The health center is interested in identifying the barriers to lowering A1c levels. They have developed a 5-question survey to field to their patients asking whether issues such as food insecurity, opportunities to exercise, or cost of medication are the problem. The plan is to survey 300 patients and refer them to appropriate services within the community, such as the YMCA or the health department if necessary. The Health Center will use health education materials from the CDC Diabetes Control Program.

Zufall had received a grant from their health department that allowed them to do some additional research and reporting within their EMRs on diabetes. They currently have a dashboard that identifies patients with varying A1c levels and provides that data to providers, which has prompted providers to check on and follow up with their diabetic patients.

Wichita Falls is working with a Telemedicine Retinal Screening group to understand whether there is a relationship between retinal damage, high blood pressure, and diabetes. There are 300 patients registered for this program. It has been going on for the past 2 years. Preliminary results are coming in the coming months.

How to Improve Attendance at Diabetes Education Meetings

- ✓ Give patients a call- A direct conversation with a patient provides an opportunity to answer questions, give gentle reminders, and troubleshoot barriers to attendance.
- ✓ Provide transportation- Lack of transportation is one of the keys barriers to accessing care for public housing residents.
- ✓ Flexible scheduling- Offer educational courses on weeknights or weekends to accommodate work and school schedules.
- ✓ Provide childcare- For busy parents, childcare is often an obstacle.

Conclusion

Addressing access to healthy food and improving diet and exercise are critical to improving the health of public housing

residents. Analysis of UDS 2018 data show that 69.16% of children and adolescents ages 3-17 with a BMI percentile, received counseling on nutrition and physical activity. The 2018 UDS also reports that 70.15% of adult patients 18 years and older with high BMI were screened and received a documented follow-up plan[xix]. However, based on findings from the learning collaboratives, PHPCs are engaging with multiple partners and are using innovative strategies to increase opportunities for healthy eating and lifestyle.

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About the National Center for Health in Public Housing

The mission of National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally-funded Public Housing Primary Care (PHPC) health centers and other health center grantees caring for public housing residents by providing training, technical assistance and research.

The PHPC program is built on a foundation of collaboration between Health Centers, Public Housing Agencies, and residents.

For more information visit www.nchph.org

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