

#### Service area covered in this assessment and plan:

NewYork-Presbyterian Hudson Valley Hospital's Westchester County service area includes the City of Peekskill and towns of Cortlandt (Buchanan and Croton-on-Hudson), Ossining, Somers, and Yorktown. In Putnam County, the hospital's service area includes the towns of Carmel, Patterson, Philipstown, Putnam Valley, and Southeast, and villages of Brewster, Cold Spring, Mahopac and Nelsonville. In southern Dutchess County, the hospital's service area includes the municipalities of Beacon, East Fishkill, Fishkill, Hopewell Junction, Poughkeepsie and Wappingers Falls.

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#### Background

To determine the Community Health priorities for 2016-2018, the Westchester County Department of Health created the Westchester County Health and Hospital Planning Team, composed of the DOH and all Westchester County-based hospitals and health systems. To date, NewYork-Presbyterian Hudson Valley Hospital is a member and attends quarterly meetings at DOH offices in White Plains, NY.

Drawing from five health priorities presented in "The Prevention Agenda 2013-2018," New York State's plan to become the nation's healthiest state by 2018, this Planning Team identified two prevention agenda health priorities that the respective healthcare providers in Westchester County would tackle individually, with their own programs, in a three-year plan to positively impact the health of New Yorkers by 2018:

**Priority/Focus Area 1:** Prevent chronic disease by increasing access to high quality chronic disease preventative care and management in both clinical and community settings and the health disparity of race.

Priority/Focus Area 2: Prevent Chronic Disease; Reduce obesity in children and adults

These focus areas were extensively detailed in December 2016 with NewYork-Presbyterian Hudson Valley Hospital's publication, *Community Assessment and Community Service Plan 2016-2018*.

This 2018 addendum to the Community Service Plan 2016-2018 was completed in November.

# **Executive Summary**

NewYork-Presbyterian Hudson Valley Hospital, located in Cortlandt Manor, New York, serves residents of Westchester, Putnam and Dutchess Counties. The 128-bed facility provides a wide range of inpatient services and ambulatory care with 463 practitioners on staff in 63 specialties.

Suburban communities make up a large portion of the hospital's service area, alongside well-recognized pockets of poverty where target populations experience a tremendous inequality in wellness. There is a large gap between the highest and lowest /socioeconomic classes within our service area, with family household income ranging from less than \$10,000 to more than \$200,000.00. According to 2014 data provided by the Westchester County Department of Health, 87.1% of the Westchester County population ages 18-64 has health insurance which is below the NYS 2018 objective of 100%. Additionally, our primary service area faces an average unemployment rate of 8.75%.

As part of the NewYork-Presbyterian Regional Hospital Network, the hospital is aligned with the entire organization's "patient-centric" mission, which goes beyond a specific diagnosis, prognosis and treatment plan. To serve all, the hospital understands and implements strategies and programs that contribute to patients' wellness, such as creating healthy habits, practicing good nutrition and incorporating exercise in weekly activities. In addition, the hospital is highly engaged with New York

State's Prevention Agenda and deeply committed to advancing the health and well-being of our communities and neighbors.

#### Overview

**Priority/Focus Area 1:** Prevent chronic disease by increasing access to high quality chronic disease preventative care and management in both clinical and community settings and the health disparity of race.

Goal: Promote evidence-based care to manage chronic diseases.

Intervention: Healthy Heart Program, designed for African-American and Hispanic individuals, ages 45-65, who are at risk for heart disease.

The Healthy Heart Program is a free program designed to educate a minority population in the community with a specific diagnosis of a cardiac medical condition on the importance of healthy meal planning and the benefits of exercise. Enrollment consists of African-American and Hispanic individuals, ages 45-65 at risk of heart disease due to a previous heart attack, other cardiac health concerns or predisposition due to heredity, high blood pressure, diabetes or being overweight. The Healthy Heart Program brings together nutrition education and physical fitness with the aim of reducing the risk factors of cardiovascular disease.

**Note:** Beginning in September 2017, in an effort to positively impact the health of more participants over the course of the year, the program duration was reformatted to five cooking classes and a sixweek fitness membership. Our experience over the years noted that there was a significant drop-out rate over the five months and, as a result, the team restructured the program to maximize the benefits of the classes within a shorter time period. This enables our participants to still receive all the information and have a higher rate of completion.

The cooking classes are led by the chef, a graduate of both the New York University Food Studies Master's Program and the Natural Gourmet Institute. The recipes she uses were vetted with and approved by the NYPBeHealthy team of registered dietitians.

The chef's focus is teaching others how to better manage their health through diet and lifestyle changes. The program aims to provide long-term solutions to improving health. Long-term, the program emphasizes an increase in consumption of fruits and vegetables, and increase in heart health food preparation techniques, and increase in exercise habits, and increase in food label comprehension, a decrease in the consumption of soda and sugary beverages, and a decrease in the consumption of sodium. Moreover, the program seeks to empower participants, increasing their confidence in preparing heart healthy foods, and promotes mindful food consumption.

The start of each class begins with a review of the key points from the previous session, thereby reinforcing concept understanding over the duration of the program. Each class allows time for questions and is personalized to the needs of the participants. Participants are provided an education binder with health tips and recipes to take home. The cooking class also has access to the on-site organic garden which provides an opportunity for participants to learn to harvest fresh fruits and vegetables and incorporate them into "healthy heart" meals.

The program includes a limited membership – reflecting the length of each Healthy Heart program - at no cost to The Wellness Center, NewYork-Presbyterian Hudson Valley Hospital's fitness facility located

on campus. The fitness experts create a personalized exercise program designed to engage and educate the participant in the benefits of regular physical activity. The benefits available to the Healthy Heart participants are that exercise improves overall health: controls weight, combats health conditions and diseases, improves mood and boosts energy, and also promotes better sleep. The Wellness Center offers a wide range of exercise options from cardio equipment, weight training, and exercise classes to meet anyone's physical activity level.

Upon completing the program, participants are offered an opportunity to keep their membership to the Wellness Center at a reduced cost. Additionally, they are reminded that simply adding walking to their weekly regimen and monitoring their steps will also impact healthy outcomes. To this end, participants are given a pedometer to help monitor their daily steps, with 10,000 as the recommended goal.

Beginning in September 2017 and through October 2018, the cooking class curriculum was condensed but remained comprehensive for the five-week sessions, providing educational materials and recipes on the following topics:

Class 1: Food for Fitness Class 2: Healthy Fats

Class 3: Fruits and Vegetables

Class 4: Fun with Fiber

Class 5: Healthy Heart Celebration

(Note: A healthy meal is prepared together to celebrate the completion of the program and review of content, but also teaches about portion-control and eating strategies during celebrations, and how to discern and avoid overly salty dishes).

# **Results**

From 2016 to 2018, NewYork-Presbyterian Hudson Valley Hospital's achieved the goals of Priority/Focus Area 1, addressing the health disparity of race, and increasing access to high quality chronic disease preventative care with its Healthy Heart Program. A total of 78 individuals from minority backgrounds were served with heart health education and resources from 2016 to 2018:

	African-American	Latino	Total
2016	16	8	24
2017	16	6	22
2018	25	7	32
Total	57	21	78

In 2016, the program was held twice, for five months at a time. In 2017, one five-month program was held before transitioning in September to a five-week program.

• Noteworthy in 2018 was the increase in referrals by NewYork-Presbyterian Medical Group Hudson Valley physicians of their own patients to the hospital's Healthy Heart Program. In previous years, the hospital's Community Outreach team collaborated mostly with the Peekskill-based Hudson River Health Care (HRHC), a New York State federally-qualified health center, for recommendations. While that collaboration continued, in 2018 the Outreach team increased its efforts to physicians associated with NewYork-Presbyterian Medical Group Hudson Valley, which resulted in expanded membership in the program. In 2018 specifically, this meant that in addition to

community participation (HRHC referrals and other), the Healthy Heart class enrollment reflected 10 patients of our cardiologists and 14 patients of our internal medicine practitioners.

- Beginning in August 2018, Dr. Patrick Thomas, Cardiologist, NewYork-Presbyterian
  Medical Group Hudson Valley, was invited to guide and participate in one class in each
  five-week Healthy Heart Program. In preparing the curricula for the program, Chef
  Emilie Berner had consulted our NYPMG HV Cardiology practitioners. Adding access to a
  notable cardiologist reinforced the curricula and Dr. Thomas shares insights with
  participants about optimizing heart health overall. In addition, his attendance produces
  a robust Q&A opportunity.
- With the restructuring of the program to five weeks in September 2017, biometric results pertaining to weight loss and an improvement in blood pressure readings were supplied at the start and conclusion of each five-week program, administered under the care of a Magnet nurse and an exercise trainer from the hospital's Wellness Center. Overall, within five weeks, most participants experienced an improvement in their blood pressure readings. These measures were shared with each individual to in turn discuss with their physician to make longer-term goals.
- Demonstrating the impact of the program, in terms of the results of all the Healthy
  Heart programs regardless of their length were the attitudinal shifts toward nutrition
  to support cardiovascular health and overall well-being. The following is from a
  representative participant survey group:
  - o **Importance of Fruits & Vegetables:** Comprehension increased significantly regarding how fruits and vegetables are essential to supporting cardiovascular health and overall well-being. Before the program, 83% of participants never or sometimes ate three or more servings of fruit per day. After completion of the program, 50% of the participants increased their daily intake of fruit, consuming three servings or more of fruit per day. Regarding vegetables, before the program, 75% of participants never or sometimes ate three or more servings of vegetables per day. At the end of their program, 100% of the participants recognized the importance of adding vegetables to their diets and included vegetable servings daily.
  - Consumption of Red Meat vs. Poultry, Fish & Vegetables: It has been suggested that overconsumption of red meat may be connected to increased cardiovascular risk; therefore, an emphasis should be placed on increasing poultry, fish and vegetables in one's diet. At the beginning of the program, when participants were asked how often they ate more poultry, fish, and vegetables than red meat at meals, two-thirds of the class never or sometimes ate more heart healthy foods than red meat at meals. Participants' comprehension increased again. By the end of the program, half of the participants reported that they ate more poultry, fish and vegetables than red meat the majority

of the time, recognizing the importance of reducing consumption of red meat.

- Reliance on Sugary Beverages: On the topic of overconsumption of sugary beverages as one of the leading contributors in diet-related illnesses, participants were asked, how often do you drink regular soda, sugary drinks, such as powdered drinks, fruit-flavored drinks, or sports or energy drinks? At the start of the program, 92% of participants reported that they never or sometimes drink regular soda or sugary drinks, which demonstrated that most already understood the negative impact of sugar-containing liquids. By the end of the program, that percentage grew to 100% "never or sometimes" consuming sugary beverages.
- Salt Intake: Overuse of salt has often been connected to hypertension and high blood pressure. Participants were surveyed on their intake of salt and at the start of the program 41% said they added salt to their food most of the time or all of the time. By the end of their program, 100% either eliminated salt completely from their diet or reported not adding salt to their food the majority of the time.
- Nutritional Literacy: Learning to read and understand food labels are important to participants' nutritional literacy. When participants were asked, how often do they read "Nutrition Facts" food labels when they shop for food, 17% read nutrition facts food labels when shopping for food. At the end of programming, 33% reported reading nutrition facts labels all of the time when shopping for food. Participants also reported an increased confidence about their ability to comprehend food labels: at the start, 50% were either not confident or only somewhat confident. By the end of the program, 100% felt some degree of confidence while 50% were "very confident."
- Culinary Skills Education: Further, the hospital's Healthy Heart Program is designed to empower participants in their culinary skills. At the beginning of the program, 41% of participants felt confident or very confident in their ability to cook heart healthy foods. By the end of the five weeks, 66% of participants expressed feeling confident or very confident in cooking heart healthy foods.
- Impact on Community: The impact of the Healthy Heart Program is measured in participants' sharing the information that they learned.
   After the program, 83 percent of participants answered that they had shared the information with family and friends.
- Attitudinal Shift: Perhaps most indicative of the success of this program
  is how participants report feeling upon completion of the program. In
  our starting survey, nearly 50% recognized that they needed to make
  healthy lifestyle decisions, thus their interest in the Healthy Heart

Program. The other half of participants disclosed at the start of the program that either they had not tried at all to change unhealthy habits or had tried a little, but were frustrated by a lack of results.

The goal of the Healthy Heart program is to have most participants undergo change and remain motivated, and this goal was realized. After the program, not one person remained negative, frustrated or only mildly committed. Instead, 16% were actively seeking information and changing unhealthy habits and 83% had made changes, were seeing results and said they would remain committed to a plan to achieve optimal health. In other words, four out of five participants embraced significantly new attitudes and corresponding behaviors, like eating better and exercising more, while one out of five was just behind them, taking action and deepening a commitment to the next level. This marked difference in attitude and behavior demonstrates how empowering this program is, and transformative for participants.

#### **Exercise Component**

Exercise is an essential part of the Healthy Heart Program. Included in the program is a six-week membership to the hospital's Wellness Center facility at no charge to our participants. The participants are required to have physician clearance to participate in the exercise program. The Wellness Center is the only medical fitness facility in the hospital's service area and has 300+active memberships through Q3 2018.

At the start of the program, a certified exercise trainer from the Wellness Center gives an introduction and overview of the membership benefits which includes a one-on-one fitness assessment and a fitness program designed specifically for each person. Included in the membership is use of all cardio and weight machines, as well as fitness classes such as Zumba, Step, Yoga, and Tai Chi. Emphasis is also placed on measuring one's progress, whether that is accomplished as Wellness Center members through our Activelinxx technology, through their own Smart Phone, or with the use of a pedometer. Drawing from the information supplied by the individual's medical provider, our exercise trainers design an exercise routine reflective of their health concerns and also instruct which exercise to avoid.

**2018 Findings:** Of the 32 participants enrolled in the Healthy Heart Program in 2018, 22 had their consultations. Of the 22, three individuals were "stand-outs" in that they attended at least once a week for six weeks. Those who did not participate in our Wellness Center offer said they had their own gym memberships to fulfill the exercise component of the program, and/or indicated the location of the hospital's Wellness Center was not geographically convenient for them.

A selection of participants' anonymous comments from a program ending in August 2018:

Loved the class! Thanks so much for giving back to the community this way. I am so planning to take more classes.

Very good program! Nutrition education is welcomed and cooking techniques invaluable. Always learning something new from the heart healthy kitchen.

Excellent class, I am sharing this with friends whom need to take this class, really enjoyed and benefitted from it.

I thoroughly enjoyed this program. It has enhanced my knowledge of my dietary intake. Presently I could not think of anything to improve this program.

In addition to the Healthy Heart Program, community members have access to NewYork-Presbyterian Hudson Valley Hospital's Farmers Market offered year round in the Main Lobby, making healthier food choices more readily available. Healthy Heart participants were encouraged to use the knowledge learned in the cooking classes about the nutritional value of fresh fruits and vegetables, ask questions directly of the farmers and purchase fresh produce. Chef Emilie Berner also began giving guided tours of the Market in 2018, sharing insights and recipes. Each market serves an average of 479 visitors

#### **Overview**

**Priority/Focus Area 2:** Prevent Chronic Disease; Reduce obesity in children and adults.

Goal: Expand the role of healthcare and health service provides in obesity prevention.

Intervention: Increase breastfeeding rates at discharge to 90% by training all Obstetrical Services staff on the benefits of breastfeeding and by providing breastfeeding education and support to mothers within one hour of birth; teaching mothers how to maintain lactation; and encouraging breastfeeding on demand.

In 2013, New York-Presbyterian Hudson Valley Hospital was the first hospital in the region to be certified "Baby-Friendly" by Baby-Friendly USA and the World Health Organization. This meant its Obstetrical Services Department was recognized for its superior care and commitment to making sure that mothers who choose to breastfeed have the best chance at success. In addition, NewYork-Presbyterian Hudson Valley Hospital has garnered a reputation in the region for providing a personalized birthing experience to support parents with their childbirth goals while providing a safe clinical environment.

The hospital is seeking recertification as a Baby Friendly Hospital in 2018.

In addition, since 2013, NewYork-Presbyterian Hudson Valley Hospital has been recognized as a "Breastfeeding Friendly Employer." The hospital worked with Hudson River Health Care, based in Peekskill, a New York State federally-qualified health center, to successfully maintain a dedicated lactation and breastfeeding room for its staff.

The link between breastfeeding and reducing obesity is underscored by various sources including:

- The Centers for Disease Control website (www.cdc.gov) states that breastfeeding protects
  against childhood obesity and the success rate among mothers who want to breastfeed can be
  improved through active support from their families, friends, communities, clinicians, health
  care leaders, employers, and policymakers.
- The New York State Prevention Agenda Dashboard for Westchester County reflects that the
  percentage of infants exclusively breastfed in a hospital has 'significantly worsened' from 48.7%
  in 2013 to 44.9% in 2016. As the state-wide prevention agenda goal for 2018 is 48.1%, it was
  deemed by Westchester County Department of Health that focusing on the intervention of

increasing breastfeeding at discharge is aligned with and supports the overall Prevention Agenda goals for 2018.

#### Results

From 2016 through October 2018, NewYork-Presbyterian Hudson Valley Hospital has achieved the goals of Priority/Focus Area 2, by expanding its role in obesity prevention by training all Obstetrical Services staff on the benefits of breastfeeding and by providing breastfeeding education and support to mothers within one hour of birth; teaching mothers how to maintain lactation; and encouraging breastfeeding on demand.

Specifically, the team of NewYork-Presbyterian Medical Group Hudson Valley physicians, midwives, Magnet nurses, lactation consultants and staff increased breastfeeding rates at discharge to 94%. This achievement exceeds the Prevention Agenda goal of 90% and built upon 2017 year-end results, which showed breastfeeding rates at discharge were 85%. In comparison, the New York state-wide prevention agenda goal in 2018 for breastfeeding rates at discharge is 48.1%.

In addition, NewYork-Presbyterian Hudson Valley Hospital nurses are Magnet nurses, recognized for their clinical excellence, best practices and innovation. Research shows that Magnet hospitals have better outcomes.

The policies implemented by NewYork-Presbyterian Hudson Valley Hospital's Obstetrical Services Department are taken directly from the World Health Organization's "Ten Steps to Successful Breastfeeding:"

- Have a written breastfeeding policy routinely communicated to staff. (In 2017 and 2018, patient collateral at NewYork-Presbyterian Hudson Valley Hospital markedly improved with the development of a new Patient Guide in collaboration with NYP, and the placement of increased signage about breastfeeding, not only in OB but also in all units and public access areas.)
- Train staff in the skills necessary to implement breastfeeding policy (NewYork-Presbyterian Hudson Valley Hospital employs a full-time lactation consultant who provides a one-on-one session with each OB patient; on average, 800 births occur at the hospital annually.
- Provide breastfeeding education to all pregnant patients about the benefits of breastfeeding. Prenatal classes are offered monthly at the hospital, including breastfeeding education, and all patients are supplied with written materials. In addition, post-delivery and pre-discharge, the hospital's lactation consultant meets individually with each mother, who is also informed about the hospital's bimonthly Breastfeeding Support Group.
- Help mother initiate breastfeeding within one hour of birth.
- Show mothers how to maintain lactation even if they are separated from their infants.
- Provide breast-milk unless otherwise medically indicated.

- Practice rooming-in which allows mothers and infants to remain together 24 hours per day.
- Encourage breastfeeding on demand.
- Give no pacifiers or artificial nipples to breastfeeding infants.
- Establish and promote breastfeeding support groups and refer mothers to them upon discharge from the hospital.

NewYork-Presbyterian Hudson Valley Hospital will maintain its focus on the importance of breastfeeding to prevent chronic disease and reduce obesity in children and adults, with other initiatives as well:

- o In 2018, NewYork-Presbyterian Hudson Valley Hospital served the community by providing bi-monthly breastfeeding education and support groups to 300 new mothers. Partner resources for the hospital's Obstetrical Services Department has grown from 2016 to 2018, to include the Visiting Nurses Association of Hudson Valley and Putnam, Visiting Nurse Services Westchester, the Putnam County Department of Health, ArchCare (formerly Dominican Health), and the Peekskill-based Hudson River Health Care (HRHC). Hospital staff directs our patients to resources for referrals.
- In 2018, Magnet nurses routinely staffed tables at community fairs and our Farmers
  Market, interacting with hundreds of participants. While we strive to increase the
  success rate among mothers who want to breastfeed, as community representatives our
  Magnet nurses are respectful of individual choices as well.
- NewYork-Presbyterian Hudson Valley Hospital's Chef Peter X. Kelly Teaching Kitchen has offered a "Do-it-Yourself Baby Food" class for mothers and fathers. With two classes to date, 17 people, 15 of whom also brought their babies, have participated and learned techniques in preparing healthier food items for their children.

# New York State Prevention Agenda 2019 - 2024

The New York State Public Health and Health Planning Council's Ad Hoc Committee to Lead the Prevention Agenda is updating the Prevention Agenda for the next six years, from 2019-2024.

NewYork-Presbyterian Hudson Valley Hospital remains part of the Westchester County Health and Hospital Planning Team and has reviewed and contributed to a new survey about priority health care concerns, to be shared with community members in first quarter of 2019.