CASE STUDY

The PeakHealth Wellness Program:

A community approach to chronic disease self-management

Teva Pharmaceuticals and
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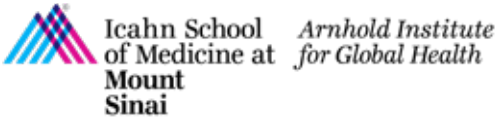

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Introduction

What is the PeakHealth Wellness Program?

Self-management is a promising approach for treating chronic conditions because it helps individuals identify barriers and solutions associated with their conditions. The PeakHealth Wellness Program (PHWP) is a 12-week intervention designed to help patients within PeakHealth—a clinic in Mount Sinai Health System providing high-intensity primary care to persons with high medical costs and needs—self-manage their chronic conditions through help from their peers.

Case study: the pilot phase

In collaboration with leaders at PeakHealth, we built the PHWP to help patients with multiple chronic conditions support each other in achieving better health outcomes through self-management. Each weekly, 90-minute program session focused on a different health topic—ranging from healthy eating; to medication adherence; to managing stress and chronic pain—and was co-led by peer leaders (also PeakHealth patients) and professional topic experts. Through peer leadership, participants received additional informational and emotional support around shared medical and sociocultural issues.

The PHWP is an example of how a peer-led self-management program can be created within a high-risk, low-socioeconomic-status community. The following case study details the design, dissemination, and results of the PHWP pilot for reference.

Background

Why focus on chronic disease self-management?

Across the globe, non-communicable diseases have become an increasing threat to population health and economic growth. Policymakers and public health officials alike have recognized the need for chronic disease management in particular, developing coordinated health care interventions for high risk populations.

Compared to other high-income nations, the United States has substantially higher healthcare expenditures with remarkably poor population health outcomes and access to care. According to the Centers for Medicare and Medicaid Services, U.S. healthcare spending grew 4.6% in 2018, reaching $3.6 trillion: or $11,172 per person. Relative to the nation's gross domestic product, health spending accounted for 17.7%.[1] As chronic diseases remain the leading cause of death and disability in the U.S.[2], the understanding, management, and continued prevention of these conditions is imperative to provide better quality healthcare to patients and reduce cost burden nationwide.

Images Source: National Center for Chronic Disease Prevention and Health Promotion

Treating chronic conditions is particularly challenging because they rarely exist in isolation. While 6 in 10 American adults have a chronic condition, 4 in 10 U.S. adults have two or more chronic conditions.[3] Given America's current demographics—wherein 10,000 Americans will turn 65 each day from now through the end of 2030[4]—the overall number of patients with comorbidities will soon increase significantly.

Currently, the top chronic conditions affecting Americans are heart disease, cancer, chronic lung disease, stroke, Alzheimer's disease, diabetes, and chronic kidney disease. The nation's aging population, coupled with the rising prevalence of key risk factors (tobacco use, poor nutrition, lack of physical activity, and excessive alcohol use) suggest that these problems will only intensify if not effectively addressed now. Funneling resources towards the management of chronic conditions would lead to dynamic advances in disease prevention, improved health outcomes, and equitable value-based care.

Many of these chronic conditions—while unique in their specific characteristics and demands—present similar management challenges, including: dealing with symptoms, tracking complex medication regimens, and maintaining appropriate levels of nutrition, diet, and exercise. Self-management is a promising approach for treating chronic conditions by moving beyond traditional public health education, to teaching individuals how to actively identify barriers and solve problems associated with their conditions. Backed by years of validated literature supporting the effectiveness of self-management, we developed the PHWP with similar goals for improving the quality, effectiveness, cost, and equity of health care delivery in East Harlem, NY.

Why the PeakHealth clinic and how does it work?

The PeakHealth clinic is a care model designed for Mount Sinai patients at high risk for avoidable hospitalizations and emergency department visits. Many PeakHealth patients are low-income individuals and face major structural barriers to care in addition to multiple complex medical conditions.

With approximately 350 patients enrolled, the PeakHealth clinic delivers care through a multidisciplinary approach which includes physicians, nurse practitioners, social workers, care coordinators, psychiatrists, and licensed practical nurses. Enrolled patients create comprehensive medical and psychosocial care plans with their assigned primary care physician and social worker, and meet frequently with their care team to follow up on their listed goals and overall health status. Patients who achieve their medical and psychosocial goals graduate from the program and return to another practice of their choice.

This unique care model has been shown to prevent unnecessary hospitalizations and save healthcare costs for both patients and providers.

Yet despite its success, some patients struggle to graduate—facing numerous challenges with understanding and managing their chronic conditions outside of the clinic.

Even with a broad, multidisciplinary professional health team to assist each patient, PeakHealth's care model lacks a peer support element: patients helping each other to find and embrace strategies to manage their chronic diseases. With PeakHealth leadership, we saw an opportunity to incorporate peer support into patients' care plans and make this innovative program stronger still.

Introducing: the PeakHealth Wellness Program

We created the PHWP to keep patients with multiple chronic conditions healthy and out of the hospital by working with them to improve self-management techniques and health behaviors.

In partnership with The Arnhold Institute of Global Health, the PHWP is funded by a grant from Teva Pharmaceutical Industries, as part of a larger agenda to establish and share interventions to support patients managing

PeakHealth care team members participating in Wellness Day

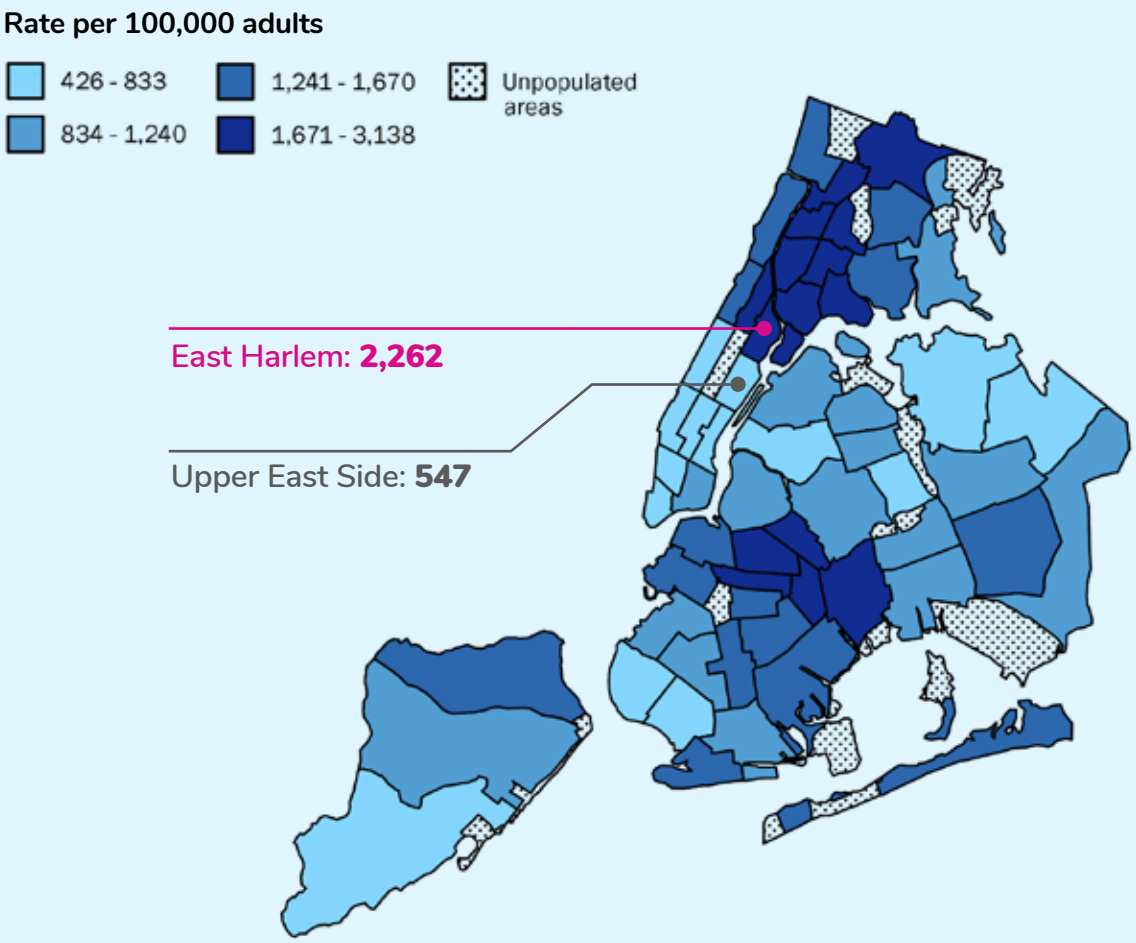
multiple chronic conditions. Although Teva funded the initiative based on a pre-agreed implementation plan, the company was not involved in any aspects of the design, implementation, or evaluation of the initiative.

Who are the patients we serve?

Like most PeakHealth patients, PHWP participants come from ethnically diverse but socially and economically disadvantaged communities. A vast majority of participants are from the East Harlem neighborhood in New York City, which hosts approximately 124,000 residents with 50% identifying as Latinx (predominantly Puerto Rican), 31% black, 12% non-Latinx white, 6% Asian and 2% other races.[5]

Many East Harlem residents struggle with limited financial resources, while bearing a disproportionate burden of chronic diseases such as diabetes, arthritis, and chronic heart failure. With nearly one third of residents living below the poverty level, East Harlem residents rank 5th in avoidable adult diabetes hospitalizations—more than twice the rate in New York City as a whole.[5]

Avoidable Hospitalizations Among Adults in NYC[5]



Source: New York State Department of Health, Statewide Planning and Research Cooperative System, 2014

Program Implementation

Peer leader training

In the PHWP, peer leaders are responsible for leading participants through discussions about challenges related to their chronic conditions and ways to overcome those challenges through information, motivation, and support.

Prior to program start, we recruited peer leaders from a pool of eligible PeakHealth patients. For this pilot, eligibility was determined by patients' ability to speak and write in English. We also looked to recruit peer leaders of diverse age and ethnicity who showed success in their own self-management journey. As such, we recruited 4 peer leaders from the community who were actively working on managing their chronic conditions, supportive of others in a group, and who interacted well with their peers.

Each peer leader underwent an intensive 6-week training program in leading group discussions, codes of conduct, motivational interviewing techniques, chronic condition overviews, conflict resolution, facilitation techniques, and managing confidentiality. Details of how we curated this content can be found within the Inspiring Self-Management Through Peer Leadership Toolkit.

Additionally, peer leaders learned how to facilitate goal-setting and action-planning exercises. Each weekly training session was led by PeakHealth's lead social worker and the Wellness Program's program director, and a clinical research coordinator from the Arnhold Institute.

Patient recruitment

For this pilot, patients were recommended by PeakHealth physicians, nurse practitioners, and care coordinators based on the frequency and severity of patients' chronic conditions and their motivation to address them. An initial list of candidates was then vetted by the lead social worker at PeakHealth for language barriers and psychosocial conflicts. The clinical research coordinator was then responsible for contacting and enrolling patients into the PHWP.

Program design

Each PHWP session was approximately 90 minutes and took place in a conference space at the New York Academy of Medicine. The location and timing of group sessions were selected based on proximity to the clinic and suitability with the program team's schedule. The structure of the group discussion aimed to promote health literacy, self-advocacy, and engagement in individualized care, while simultaneously creating a space for open discussion and questions. Each session consisted of a check-in, topic overview, topic expert discussion, physical activity, and goal-setting and action-planning activity.

Our topic experts included a pharmacist, clinical pain management physician, internal medicine physician, social workers, and care coordinators. Detailed session content can be found within the accompanying Toolkit and on our website.

Measuring outcomes

We evaluated the pilot in two phases. We first conducted a baseline and post-intervention quantitative survey of participants' self-reported medication adherence, depression level, substance use, and health care access, in addition to blood pressure and body mass index.

Secondly, we conducted qualitative key informant interviews with clinical staff at PeakHealth clinic, program participants, and peer leaders to measure PHWP feasibility, acceptability, and effectiveness. In addition, peer leaders took baseline and post-intervention self-assessments which examined self-efficacy and knowledge at before training vs at end of program completion.

Results

Quantitative outcomes

Out of 50 eligible participants, 27 were deemed active or passive refusals and 23 verbally agreed to participate. Out of the 23 patients who agreed to participate, 17 were consented, 12 remained active in the program (patients were considered active if they attended 2 or more sessions), and 1 one was removed from the program. Therefore, 15 patients completed the program, including 3 of 4 trained peer leaders.

The average age of our participant population was 54 years, with 33% identifying as male and 67% female. 27% reported high school as their highest level of education, 53% are unable to or are out of work, and 73% reported an income level less than $35,000. Patients self-reported a complex variety of chronic diseases, including chronic obstructive pulmonary disorder, congestive heart failure, diabetes mellitus, chronic kidney disease, and systemic lupus erythematosus.

Patients' baseline average body mass index was 36.23; and 80% were overweight or obese. 53% had an initially hypertensive blood pressure reading; 13% of participants reported themselves as smokers, 47% did not engage in physical activity, 47% stated that they missed appointments some of the time, 40% forgot to take their medication some of the time, and 20% decided not to take their medication some or all of the time. 60% reported getting under 8 hours of sleep each night, 73% reported having some difficulty walking about, 27% reported problems washing or dressing themselves; 73% struggle with performing usual activities of daily living, 86% have moderate pain or discomfort, and 60% state that they are moderately or extremely anxious or depressed.

Results from the satisfaction survey showed that 100% of program participants agreed that the program materials were easy to understand, the topic experts were very important, the weekly action plans helped them reach their goals, and the group sessions gave them ideas that were easy to work into their life. 90% believed that the peer leaders were very important and helped them to reach their personal health and fitness goals. 60% felt they were confident navigating health care forms.

There was no significant change in participants' level of physical activity, body mass index, blood pressure, or self-reported depression score; however, the sample size was not sufficiently large to detect most clinically significant changes.

Qualitative outcomes

Our team completed 14 in-depth qualitative interviews. Formal transcript coding has concluded and thematic analysis is pending as of October 2020. Initial qualitative evidence from the pilot shows that after attending the PHWP, participants reported the following:

- **Improvements in quality of life and attitude towards chronic conditions**
- **Increased usage of self-management tools and skills**
- **Confidence in advocating for their health needs**
- **Strong sense of community and social support from peers**
- **Consistent mental and emotional health progresses**

Next Steps

COVID-19 and the PeakHealth Wellness Program

The PHWP was initially designed as an intensive 12-week in-person intervention to help medically and socioeconomically at-risk patients 1) improve health behaviors (diet and exercise); 2) increase self-management abilities (self-efficacy and self-advocacy); and 3) build sustainable quality of life improvements (mental health).

In response to the COVID-19 pandemic, we intend to further test, evaluate, and scale this program to help patients at greatest risk of COVID-19-related disease and death take progressive and preventive measures to protect their health.

In urban areas such as New York City, COVID-19 has negatively impacted patients' ability to receive and access quality medical care. For patients living with chronic diseases, the combination of disruptions or delays in care and shifting daily routines has further challenged them to manage their health and psychosocial needs.

Marginalized populations, including minorities and low-income communities, have less access to testing and are more likely to experience detrimental changes in housing stability, food security, and mental health due to social isolation. It is critical that care teams continue to prioritize the ongoing needs of patients living with chronic conditions and identify new ways to deliver the needed self-managing support.

In order to scale up this intervention to both comply with COVID-19 social distancing measures and empower patients to understand and protect themselves against COVID-19, we are working now on a 3-pronged approach, detailed to the right.

Plan for Scaling the PHWP

EXPAND our cohort of eligible program participants by partnering with practices in the Mount Sinai Health System that serve medically vulnerable, high risk patients similar to our PeakHealth cohort.

Presently, the PeakHealth clinic serves 350 patients, not all of whom are able to participate due to medical or psychosocial barriers. The inclusion of other practices within the health system would increase our eligible patient population to nearly 1,700. With an estimated 10% enroll rate, we intend to grow our enrollment from 15 patients to 100-200.

DEVELOP an online platform to deliver a more robust, evidence-based self-management initiative.

We have begun a licensed partnership with the Chronic Disease Self-Management Program (CDSMP)—among the most established and effective peer support behavior change programs worldwide—to leverage their curriculum for a more intensive and more scalable version of the PHWP. This virtual CDSMP program will involve six weeks of online peer support, patients will learn to live better and manage their chronic conditions by improving their self-efficacy, motivation and knowledge on self-management practices.

INTEGRATE behavior change content optimized for marginalized persons with limited financial resources and health literacy—including for COVID-19.

The CDSMP has worked effectively for many socioeconomically diverse populations worldwide. But its accessibility for marginalized people as a virtual platform is less established. In discussion with CDSMP leadership – and in partnership with other community groups across New York City – we will work to make the PHWP a model for virtual CDSMP delivery that works for everyone. We will integrate messaging around COVID-19 health and safety into this model – including around emotional well-being and mental health.

We intend to ensure the sustainability of the PHWP by:

1. Exploring financing mechanisms through the Mount Sinai Health System
2. Obtaining input and buy-in from community and stakeholder organizations
3. Establishing mechanisms to identify and solve challenges
4. Documenting and sharing information on program progress

PeakHealth Wellness Program participants and leaders celebrate their accomplishments at the end of 12 weeks

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