

**Our Vision:** VARANDA (VA Repurposing Agriculture and Nutrition for Diet Awareness) is a preventive health initiative inclusive of a food pantry, sustainable food garden (farm) distributed as food prescriptions for US Veterans and their families. The VARANDA food pantry and farm will provide foodstuff to food insecure and 'diet unaware' Veterans. Raw, freshly grown vegetables will come from a farm located at two VA hospitals – Brockton and Bedford. The farm will supply over 5,000 pounds of fresh produce from April to November and will be supplemented by food from the Greater Boston Food Bank for year-round distribution. Farm output will stock the in-hospital preventive health pantry, an on-campus farmers market, and hospital cafeteria. Prescriptions can be written by any provider within the VA New England system in the electronic medical record. Detailed food prescriptions will be tailored toward specific Veterans' needs. The program, if successful, has potential to expand to VA hospitals nationwide.





Preventive Health Food Pantry



Seasonal Farm



Prescription Program



Research, Education & Health Policy



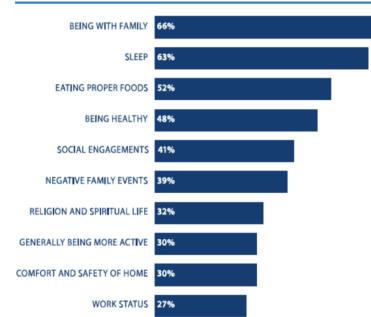
Meet Our Team

Rationale: Whole Health is rolling out across the VA by promoting 8 pillars of health promotion including nutrition and cultural transformation of systems of care. VA Boston is one of 18 flagship VA sites for Whole Health. 'Ideal cardiovascular health' is a concept promoted by the American Heart Association based on seven risk factors (Life's Simple 7) that people can improve. Diet is a core component. Research has shown that those who can achieve cardiovascular wellness goals by age 50 can expect another 40 years free from heart attack and stroke.

Many chronic diseases have their roots in poor food choices either by necessity or lack of awareness. We will be a healthcare facility with a *farmacy*! VARANDA could create a roadmap that replicates at other VA sites. Each aspect of planning and implementation will be framed by the idea of scalability to VA medical centers nationwide.

Importantly, Veterans rank this issue highly (see chart).

**Top 10 Most Frequent Responses** 



https://www.va.gov/PATIENTCENTEREDCARE/explore/about-whole-health/have-a-conversation.asp

When asked what matters to them most, "eating proper foods" topped the list after 'being with family' and 'sleep' as highest priorities. We have an obligation to meet this need. Not only will we provide fresh produce but a toolkit for integrating proper nutrition into a healthy lifestyle.





Research Opportunities: VARANDA is mission- and outcome-oriented. Given the potential reach to thousands of Veterans in the New England VA Healthcare System, participants in the prescription program can be queried pre- and post-participation for changes in diet awareness. Important goals are to change food preference, reduce obesity and improve life satisfaction which could translate into fewer hospitalizations. Other outcomes include reduced medication requirements for treatment of diabetes, hyperlipidemia, and hypertension. All outcomes can potentially be tracked longitudinally as part of a research program. The feasibility of a randomized clinical trial of VARANDA versus usual care in high-risk cardiac patients who are 'diet unaware' will also be explored.



This Project is getting recognition! Let's participate!

#### Honorable Mentions

- · Alba Valasquez Los Angeles Food Policy Council, Los Angeles, CA
- Austin Avery- Fish N Loaves, Memphis, TN
- Cat Anderson- Cat Scan, New York City, NY
- Gary Montague- Elliot, Denver, CO
- Jacqueline Gottlieb- Making Homes Sage, Clay County, NC
- · Melvin Thompson- Edeleo, Chicago, IL
- · Noelle Warford Urban Tree Connection, Philadelphia, PA
- · A. Pradhan MD, P. McGregor MD, S. Moore MD- VARANDA Project, Boston, MA
- · Dr. Yolandra Hancock- M-SizeMe, Bowie, MD

#### **Contact Information**

**Locations to come:** Brockton and Bedford campuses

Email: VARANDAproject@va.gov

**Proposed Hours of Operation**: Monday to Thursday from 11am-2pm; Wed 4-6pm

In the News: These doctors want to write 'farmacy' prescriptions -American Heart Association News

**Useful Links:** 

Whole Health
AHA Life's Simple 7
USDA: "Choose My Plate"
Move! Program









VARANDA will source food items and produce through collaboration with local food pantries and The Greater Boston Food Bank (GBFB) as well as initiation of an on-site farm. We will provide not only the materials (food) for a healthy diet but will include a comprehensive program that leverages the existing facilities, staffing (e.g. physicians, nurses, dieticians, chefs), and reimbursement structure to effect durable change in dietary behavior through:

- raw freshly grown produce;
- prepared fruits and vegetables for snacking;
- nutrition education (e.g. 15-minute workshops and webinars on value of nutrition, how to simply prepare vegetables for consumption, and food hygiene);
- recipes and choices that respectfully accommodate a Veteran's current situation (e.g. dentition, home environment, physical disability);
- volunteer opportunities (e.g. purposeful physical activity in the farm, community building);
- employment opportunities (e.g. pantry administration, packaging); and habituation through a regular schedule of visits to the food pantry for food pick

## How many can we feed?

Pantry Hours Per Day	Frequency of Visits	No. Veterans Per Month	No. Individuals (4 per Household) Per Month	Pounds of Food Distributed Per Week
4	Weekly	160	640	2880
	Every Other Week	320	1280	2880
6	Weekly	240	960	4320
	Every Other Week	480	1920	4320
8	Weekly	320	1280	5760
	Every Other Week	640	2560	5760
Assumes 6 minutes per pick-up (BMC rate = 3 minutes per pick-up) Meals for 5 days at each pick up Assumes 1.2 lbs per meal (national average)			~225,000 lbs of food donated from GBFB annually	

The Greater Boston Food Bank has agreed to provide the food donation and has a huge capacity.

We can accomplish this with **one** private bagging area. Give us **two** and we can double. Pantries at **both campuses** and we we can quadruple.

Fresh Produce			Dairy			
Carrots	Eggplant	Berries	Milk [low-fat (1%	) or skim/non-fat]		
Cabbage	Asparagus	Bananas	Yogurt [low-fat (1%) or skim/non-fat]			
Broccoli	Spinach	Apples	Milk substitutes (soy milk, almond milk)			
Sweet Potatoes	Kale	Pineapple	Shelf-stable evaporated milk			
Brussel sprouts	Collard Greens	Avocado	Cheese (reduced fat or low-fat)			
Bell Peppers	Romaine Lettuce	Watermelon				
Whole Grains			Canned/Frozen	Fruits and Vegetables		
Rolled oats	Brown Rice		Canned Fruits‡			
Barley	Whole grain-rich bread and pasta*		Canned Vegetables <sup>5</sup>			
Wild Rice	Whole gra	ain-rich cereals†	Frozen Vegetables (e.g. peas, green beans, cauliflower, spinach)			
Lean Protein Foods			Condiments		Toiletries	
Meat (frozen)	Nuts and seeds	Eggs	Olive Oil	Balsamic vinegar	Toothpaste	
Poultry (frozen)	Spreads (e.g. peanut	Beans	Mustard	Salsa (low salt)	Laundry Detergent	
Seafood (frozen)	butter)	Lentils	Honey	Lemon Juice	Toilet Paper	





**†** Canned fruit: ≤ 12 g total sugar/serving, no partially hydrogenated oil



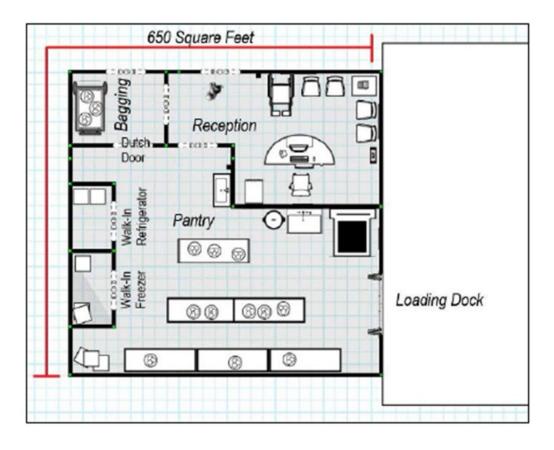
Whole grain-rich cereals: ≤2g saturated fat/serving, 0g of trans-fat, ≤230mg of sodium/serving, ≤12g total sugar/serving, >3 g fiber/serving

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# Our Projected Pantry Space



The space will include a reception area to greet patients and a separate bagging area with its own exit to allow privacy and minimize shaming.



#### Want to help?

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#### **Useful Links:**

VARANDA Veterans Affairs homepage <a href="https://www.bedford.va.gov/services/VARANDA.asp">https://www.bedford.va.gov/services/VARANDA.asp</a>

Whole Health: https://www.va.gov/wholehealth/

AHA Life's Simple 7: <a href="https://www.heart.org/en/healthy-living/healthy-lifestyle/my-life-check--lifes-simple-7">https://www.heart.org/en/healthy-living/healthy-lifestyle/my-life-check--lifes-simple-7</a>

USDA's "Choose My Plate": <a href="http://www.choosemyplate.gov/">http://www.choosemyplate.gov/</a>







With land at both the Brockton and Bedford VA campuses, we will be able to grow our own farm fresh produce. Both campuses have land, greenhouses and possibly smoking shelters that can be converted into additional greenhouse space. An on-campus farm sends the visible message that these facilities are aligned with health promotion and symbolizes that healthy lifestyle choices are such a priority that they are physically aligned with our buildings.

The benefits of a fresh produce farm are endless, including but not limited to:

- Opportunities for recreation and mindfulness therapy for Veterans
- Compensated work program employment
- Involvement of healthcare employees in wellness programs aligned with Veterans
- Support of Whole Health in a tangible way
- Changes in the landscape of the inpatient plate and hospital canteen for everyone
- Introduction of nutrition as a rotation for interns, residents and fellows
- Changes in medicine with focus on prevention













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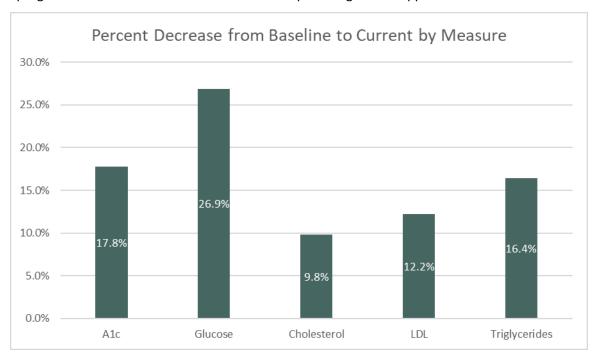
Any Veteran who is deemed food insecure or diet unaware should be referred to the Pantry via the VA electronic medical chart. The prescription can be written by any provider within VA Boston or Bedford Healthcare Systems. Orders will be received by all designated Pantry personnel who will call to schedule the Veteran within 48 hours, (excluding non-business hours), with a pick-up date and time. A Nutritionist/Dietician of the day will work with the Pantry Manager and their staff first thing in the morning on Mondays thru Thursdays to assemble the appropriate food selection for each Veteran and their family based on preferences and medical conditions. These consults will be automatically tied to social work for any additional support to include possible transportation needed to the Pantry.

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## **Proven Results**

Biometric Outcomes for Fresh Food Farmacy Enrollees

Patients included below are those who enrolled and received food as part of the Fresh Food Farmacy program AND had both a baseline and follow-up reading for the applicable biometrics.



Baseline Reading: Biometric values at the time of FFF enrollment.

Current Readings: Most recent biometric values as of 3/1/2018

Source: Authors and Geisinger Clinical Informatics NEJM Catalyst (catalyst.nejm.org) @Massachusetts Medical Society









VARANDA is mission- and outcome-oriented. Given the potential reach thousands of Veterans in New England (VISN1), participants in the prescription program can be queried pre- and post-participation for changes in diet awareness. We will start with *surveys* and *focused groups* with important goals to change food preference, reduce obesity and improve life satisfaction, which could translate into fewer hospitalizations. Other outcomes include reduced medication requirements for treatment of diabetes, hyperlipidemia, and hypertension.

All outcomes can potentially be tracked longitudinally as part of a research program. The feasibility of a randomized clinical trial of VARANDA versus usual care in high-risk cardiac patients who are 'diet unaware' will also be explored.





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### These doctors want to write 'farmacy' prescriptions



By American Heart Association News January 27, 2020



(courtneyk/E+, Getty Images)

Doctors are used to writing prescriptions for medicine. But three Boston-area cardiologists are working on a federal program that would focus on writing prescriptions for food. Varanda, which stands for Veterans Administration Repurposing Agriculture for Nutrition and Diet Awareness, would create a network of sustainable food gardens at veterans hospitals to provide fresh food – for free – to vets and their families.

The work is inspired by the rooftop farm at Boston Medical Center. The farm, in place since 2017, harvests more than two tons of fresh vegetables yearly and distributes them to their preventive food pantry and hospital kitchen.

"The rooftop farm is this amazing farm operation in a hospital," said Dr. Stephanie Moore, an assistant professor at Harvard Medical School and VA staff cardiologist. "The doctors could write prescriptions for fresh vegetables and healthy foods that the patients could pick up at the on-site pantry. They would go onto their computers and, much like I would write a prescription for a medication, they would write a prescription for food. And it's free."

Moore, who first learned about the farm, told two colleagues. Dr. Aruna Pradhan, a cardiologist and epidemiologist works in preventive medicine at the Brigham and Women's Hospital and in cardiovascular medicine at the VA Hospital's West Roxbury Campus. Dr. Pei-Chun (Cheri) McGregor directs the ambulatory cardiology outpatient clinics for Boston VA. McGregor is a lieutenant colonel in the Air Force Reserves and a former 11-year active duty officer. "We as cardiologists see a lot of diseases where we give medication instead of getting to the root of the problem, when a lot of the issues are actually lifestyle and nutrition-related," McGregor said.

The program is slated to start this year in the Boston suburbs Brockton and Bedford. Funding will come from private donations, federal and foundation grants and existing VA reimbursement mechanisms.

The doctors envision Varanda as a preventive health initiative that includes a food pantry, sustainable produce garden and a farmers market for veterans and their families.

The pantry and farm will provide food to veterans in need, and the vegetables will be grown on farms at the two VA hospitals, where thousands of veterans annually receive health care. The goal is to supply over 5,000 pounds of fresh produce from April to November and be supplemented by food from the Greater Boston Food Bank for year-round distribution. Farm output will stock the in-hospital preventive health pantry, an on-campus farmers market and hospital cafeteria.

"We'll be a health care facility with a pharmacy and a 'farmacy," said Moore. "Access to Varanda by prescription means access not only to free and nutritious and healthy protein sources, but to a host of educational resources and activities, like cooking classes."

While the three women kicked off the idea on their own, they quickly received buy-in from several VA departments, including nutritional services, social work, homelessness and more. They now have a core group of more than 60 people. Varanda also coincides with the VA's rollout of Whole Health, a plan focusing on nutritional and cultural transformation of systems of health care. VA Boston is one of 18 flagship VA sites for Whole Health.

"As a huge national single payer system, the VA has enormous potential for successful local programs to spread more widely," Moore said. "We're trying to write the playbook for this, not just make it a one-off. Each aspect of planning and implementation will be framed by the idea of scalability to VA medical centers nationwide."

An education imperative also drives Varanda, which was a top candidate for the American Heart Association's 2019 EmPowered to Serve Business Accelerator Program. "Unfortunately, nutrition is not well-taught or well-received in medical schools," Moore said.

Because training at VA medical centers is a core component of medical education for thousands of medical students yearly, Moore hopes Varanda will be an opportunity to give those trainees the needed nutrition awareness and practice.

"We strongly believe that future and current physicians should learn how to integrate lifestyle choices into their practice in a real and tangible way."

If you have questions or comments about this story, please email editor@heart.org.



# Coming Soon!

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