

## **APPLICATION FORM**

**Title of Entry:** Food for Health: Improving Access to Foods and Nutrition Services in our Community

**Division:** Large Organizations

**Award:** Community Champions

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**Date Implemented:** 04/22/2015  
**Date Results Achieved:** 05/16/2017

**Team Members:** Chinwe Onyekere *Associate Administrator at Lankenau Medical Center and System Administrator of Graduate Medical Education at Main Line Health*  
Jen Malkoun *Resident Farmer, Lankenau Medical Center and Greener Partners*  
Phil Robinson *President, Lankenau Medical Center*

# **HAP Achievement Award**

**Category: Community Champions**

**Division: Large organization**

**Title of Entry: Food for Health: Improving Access to Foods and Nutrition Services in our Community**

## **EXECUTIVE SUMMARY**

**One page summary should be a concise explanation of the project initiative. It should summarize the quantitative information that best supports the end result and must include: a) title of entry; b) description of the problem/opportunity, including goal and target audience(s); c) evidence; d) baseline data; e) intervention; d) results.**

Our facility has a unique geography—set in the middle of two Pennsylvania counties, one that Robert Wood Johnson Foundation ranks as the sixth healthiest county of 67 in the state, and the other as the 67<sup>th</sup>. In the least healthy county in the state, the Public Health Management Corporation (PHMC) states that approximately 34% of the population of adults aged 18-64 are obese and 27% are suffering from a chronic condition. PHMC also found that most adults in that county (more than 90%) eat fewer than five servings of fruits and vegetables each day and 20% report not exercising at all. In addition to complex health challenges, many of our patients face psychosocial issues, including insufficient food or inadequate housing, further compromising their health.

These staggering statistics led to the development of a solution that can help to address the treatment of the whole person—including non-medical issues like food insecurities that can gravely affect outcomes. Research has shown that the implementation of community gardens have proven to increase fruit and vegetable consumption, community engagement and physical activity. Hospital-based community gardens have the ability to enhance patient nutrition and overall health.

With this information, we decided to take the progressive step of creating our Wellness Farm, a half-acre, organic farm that produces fresh fruits, vegetables, herbs and flowers. One of only a few in the country, the wellness farm improves access to healthy foods and education about the link between nutrition and health for our community members. It also helps to support primary care providers in identifying and addressing food insecurities.

Currently, the Wellness Farm serves as a hands-on nutritional education site for approximately 10,000 school children taking classes at our facility's health education center. It also serves as a platform for research and conversation between clinician and patient around issues at the intersection of food and health. Our facility's health educators conduct more than 100 food demonstration classes each year in two physician office waiting rooms, reaching over 1,100 patients in 2016. Each patient receives the healthy recipe, in addition to the fresh ingredients from the farm, to try at home. Collectively, more than 4,200 pounds of healthy vegetables, fruits, and herbs from the Wellness Farm are provided yearly to patients.

## **ASSESSMENT**

**Describe the needs assessment process and/or research conducted prior to implementing the initiative and the results of that needs assessment/research, including evidence and baseline data.**

Our facility reviewed the staggering data collected from the Public Health Management Corporation, which states that approximately 34% of the population of adults in the least health PA county who are aged 18-64 are obese and 27% are suffering from a chronic condition, that most adults in that county (more than 90%) eat fewer than five servings of fruits and vegetables each day and 20% report not exercising at all. We also used data from our facilities Community Health Needs Assessment, as well as a social needs survey produced by our clinics that provides primary care, obstetrics and gynecology, and other specialty services, to low income, uninsured and underinsured patients in our community, that led to the implementation of the Wellness Farm.

The social needs survey focused on identifying those patients who need special assistance with daily living – including paying for groceries, transportation, child care, prescriptions, etc. The survey found that the majority of patients identified food, housing, adult education, dental care, and employment as social needs that were most important to them.

Our Community Health Needs Assessments includes an extensive analysis of socio-demographic data and health status characteristics of the residents of the defined CHNA areas, along with input received from a broad range of interests in the community. The CHNA found that the majority of patients who receive treatment in these clinics have difficulties making household payments, over 20% have reduced their meal size or have skipped meals altogether because of cost, and among those uninsured, 32% identified cost as a major barrier to health care. Our CHNA also found that weight and diabetes were a major need, in addition to several others areas. Following the CHNA, our facility prepared an implementation plan to address the priority needs in the community, which included the implementation of the Wellness Farm.

After our most recent CHNA, our health educators were directed to conduct 24 pop-up cooking demonstrations each year in our physician practices that care specifically for the uninsured/underinsured in the community per year. The cooking demonstrations incorporate the Wellness Farm's organic produce, and patients participating in the cooking demonstration classes receive recipes and organic produce to take home.

The Wellness Farm and our pop-up food demonstrations were conceived as a way to address health needs in the communities and improve access to healthy foods in this population. It reinforces the link between nutrition and health and supports our primary care providers in identifying and addressing food insecurities. Our Health System has a strategic focus on ameliorating disparities in care and the work on the Wellness Farm is another demonstration of our commitment to the American Hospital Association's Institute for Diversity's #123forEquity initiative.

## **INTERVENTION**

**Identify the steps taken to initiate your effort(s) including strategies, implementation plan, and the interventions.**

As previously noted in our needs assessment, the data represented a community need specific to the areas of weight and diabetes, and showed staggering statistics and data that represented a lack of resources and access to healthy foods in the specific community in our Hospital's service area. With this information, the idea of implementing a farm on the Hospital's campus was developed. The Hospital's Associate Administrator spoke with senior leaders to gauge their interest in the idea and to receive proper approvals to move forward. Once all Hospital and township approvals were received, the land, which was previously an empty field, was determined to be the best location for the creation of the half-acre Wellness Farm.

The groundbreaking of the wellness farm took place on Earth Day in April of 2015 and the construction took approximately seven months. The farm began operating in November 2015 and began harvesting over 25 different types of produce in April 2016.

## **RESULTS**

**Summarize the success of your initiative and provide evidence of sustained improvements.**

Since the implementation of the Wellness Farm at our Hospital, we have achieved the following:

- Hiring of two full time farmers/food educators;
- grew over 4,200 pounds of organically-grown vegetables consisting of over 25 different varieties;
- Health Educators conducted more than 100 food demonstrations and distributed produce to over 1,000 vulnerable patients in our health clinics that serve the uninsured and underinsured populations of our communities;
- Farm educators delivered 18 farm-based youth education classes to over 400 students;
- Farm Manager and Educator co-taught over 30 nutrition classes with dietitian to patients with congestive heart failure (CHF) on how to substitute herbs for salt;
- organic produce has been integrated into our Hospital's Health Education Center youth-based programming for more than 10,000 students;
- launched our first two-week Internal Medicine Residency Farm Elective;
- integrated the Wellness Farm into our Hospital's Medical Student Health Advocacy Program, helping to educate the next generation of physicians about the power of healthy food and nutrition;
- embedded the Wellness Farm into our Hospital's nationally certified cardiac rehab program to enhance nutrition education for participants;
- delivered farm-fresh flowers throughout the Hospital for patients and staff;
- created farm-based "lunch and learn" series for Hospital staff;
- Wellness Farm has been featured in more than a dozen media outlets nationally, regionally and locally;
- Wellness Farm has been launched into the national stage by First Lady Michelle Obama during the Let's Move! Celebratory Event at the White House in 2016;

- Launched Farm Survey, with Institutional Review Board approval, in two clinical sites (primary care and OB/GYN) to better understand patients' food environment, receive patient<sup>Figure1</sup> and provider<sup>Figure2</sup> input and feedback on how best to integrate the farm into primary care, and measure our impact. This will lay the groundwork for research on the integration of a hospital-based farm into clinical care.

The formal results of the farm's implementation will be assessed in future Community Health Need's Assessments conducted by the Hospital. However, the results listed above in addition to seeing and hearing the reactions firsthand from patients, visitors and students who have received education, recipes and fresh produce from the Wellness Farm is proof of its success in our communities.

### **ADAPTABILITY**

**Describe the potential ability to replicate your initiative in other organizations that provide the same service or serve the same type of population. Also, describe how to maintain the initiative and/or its results, any negative outcomes, areas of improvement or lessons learned.**

We believe a wellness farm can be implemented at hospitals across the country if they think of creative ways to take advantage of extra space. Whether it's built on a half-acre of land outside of the hospital or on the rooftop of a building or parking garage, the benefits of implementing a farm would far outweigh the cost if space can be used creatively and efficiently.

Maintaining the farm is truly a full-time job and required the proper approvals of hospital administration and budget to implement those plans. With an effective strategy that is based on the needs of the community, our hospital leadership was incredibly supportive. The implementation of the Wellness Farm would also not have been possible without our partnerships with community-based organizations.

# SUPPORTING APPENDICIES

## FIGURE 1 – PATIENT SURVEY DRAFT

Survey given to patients to better understand their food environment.

Please Place Patient Sticker Here

1. Approximately how many times have you received produce while visiting your doctor? (if Never, then skip to question #6)

- <sup>1</sup> Never   
  <sup>1</sup> First time   
  <sup>2</sup> 2-3   
  <sup>3</sup> 4-5   
  <sup>4</sup> More than 5

2. When you received produce, did you receive any health education? (Please check all that apply).

- Cooking demonstration  
 Recipe handout  
 Nutrition educator lesson  
 Discussion about healthy eating with your doctor or nurse  
 None

3. If you received produce while visiting your doctor, did you use all of it?

- <sup>0</sup> No   
  <sup>1</sup> Yes   
  <sup>2</sup> Sometimes

4. On a scale from 1 to 4 where 1 is poor and 4 is excellent, please rate each of the following...

	Poor 1	Fair 2	Good 3	Excellent 4
Convenience of receiving vegetables while visiting your doctor				
Quality of the vegetables you received	1	2	3	4
Variety of the vegetables offered	1	2	3	4
Amount of vegetables you received each visit	1	2	3	4
Availability of vegetables that are familiar to you and that you like to eat and/or cook	1	2	3	4

5. What do you like best about receiving vegetables while visiting your doctor?

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6. Which vegetable are you or your family most likely to use? (Check all that apply)

- Arugula   
  Cauliflower   
  Garlic   
  Kale   
  Scallions   
  Sweet Potatoes  
 Beets   
  Collards   
  Green Beans   
  Onions   
  Spinach   
  Tomatoes  
 Broccoli   
  Cucumbers   
  Head Lettuce   
  Potatoes   
  Zucchini   
  Turnips  
 Carrots   
  Eggplant   
  Hot Peppers   
  Radish   
  Sweet Peppers   
  Winter Squash

7. Would you like to learn more about healthy eating?

- No   
  Yes

8. Would you like to learn how to prepare fresh produce?

- No   
  Yes

**FIGURE 1 – PATIENT SURVEY DRAFT (CONT.)**

9. How much do you agree or disagree with the following statements?

	Strongly Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Strongly Agree
It is easy to buy fresh fruits and vegetables in my neighborhood					
The fresh produce in my neighborhood is of high quality					
There is a large selection of fresh fruits and vegetables in my neighborhood					

10. Where do you, or the person who buys food, go grocery shopping? (Select all that apply)

- |  |  |
|--|--|
| <input type="checkbox"/> Large chain grocery store or supermarket    | <input type="checkbox"/> Natural or organic supermarket (Whole Foods Market etc) |
| <input type="checkbox"/> Small local store or corner store           | <input type="checkbox"/> Warehouse club store (Sam's Club or Costco)             |
| <input type="checkbox"/> Convenience store (7-Eleven or mini market) | <input type="checkbox"/> Ethnic market   |
| <input type="checkbox"/> Discount superstore (Wal-Mart or Target)    | <input type="checkbox"/> Farmer's market/ Co-op or CSA                           |
| <input type="checkbox"/> Produce Store or Truck (Produce Junction)   | <input type="checkbox"/> Don't know  |

11. How many servings of fruits and vegetables do you eat on a typical day? A serving of a fruit or vegetable is equal to a medium apple, half a cup of peas or half a large banana. \_\_\_\_\_ #of servings

12. For each statement, please mark whether you agree or disagree with that statement.

I don't eat fruits and vegetables as much as I like to because:

	Agree	Disagree
They cost too much		
They often spoil before I get a chance to eat them		
They take too much time to prepare		
They are not filling enough		
My family doesn't like them		
I don't know how to prepare them		
I have trouble digesting them		
I don't know how to choose fresh fruits and vegetables		
I just don't think of fruits and vegetables when I'm looking for something to eat		
They are not available where I do my grocery shopping		

## FIGURE 2 – PROVIDER SURVEY

Survey given to health care providers for feedback on how best to integrate the farm into primary care and measure our impact.

1. What is your profession?

Attending Physician     Resident physician     Physician assistant     Nurse practitioner  
 Pharmacist     Nurse     Medical Assistant     Health Educator  
 Medical Student (specify: Medical Student, Medical Student Health Advocate, or Urban Medicine)  
 Other \_\_\_\_\_

2. Have you ever heard of the Wellness Farm?  
 No (If No, skip to question 11)     Yes

3. How often would you say you communicate the following with your patients?

	Never	Almost Never	Some of the time	Almost Always	Always
How often do you tell patients about the Wellness Farm?					
How often do you tell patients about the availability of free garden produce bags?					

4. Have you used the Wellness Farm for patient education?  
 No     Yes

5. If yes, please briefly describe how you have used the Wellness Farm in patient education

\_\_\_\_\_

\_\_\_\_\_

6. Has the Wellness Farm had an impact on your personal knowledge?  
 No     Yes

7. If yes, please provide a brief explanation for your answer

\_\_\_\_\_

\_\_\_\_\_

8. Do you think the frequency of "pop up" produce markets and cooking demonstrations in your practice is...?  
 too often     not often enough     appropriate

9. If you felt it is too often or not often enough, please give a brief explanation for your answer:

\_\_\_\_\_

\_\_\_\_\_

10. How would you rate your overall experience of the Wellness Farm?  
 Poor     Fair     Good     Excellent     I don't know

**FIGURE 2 – PROVIDER SURVEY (CONT.)**

11. The Wellness Farm is a hospital-based community garden providing free produce alongside health education to patients of our primary care practices for uninsured and underserved patients. Having heard a little about the Wellness Farm, what is your level of interest in using it for patient education?

- Not interested     
  Somewhat interested     
  Very interested  
 Already using with patients

12. How much do you agree or disagree with the following statements about the Wellness Farm?

	Strongly Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Strongly Agree
Can be used as an effective tool for nutrition education					
Can be used as a tool to address issues of food insecurity					
Can be used to facilitate patient/provider communication					
Provide access to fresh produce among patients					

13. Would you like to learn more about how to incorporate nutritional knowledge and culinary techniques into patient health care?

- No     
  Yes

14. If yes, please read the list of continuing education classes and check all that apply,

- hands on culinary techniques  
 diet, lifestyle and nutrition  
 cooking and shopping on a budget  
 integrating nutritional counseling to supplement pharmacological treatment  
 communication with patients on healthy eating and nutrition as it relates to good health

15. How many servings of fruits and vegetables do you estimate your average patient eats on a typical day? A serving of a fruit or vegetable is equal to a medium apple, half a cup of peas or half a large banana.

#of servings

\_\_\_\_\_

16. Do you have any additional comments about the Wellness Farm or suggestions on how we could improve?

\_\_\_\_\_  
 \_\_\_\_\_