

Summer 8-10-2018

Healthy Lifestyles: How a Community-Based Intervention is Helping Low-Income Patients Battle Chronic Disease

Gina Baik
ginabaik17@gmail.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>

 Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Baik, Gina, "Healthy Lifestyles: How a Community-Based Intervention is Helping Low-Income Patients Battle Chronic Disease" (2018). *Master's Projects and Capstones*. 825.
<https://repository.usfca.edu/capstone/825>

This Project/Capstone is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.

Running Head: HEALTHY LIFESTYLES: HOW A COMMUNITY-BASED
INTERVENTION IS HELPING LOW-INCOME PATIENTS BATTLE CHRONIC
DISEASE

Healthy Lifestyles: How a Community-Based Intervention is Helping Low-Income Patients

Battle Chronic Disease

By

Gina Baik

A Capstone Project submitted in partial fulfillment of the requirement for the degree of Master of
Science in Behavioral Health

University of San Francisco

San Francisco, California

August 2018

Advisor: Dr. Kelly McDermott

Abstract

Background: This project aimed to evaluate a weekly group medical visit provided at a federally qualified health center, called Healthy Lifestyles + Open Source Wellness. The weekly group provides guided movement, mindful meditation, nutritious snacks, health education, group health coaching, and clinical monitoring for low-income patients with chronic conditions. The group aims to promote positive lifestyle changes to manage and treat various chronic conditions, such as diabetes, hypertension, chronic pain and obesity.

Methods: Interviews were conducted with four staff members, six steadily engaged patients, and seven disengaged patients who visited and did not return to the group. Weekly observations of the group medical visits were also made over eight months.

Results: The camaraderie and social support was the most valued aspect of the weekly group. Patients also expressed enjoyment of the guided movement, the practical information learned, and access to health professionals. A conflicting schedule, lack of transportation, and misinformation provided by the clinic staff were the most apparent themes for the patients who did not return to the group.

Discussion: Suggestions to help solve these issues with patient retention include public transportation vouchers and improved communication among the referring providers and clinic staff. Since connection was the largest value expressed, the activities should aim to foster socialization and communication between patients. In addition, the monthly surveys that the patients complete should be simplified and allow constructive feedback for the group.

Keywords: Chronic disease, chronic conditions, lifestyle medicine, nutrition, exercise, physical activity, mindfulness, connection, community, social support, health coaching, low-income, group medical visit, shared medical visit

Executive Summary

Chronic conditions such as heart disease, type 2 diabetes, and obesity are the leading cause of morbidity and mortality in the United States (CDC, 2017) and affect lower income populations at higher rates (WHO, 2018). These conditions are largely preventable and proper management can reduce adverse health outcomes. Prevention and management include health behaviors related to nutrition, exercise, stress management, and social connection. However, proper lifestyle changes are difficult for many patients, and especially among low-income populations due to barriers such as lack of healthcare access and food insecurity.

The Healthy Lifestyles + OSW is a weekly group at a low-income community clinic in Hayward, California serving patients with chronic conditions. When referred, patients can come in for thirty minutes of movement, ten minutes of mindful meditation, receive a small lesson about a health behavior topic, eat a healthy snack, receive professional health coaching around personal lifestyle changes, and receive free produce. Steady attendance and participation to the group is key for the patients to learn and maintain positive lifestyle behaviors. By setting weekly goals and being held accountable by the staff, they are more likely to perform healthier behaviors, make better decisions, and improve their health outcomes.

This capstone project aimed to identify areas of improvement through interviews and observations. Qualitative data around patient values and barriers was collected in the form of phone-interviews from four of the Healthy Lifestyles + OSW staff members, six engaged patients, and seven disengaged patients. Weekly group observations were also conducted, over the course of eight months.

From all areas of data collection, there was generally positive feedback of the group. Patients expressed their appreciation for the camaraderie and the useful information they learn.

And since they struggle with access to their providers through the clinic, they appreciate the access they have to the medical staff through the group. When asked which activity in the group is most enjoyable, five of six retained patients responded with the thirty-minutes of movement and all six emphasized the opportunities to connect with the other patients.

From the interviews and observations, there were three main themes of why patients did not return. The group runs on Thursday afternoons, causing many schedule conflicts with childcare and day job schedules. There was also concern with finding transportation to Hayward Wellness every week. The final and most urgent issue is the misinformation that the Hayward Wellness staff provides to the patients about the group during the referral process. Many providers did not give accurate information about what the group purpose was and what activities are included.

These findings from the observations and interviews suggest improvements and ideas within the clinic and within the group. The providers at the clinic need to have a clear idea of what the group is, so they can provide realistic expectations for the patients they refer. The receptionists that make reminder calls also need to have accurate information about the group in order to properly inform the patients. Increased communication between the group staff and the clinic staff needs to occur for this to happen.

Some other recommendations to the group include offering public transportation vouchers, or organizing carpool arrangements for those who don't have a means to get to the clinic. There should also be an intentional focus on nutrition, perhaps with a short session of mindful eating when the snack is served and cooking demonstrations. Any new or adjusted activities within the group should attempt to promote more interaction between all of the participants. The monthly survey should also be edited to include more basic language, a

simplified format, and allow patients to provide feedback on the group. The Healthy Lifestyles + OSW group is a positive medical and social resource for its patient population facing chronic conditions.

Literature Review

Chronic disease is the leading cause of morbidity and accounts for 70% of all mortality in the United States (Centers for Disease Control and Prevention [CDC], 2017). In 2012, nearly half of all U.S. adults had at least one chronic condition, while a quarter of all U.S. adults had at least two chronic conditions (Ward, Schiller, & Goodman, 2014). Chronic conditions such as diabetes, heart disease, and obesity account for 76% of all physician visits, 81% of hospital admissions, and 91% of all prescriptions (Partnership for Solutions, 2004). And this contributes to higher prices of healthcare and pharmaceuticals in the U.S compared to other industrialized countries (Squires & Anderson, 2015), which can then impact access for lower-income adults with chronic disease. Patients who are classified as low-income and face chronic health conditions are not adequately supported by traditional medical care for multiple reasons (Mao et al., 2017). This widespread issue among lower-income populations calls for more cost efficient and evidence based solutions to approaching management and treatment of chronic conditions.

Health Behaviors

Physical activity.

There is a bidirectional relationship between lack of physical activity and chronic disease. A sedentary lifestyle is a health risk factor for developing chronic health issues (CDC, 2017), while pain and physical impairment from chronic disease is a significant risk factor for physical inactivity (Ashe, Miller, Eng, & Noreau, 2009). For those who experience pain and functional limitations from their health conditions, regular physical activity is not very achievable (Ashe et

al., 2009). For low-income populations facing chronic conditions, achieving regular physical activity might not be possible due to environmental barriers related to their socio-economic status. Crime, poor walkability, and low air quality are some impediments that lower-income communities face in increasing physical activity (Larsen, 2016).

However when achieved, proper physical activity can modify the severity and progression of chronic conditions (Sawatzky, Liu-Ambrose, Miller, & Marra, 2007). Physical activity helps improve mobility limitations, reduces pain, and increases emotional well-being (Sawatzky et al., 2007). Regular physical activity can reduce mortality rates within cardiovascular disease, and prevent attainment of future conditions while delaying progression of existing chronic conditions (Bodai, Nakata, Wong, 2017, Sawatzky, Liu-Ambrose, Miller, & Marra, 2007). Developing sustainable healthy exercise attitudes however takes time, effort, and personalization (Ashe et al., 2009, Minich & Bland, 2013). Increasing regular physical activity is therefore an important yet underutilized treatment for various chronic conditions.

Nutrition.

In 2015, 40% of U.S. adults ate less than one serving of fruit a day and 22% of adults said they ate less than one serving of vegetables a day (CDC, 2017). Federal guidelines for healthy eating in the U.S. include less than 10% of calories per day from added sugars, less than 2,300 mg of sodium per day, and a variety of fruits and vegetables per day (U.S. Department of Health and Human Services [USDHHS], U.S. Department of Agriculture [USDA], 2015). Unfortunately these standards are not largely met, with a common barrier of lack of access to healthy foods (Larsen, 2016) especially for lower income adults. Limited fruits and vegetables, and excessive sugar and sodium intake are examples of the many dietary issues that contribute to the larger issue of widespread chronic disease. Sociodemographic factors such as lower income,

less education, and sedentary lifestyles increase an adult's chances of consuming more added sugars (Park, Thompson, Pan, McGuire, Galuska, & Blanck, 2016). According to a study by Jackson, Coleman, Zhao, and Cogswell, 90% of Americans over the age of 2 years consume more than the recommended amount of sodium (2016). This increases the risk for high blood pressure and of many chronic heart and health issues (Jackson et al., 2016) leading to the state of chronic conditions in our country today.

Food insecurity.

Food insecurity is the inability to access or afford safe and nutritionally adequate food to maintain a healthy lifestyle (United States Department of Agriculture, Economic Research Service, 2017). This leads to lower-income populations facing the issue of food insecurity at higher rates (Larsen, 2016). Not surprisingly, there is also a large association between food insecurity and chronic conditions such as diabetes and hypertension (Seligman, Laraia, & Kushel, 2010). Some reasons for this association include the high cost of medical treatment for chronic conditions that leave little funds for purchasing healthy foods, and the lack of full-service grocery stores in low-income neighborhoods forcing the population to rely on convenience stores with foods that hold little nutrition (Seligman, Laraia, & Kushel, 2010).

The Illness Experience

Social connection.

Social isolation is defined by a lack of quality relationships with other people and is a chronic, psychosocial condition underlying chronic illness (Larsen, 2016). Physical consequences of social isolation include almost all chronic diseases, high mortality rates, and diminished overall well being (Larsen, 2016). Socially isolated individuals are also at risk for a sedentary lifestyle, poor nutrition, re-hospitalizations, and avoidable admissions (Larsen, 2016).

Chronically ill adults with lower income and constrained finances are also at a higher risk for social isolation (Larsen, 2016). Depression is a common comorbidity to physical chronic diseases (Larsen, 2016) and there is a bidirectional relationship among depression and social isolation among chronically ill patients. Less social support predicts higher depressive symptoms in individuals with chronic disease (Bisschop, Kriegsman, Beekman, & Deeg, 2004) and depression increases the likelihood of social isolation (Larsen, 2016).

Individuals with chronic disease are at risk for social isolation due to many reasons, such as loss of social roles or functional disabilities (Larsen, 2016). Interventions for socially isolated, chronically ill patients should provide opportunities to build social support. Group behavioral therapies that teach social skills are a proven method to help individuals with chronic disease reintegrate socially (Larsen, 2016). Interventions should offer social support through emotional assistance, information, and resources. The most effective interventions are group structures that are coupled with an educational input (Larsen, 2016). This can help redevelop a social identity for the patient in a positive way that accepts and manages their chronic illness.

Stress management.

It is well known that stress is a common part of everyone's life, but is harmful in excessive amounts. For a patient with chronic disease, disease management adds to daily stress. Likewise, the prolonged course of illness can bring pain, suffering, and a decreased quality of life (Whittemore & Dixon, 2008). The loss of health, independence, finances due to healthcare costs, and unmet goals can bring additional stress to a patient's life (Larsen, 2016). When a patient has more life stress, they feel less personal control over the illness, they perceive worse consequences, and display more negative emotions (Karademas, Karamvakalis, & Zarogiannos, 2009).

Mindfulness is a common stress reducing technique that has empirically proven to help management of chronic disease. For example, diabetic patients are more accurate in estimates of their blood glucose levels when they steadily practice mindfulness techniques (Kiken, Shook, Robin, & Clove, 2018). In the study by Kiken and colleagues, dispositional mindfulness also helped reduce diabetes related distress and improved self-management behaviors (2018).

Interventions that target stress in patients with chronic disease, should consider their perceptions, negative emotions, and their ability to be interoceptive to their body.

Lifestyle Medicine

The widespread problem of chronic disease is incredibly important to address, especially since most chronic diseases are preventable and managed by modifying lifestyle behaviors.

Research shows that more than 80% of chronic conditions can be prevented through lifestyle factors such as healthy eating, regular physical activity, healthy weight maintenance, and emotional resilience (Bodai, Nakata, & Wong, 2017). Many healthcare providers prescribe this type of lifestyle medicine yet do not provide enough information to help their patients plan for functional change (Bodai, Nakata, & Wong, 2017). Many patients fail to properly adopt and sustain these changes, especially if they lack financial and social resources (Larsen, 2016).

Lifestyle interventions are actually more effective than traditional drug therapy and surgeries at reducing cardiovascular disease, hypertension, heart failure, stroke, cancer, diabetes, and all cause mortality (Hyman, Ornish, & Roizen, 2009). Lifestyle medicine is also low-cost and low-risk compared to traditional medicine (Hyman, Ornish, & Roizen, 2009, Minich & Bland, 2013).

Some risk factors addressed in this project include poor nutrition, sedentary lifestyles, stress, and social isolation (CDC, 2017) (Larsen, 2016). By changing risk factors into healthier

lifestyle behaviors such as eating more fruits and vegetables and getting more physical activity, patients are more likely to see better health outcomes (CDC, 2017). Modifying lifestyle behaviors requires a personalized approach for the patient in order to be effective (Minich & Bland, 2013).

Group Medical Services

A shared or group medical visit is an integrative approach to traditional clinical appointments. A shared medical visit allows multiple patients to simultaneously meet with a provider or providers, which improves patient access to providers and increases clinician productivity (Bronson & Maxwell, 2004). During this group visit, key information is effectively delivered to many patients who share similar health issues while allowing time for other specific issues to be addressed (Bronson & Maxwell, 2004). An effective group visit includes patient education and clinical coordination, both of which has shown to improve the quality of life and health outcomes for a low-income and chronically ill population (Mao, et al., 2017, Bronson & Maxwell, 2004).

This group model has shown an enhancement in chronic disease management, by reducing emergency room visits, doses of medication, and disability days (Bronson & Maxwell, 2004). Not only is it cost efficient, productive, and effective for this patient population, it also increases their patient satisfaction with their medical care (Bronson & Maxwell, 2004).

Summary

The high prevalence of chronic disease is a widespread health crisis in our country that especially affects those of low-income status. Across the globe, there is a disproportionate concentration of chronic disease among the poor, which creates a cycle of disease and poverty

(World Health Organization, 2018). This calls for solutions and interventions that address this inability to make and sustain behavior change for low-income, chronically ill adults.

In addition to traditional medical care, lifestyle changes towards more physical activity, healthier nutrition, social connection, and stress management are largely necessary but underperformed in the chronically ill population. Interventions to improve these lifestyle behaviors among low-income patients should consider the interacting barriers that come with their socioeconomic status and condition to making these changes.

Group medical services as a form of intervention can be effective at promoting positive behavior change among this population while providing opportunities for social connection and solidarity. Incorporating collaborative goal setting into interventions can help strengthen patients' self-efficacy, social support, and successful self-management of health behaviors among this population (Bodenheimer & Handley, 2009). This project will discuss the benefits and needed improvements of a group medical service for a low-income and chronically ill patient population that emphasizes lifestyle medicine and behavior changes.

Open Source Wellness Agency Profile

History of Open Source Wellness

The name of the affiliated fieldwork agency is Open Source Wellness (OSW). OSW is a non-profit organization, founded in 2016. The two co-founders started OSW after working closely with healthcare professionals and patients with chronic conditions. They wanted to help close the large gap between behavioral recommendations and actual behavior change, since lifestyle behaviors are a large determinant of how chronic diseases form and progress. OSW's co-founders wanted to provide a space where patients can learn and practice eating healthier, exercising more, reducing stress, and connecting with their community in a fun and easy way.

They reference OSW as a “behavioral pharmacy”, in that they help patients access the right behavioral and lifestyle medication to help treat and manage their chronic conditions.

Since it is a non-profit organization, OSW is funded through a mixture of individual philanthropy, contracts, and grants. The mission of this organization revolves around four main concepts. These concepts are nutrition, physical activity, stress reduction/mindfulness, and social connection and can be reduced to their slogan of “move, nourish, connect, be”. They also make their programs either low-cost or free to increase accessibility for low-income participants.

OSW started in Oakland, California, at the Prevention Institute, which is a community building used for promoting health and wellness. The Oakland location is a community-based program, where participants attend a twelve-week program to learn and practice healthy lifestyle behaviors once a week. OSW has expanded to two other locations in the East Bay since it’s founding in 2016. There was a second program site contracted with Alameda Point Collaborative, which was an old naval base that had turned into a low-income housing site for the previously incarcerated and the previously homeless.

The third OSW location began in October of 2017 as a partnership with Hayward Wellness, in Hayward, California. Hayward Wellness is a federally qualified health center and community clinic under the larger Alameda Health System that serves a large low-income patient population. Before it’s partnership with OSW, a registered dietician and a nurse practitioner at Hayward Wellness ran a monthly group medical service called Healthy Lifestyles for adult, English speaking patients with chronic conditions to improve their lifestyle behaviors. When OSW partnered with Hayward Wellness for the Healthy Lifestyles group, the group changed to a weekly format on Thursday afternoons and was renamed Healthy Lifestyles + OSW. OSW’s contribution includes the physical activity, mindful meditation, health education,

and group health coaching pieces to the group. The Healthy Lifestyles + OSW group is unique to OSW in that the events are only for patients (and their family/caretaker) who have been referred into the group by their provider at Hayward Wellness. Another unique quality of this site is the clinical component including the registered dietician, nurse practitioner, and onsite medical assistants, as medical staff is not part of OSW's other sites. The last distinctive part of this clinical site, is that the patients receive a 10-dollar voucher from the clinic to use for fresh produce provided by a local farm, at the end of every group.

Thursdays With Healthy Lifestyles + OSW

A typical Thursday afternoon Healthy Lifestyles + OSW group consists of about twenty five patients coming into a large conference room, and completing their paper surveys with the help of a OSW staff member. The paper survey is distributed every four weeks of the twelve-week cycle of Healthy Lifestyles + OSW. The survey measures health behaviors related to physical activity, nutrition, depression, and anxiety symptoms of the patients. The patients also check in with a medical assistant to record their weight and blood pressure. Then, a group fitness instructor leads thirty minutes of movement, with activities that are modifiable for patients with mobility limitations. After movement, is ten minutes of mindful meditation led by an OSW staff member. A ten-minute didactic piece is then presented on a topic relating to physical activity, nutrition, stress reduction, or social connection. After the didactic, the registered dietician gives a small nutrition education piece to introduce the healthy snack. The dietician aims to coordinate the weekly recipe and the nutrition education piece with what is available at the farm produce table to encourage healthier cooking at home. Then, the patients sit at one of four tables with a group of other patients and a health coach to discuss their weekly goals and current experiences over the healthy snack. If needed, patients are able to do a medical check-in with the onsite nurse

practitioner in a connected private office at any time during the group. At the end of the group, the patients are given a print out of the recipe for the snack, and the ten-dollar voucher to use for fresh produce available in the clinic lobby.

Role of Project Manager

As an OSW intern, the project manager attends weekly administrative meetings and manages some social media and program outreach for the community based site in Oakland. On Thursday mornings, the project manager grocery shops according to the recipe that the registered dietician from Hayward Wellness chooses, and prepares the healthy snack. The project manager also assists the health coaches and patients with collaborative goal setting in order to increase patient self-efficacy or confidence towards positive lifestyle changes (Bodenheimer & Handley, 2009) during group coaching sessions. By participating in and observing the weekly Healthy Lifestyles + OSW group, the project manager was able to contribute meaningful work towards OSW's goal to bridge the gap between behavioral prescription and real lifestyle changes.

Methods

Overview

Qualitative data was collected over phone interviews with various stakeholders at the Healthy Lifestyles + Open Source Wellness (OSW) group at Hayward Wellness. The project manager also conducted weekly observations of the Healthy Lifestyles + OSW group, from January to August of 2018. This project topic was decided in collaboration with Open Source Wellness' co-founders to better understand patient values and improve their program at the Hayward location.

Over-the-phone interviews were conducted to collect information on respondent experiences, opinions, and suggestions for improvement of the Healthy Lifestyles + OSW group.

The main project aim was to see what changes could be made to increase patient retention and increase patient engagement. The interview guide was created by the project manager in collaboration with OSW's co-founders. Phone interviews were recorded, transcribed, and then analyzed by the project manager. Transcripts were analyzed to identify common themes. The themes were organized and presented with observations of the project manager as a formal report of recommendations to the Healthy Lifestyles + OSW group.

Participants

There were three main groups of stakeholders that were interviewed and recorded; OSW's Healthy Lifestyles + OSW staff members, patients with steady attendance (engaged patients), and patients who visited but did not return (disengaged patients). The initial goal was to interview a minimum of six engaged and six disengaged patients. By the end of the qualitative data collection, six engaged patients, seven disengaged patients, and four staff members were interviewed.

Engaged patients.

The first group of stakeholders includes patients referred by their provider at Hayward Wellness, who attended the program for at least three continuous months. Their experience with the Healthy Lifestyles+ OSW group was critical to recognize, as they were the primary target end users. They were able to share what motivates them to return every week, as well as what ongoing barriers might exist for them and their peers. Six patients were approached in person during the weekly Healthy Lifestyles + OSW group, and asked if they would like to participate in a phone interview about their experiences. All six engaged patients that were approached were interviewed over the phone by the project manager. The interview script used with engaged patient interviewees is available in Appendix A.

Disengaged patients.

The second group of stakeholders includes the patients referred by their provider at Hayward Wellness, who attended the Healthy Lifestyles + OSW group only one to three times. Valuable information about barriers to returning was gained from these disengaged patients. By understanding where the program fell short in catering to their attendance, key areas for improvement were identified. From OSW's survey data, patient names and contact information that had only been recorded once, were contacted for interviews. Of the twenty-one disengaged patients contacted, seven were interviewed. The interview script used with the disengaged patient interviewees is available in Appendix B.

Staff members.

The Healthy Lifestyles + OSW staff members were valuable sources of information because they have plenty of face time with the patients. They also contribute in operations to run the group and have insight of logistical barriers. Most of these staff members had been with OSW's Healthy Lifestyles + OSW since the start in October of 2017. A total of four staff members were interviewed for this project. Three of the staff members were employed by OSW, and one staff member was employed by Hayward Wellness. The interview script used with staff member interviewees is available in Appendix C.

Informed Consent

During planning and scheduling of interviews in person or over text/phone with the interviewees, the number of questions, expected length of time, the recording aspect, the de-identification during transcription, and overall purpose of the interview were shared. The informed consent information is repeated at the beginning of each phone interview. The interviewees are also informed of their rights to not answer and withdraw from the interview.

This primary informed consent script given at the beginning of each phone interview is available in Appendix D.

Data Collection Tools and Privacy

Phone interviews were scheduled in-person with the Healthy Lifestyles staff members and engaged patients. Phone interviews with the disengaged patients, were scheduled over phone or text message conversations. An application called NoNotes was used to record the phone interviews. The NoNotes application saves the recordings into a password protected, online account that was only accessible by the project manager. The recordings were then transcribed into organized Microsoft Word documents. During transcription, each interviewee was assigned a code id and identifying information within the interview was removed to ensure anonymity of the participants.

The interview transcripts on Microsoft Word documents were then analyzed for common themes. Each interview was read through carefully multiple times to identify certain topics. Each emerging topic was written down on a separate paper to create a large list of possible themes. Then that list of topics was consolidated into a shortened list of common themes. Each interview was then read again, and the text was tagged with the pertaining theme or themes. Then each theme was listed in a Microsoft Excel sheet in a horizontal array of cells. The tagged quotes from the transcripts were then copied and pasted in a vertical list under each pertaining theme alongside the code id of the interview it came from. The spreadsheet of themes and quotes made it easier to see the frequency of certain themes from the interviews.

Results

To see how different stakeholders viewed the weekly Healthy Lifestyles + OSW group at Hayward Wellness, a total of 17 phone interviews were conducted. Full group observations were

also made over the course of eight months, to see where improvements could be made for more efficiency and patient engagement.

Phone Interviews

Qualitative data about the Healthy Lifestyles + OSW group was collected through recorded phone interviews with three different groups of stakeholders. The three groups consist of engaged patients, disengaged patients, and group staff members. Six engaged patients, seven disengaged patients, and four staff members, were interviewed resulting in a total of 17 total phone interviews. The interviews were conducted to acquire multiple viewpoint opinions about the Healthy Lifestyles + OSW group, understand patient values, and learn how to improve patient participate retention.

Engaged patient interviews.

Of the engaged patients, three of the six interviewees had been attending the Healthy Lifestyles (adult, English) group since before the partnership with OSW. The other three engaged patient interviewees started at various times after the official partnership in October of 2017. Five out of these six engaged patients still consistently attend the weekly Thursday afternoon group. One had attended the group for over four months before leaving, due to a conflicting work schedule. Two interviewees in this group were male and four were female. Although there was no age demographics identified, all of the engaged patients interviewed were over the age of 40 years.

Five of the six engaged patients mentioned that the thirty minutes of guided movement was the most or one of the most enjoyable parts of the group. This information was surprising and encouraging considering that many patients struggle with achieving regular physical activity into their daily lives.

Table 1: *Engaged Patients' Quotes about Guided Movement*

“Even though, I do stuff myself, during the week, it’s really kind of helpful when you go in there and have lots of people doing it with you. Cause then, it becomes more fun and you’re more willing to do that kind of stuff. I like the fact that it’s very low stress, low impact. If you don’t feel like doing it or for some reason you’re hurting or whatever, they don’t try to make you do it.”

“At the beginning, I was dreading the exercise and all that kind of stuff, but I know I need it and it’s not as bad as I thought it was once I got into it. It’s actually kind of fun.”

“I used to be a really physical person when I was younger. You know what’s funny, those little exercises we do inspired me to become more physical, exercise wise.”

All engaged patients mentioned valuing the social connection they experience while in the group. Many stated it was a large reason of why they return to the group every week. The friendships and camaraderie formed during the group provide a fun and friendly environment. And many patients mentioned the theme of solidarity with others as an important value.

Table 2: *Engaged Patients' Quotes about Connection*

“I like the group stuff. Talking to people, and listening to things that they go through. And you’ve been able to share things with them, and you learn from people. There’s a good social camaraderie that happens. Like I said, the people are so friendly, its almost like how could you not enjoy going and seeing that?”

(“What drives you to come back?”) “The camaraderie I guess. Getting to know the other people as well as myself.”

“I love talking and listening. And it felt like we were part of something because we were all going through that same something.”

Gaining practical information was another large value presented in the interviews with the engaged patients. Many said they appreciated having access to the clinicians and health coaches for some of their questions and concerns, especially since the clinic itself has long wait

times for appointments and can be difficult to navigate. Some mentioned how they gain ideas and information by being with the other participants as well.

Table 3: *Engaged Patients' Quotes about Learning Information*

“Well you get to learn a lot of stuff about nutrition, cooking. You get really good ideas from the group and what [is taught]. And it’s very informative when you have certain questions about things, things like nutrients or something, or how to do things a little better for yourself.”

“And it’s kind of a growing, continuing, growing type of thing. You’re learning all the time. And it’s very informative when you have certain questions about things... or how to do things a little better for yourself.”

“[The staff] is very positive. They are not judgmental. And they give you good suggestions on different ways to do things.”

“Cause sometimes in the clinic itself, it’s harder to get through. But because we can talk to [the staff], they’ve been very, very helpful for me.”

Disengaged patient interviews.

Of the 7 disengaged patients interviewed, the number of visits to the Healthy Lifestyles + OSW group ranged from one to three. All seven of these interviewees had visited after the partnership between Hayward Wellness and OSW in October of 2017 and before April of 2018. Four of these interviewees were female and three were male.

The most urgent theme from the disengaged patients was the misinformation provided by the clinic staff. Most of this misinformation is the lack of clarity from the providers who refer them into the group. This leads to inaccurate expectations of what the group provides. There was also misinformation given from the receptionists and other clinic staff when patients came in for the weekly group.

Table 4: *Disengaged Patients' Quotes about Misinformation from the Clinic*

“Uhm well they said it would be a class about diet and exercise. I didn’t know we were gonna have an aerobics instructor. They didn’t say they were gonna make you exercise there.”

“[The provider] wasn’t clear on the explanation of what exactly it was to be honest. It definitely wasn’t what I thought it was.”
“[The provider] told me it was a support group. Maybe that I could even be a leader figure of some sort but can use the social support of the group. It was not very clear.”
“I was told by the front desk that I was only allowed for three visits... and that encouraged me not to come back.”

Schedule conflicts were the single most common reason for discontinuing attending the group. Six out of the seven disengaged patients interviewed stated their conflicting priorities as a major reason for not returning.

Table 5: <i>Disengaged Patients’ Quotes about Schedule Conflicts</i>
“I just don’t have time on my schedule.”
“My day off has changed. Before, my day off was Thursday, but now no more.”
“It was just that I was in between jobs and I had more interviews and things like that, that’s why I could not keep up with the group. And then, when I went back to full time employment, that’s why I just fell off. I was just in between two things at the time.”
“It was a good class, I just, you know, have two jobs and working in between those, I just don’t have the time to come in.”

Staff Members.

Of the Healthy Lifestyles + OSW staff members interviewed, one was employed by Hayward Wellness and three were employed by OSW. All four of the staff members were adult women over the age of 25.

Three of the four staff members mentioned a want for more intentional focus on the food during the weekly group. They felt that there was not enough being done to bring attention to the actual food, and encouraging the patients to recreate it at home. Mindful eating and small cooking demonstrations were suggested to fill this lack of focus.

<i>Table 6: Staff Members' Quotes on Focus on Food</i>
"I know for our patients, it's a challenge or sometimes they'll accept the meal cause its free food. But I don't really know how motivated they are to make it at home. So despite the interventions where we provide them with a recipe and give them produce voucher, to purchase the veggies, I am not certain if they actually make it at home."
"I also do strongly believe that the patients will not be making those dishes by themselves because they are not demonstrated how to prepare them. I think it would be more effective to have demonstrations where patients actually see how it's done."
"But that piece around the food that I want it to be more intentional of how the dish is introduced. And give people opportunity to ask themselves, 'Do I like this? Would I do this myself? How would I make it?' Even if it's only like three minutes, but just having it be a little more of a focus is something."

Two of the staff members mentioned a want for more training or information on outside resources. They expressed a want to provide more help for the patients but not sure how to go about it.

<i>Table 7: Staff Members' Quotes on Resources</i>
"Maybe there's something we can look into as far as removing stigma around seeking outside mental health services. Maybe connecting them to other social support resources. At least making it okay for them to seek that kind of help. Pointing out more options."
"I wish we were able to give better advice about how to navigate the system and connect them to resources. And right now we don't have that training."

All four staff members interviewed mentioned a need in improvement for the referral process. They recognized that some patients are not equipped with the right information from their referring providers. These expectations can interfere with how they engage with the group on their first visit.

<i>Table 8: Staff Members' Quotes on Referrals</i>
--

“Part of it might be out of our control. But I think the pieces that we can control, or that [the clinic] can do better, one is to offer better referrals or better explanations of what they’re being referred into.”

“On the referral side, sometimes people don’t know what they’re getting into. And it ends up not being a good fit and I think there can be more information given before they even come through the door the first time that would help prepare them.”

Observations

From January to August of 2018, the project manager acted as an intern and assistant health coach for the Healthy Lifestyles + OSW group at Hayward Wellness. As an intern, the project manager was in charge of grocery shopping and preparing the healthy snack for the group before it starts. Being the first staff member to arrive and staying through the post-group staff debrief session allowed the project manager to observe all stages of the afternoon group. The main purpose of observing each group was to see where changes could be made to encourage more patient engagement.

Many patients seemed to struggle with the paper survey that is distributed at their first visit, and the start of every month. The reasons for this struggle seem surround literacy issues, vision issues, and the previously mentioned theme of the difficult format, as the survey is three full pages of questions and scales. Usually the staff members are aware and attentive to this struggle, and assist the patients by reading the questions out loud and recording their verbal responses. However having the patients answer their responses out loud to a staff member might deter them from answering honestly. The survey has questions surrounding some sensitive topics such as depression and anxiety symptoms, and can affect how a patient might respond in front of others.

During the group, the registered dietician briefly describes the prepared snack, gives a short didactic of the nutritional value of the ingredients, and answers a few questions before the patients split up into their coaching tables. Then the patients are served the healthy snacks by some of the staff members. Just like many of the staff members and engaged patients mentioned, the project manager noticed a want for more information and focus on the food. The amount of actual time dedicated to the topic of nutrition is not nearly as much as the other activities.

Even though the general social environment is friendly and inviting, there are moments where some patients are by themselves when they could be mingling. When there is a new patient who enters the group, there is no protocol to introduce them to the other patients. The strict schedule of activities in the group allows little time for the patients to socialize with each other outside of their tables. However activities such as the guided movement, have potential to encourage more social connection among the patients.

Discussion

Summary of Findings

The results from the phone interviews and weekly observations, show a general positive opinion for the weekly Healthy Lifestyles + OSW group. The most common themes around these positive opinions were around the friendly social environment, gaining helpful information, and the guided movement portion. The themes around need for improvement include a lack of focus on the food during the group, schedule conflicts, and the referral process.

The results of the interviews and observations conducted through this project align well with the current literature on group medical visits. The Healthy Lifestyles + OSW patients displayed satisfaction with access to health professionals and educational materials that are otherwise difficult to obtain through their healthcare system. In general, patients who are able to

access group services feel more supported and connected, and improve their self-management of their conditions (Bronson & Maxwell, 2004). The Healthy Lifestyles + OSW patients stated that by bonding with others going through similar experiences, they felt more connected while learning from each other. Bronson & Maxwell stated that this shared learning experience increases patient satisfaction with the group service (2004).

Overall, the Healthy Lifestyles + OSW group is an effective service for their patients in providing important health information, increasing access to health professionals, and fostering connection. The emphasis on lifestyle changes in conjunction with traditional medical care is an effective way to improve self-management of chronic conditions (Whittemore & Dixon, 2008). The extra considerations such as low-intensity seated exercises, allowing family members to attend, and providing produce vouchers, are excellent personalized accommodations to this patient population (Minich & Bland, 2013).

Limitations

There were several limitations in this study. First, there is a possibility that the interviewees did not respond genuinely to all of the interview questions since the project manager was a part of the staff. Utilizing an interviewer who is not part of the weekly group staff might help avoid this bias in future qualitative research.

Second, the survey data used to identify and contact disengaged patients was not the ideal form of attendance data since surveys were only distributed on a patient's first visit and once a month subsequently. If there was no survey data collected on a new patient's first and only time attending the group, then their records would not appear on OSW's survey data. Access to the attendance data was out of reach for the project manager since they were recorded on the

patients' private medical charts. Creating a separate attendance record would provide more accurate attendance data for future projects.

Third, since the project manager's cell phone area code was unfamiliar to the Hayward and Bay area of northern California, many patient interviewees were hesitant to answer their phone. This also likely contributed to a number of disengaged patients' rejections of the project manager's phone calls. If phone interviews need to be conducted in a future project, the interviewee should consider the area code of the phone used.

Recommendations

The aim of this project was to evaluate how staff members and patients viewed the current Healthy Lifestyles + OSW group, and to identify areas for improvement within patient satisfaction and retention. The qualitative data from the various interviews and weekly observations provided concrete ideas for future recommendations.

The misinformation provided to incoming patients about the weekly group was one of the largest themes identified. This issue can be improved by providing cards to the providers at the clinic that display all of the activities and information of the group. The providers can refer to this informational card and also give them to the patients they refer. An in depth script can also be provided to the Hayward Wellness staff that make reminder calls to the patients. This script should cover the exact time commitment of the group and other important considerations. Support of the administrative leadership is essential to running a shared medical group (Bronson & Maxwell, 2004), and communication and planning between the clinic staff and OSW staff should occur regularly.

A lack of focus on the food was also a significant theme emerging from the data. Recipes of the healthy snack should be distributed to the patients before serving the food to avoid any

surprise allergic reactions, and to promote discussion of the food preparation. Including short demonstrations of the food preparation could help the patients visually see how the food is created. The demonstrations might allow a few participants to actually help prepare the food as well. A few minutes at the beginning of the table group discussions could be used to practice mindful eating which has been proven to increase awareness and promote less consumption of unnecessary sugars (Mason et al., 2016). Discussion of how the patients react to the recipe might increase their chances of utilizing their produce vouchers and repeating the recipe at home.

There should be an accurate recording of patient attendance for every week of the Healthy Lifestyles + OSW group. Medical assistants do record their own patient attendance data that they enter on their medical charts. A member of the OSW staff should work with the medical assistants to create their own record for OSW use. This attendance data can be organized into an online sheet that can be accessed by the OSW staff as Bronxon & Maxwell emphasize the importance of documenting patients attending group services (2004).

The monthly survey that is distributed to patients should also be analyzed for efficacy, and edited for simplicity. The survey can be an opportunity to gain regular feedback about the group from the patients as well. There could be a section where they can rate their satisfaction with multiple areas of the group, and offer a space to write out ideas for improvement. In order to protect the patients' privacy, the staff members assisting them with the survey could utilize more private space in the clinic lobby or other private rooms.

The theme of transportation issues arose a few times within the interviews, but was also apparent in the weekly observations. One engaged patient interviewee suggested providing a public transportation voucher for those who logistically and financially struggle with the weekly commute. A staff member mentioned the success of previous carpool efforts between the

patients, leading to the idea of a group carpool effort, which can also provide more opportunities for social connection.

Implications for Future Research

The findings of this project support the effectiveness of group medical visits for increasing patient engagement within their own self-management of their chronic conditions. However, more research should be done on various components of group services, such as health education, provider availability, and experiential learning. Future evaluations of group medical visits should also incorporate demographic information to see how these services vary with patients of different ages, genders, housing backgrounds, food security levels, and chronic conditions. Future research can also examine how community based services like Open Source Wellness can partner with healthcare systems like Hayward Wellness, to improve community wellness.

References

- Ashe, M. C., Miller, W. C., Eng, J. J., & Noreau, L. (2009). Older adults, chronic disease and leisure-time physical activity. *Gerontology*, *55*(1), 64–72.
<https://doi.org/10.1159/000141518>
- Bisschop, M. I., Kriegsman, D. M. W., Beekman, A. T. F., & Deeg, D. J. H. (2004). Chronic diseases and depression: The modifying role of psychosocial resources. *Social Science & Medicine*, *59*(4), 721–33. <https://doi.org/10.1016/j.socscimed.2003.11.038>
- Bodai, B.I., Nakata, T.E., Wong, W.T., Greger, M., & Pankaj, V. (2017). Lifestyle medicine: A brief review of its dramatic impact on health and survival. *True Health Initiative: The Permanente Journal*. doi: <https://doi.org/10.7812/TPP/17-025>.
- Bodenheimer, T., & Handley, M. A. (2009). Goal-setting for behavior change in primary care: An exploration and status report. *Patient Education and Counseling*, *76*(2), 174–180.
<https://doi.org/10.1016/j.pec.2009.06.001>
- Bronson D. L., & Maxwell, R. A. (2004). Shared medical appointments: Increasing patient access without increasing physician hours. *Cleveland Clinic Journal of Medicine*, *71*(5), 369-370. doi:10.3949/ccjm.71.5.369
- Centers for Disease Control and Prevention. (2017). Chronic disease prevention and health promotion: Chronic disease overview. Retrieved from
<https://www.cdc.gov/chronicdisease/overview/index.htm>
- Hyman, M.A., Ornish, D., & Roizen, M. (2009). Lifestyle Medicine: Treating the causes of disease. *Alternative Therapies in Health and Medicine*, *15*(6), 12-14. Retrieved from
<https://www.ncbi.nlm.nih.gov/pubmed/19943572>

- Jackson, S.L., Coleman-King S.M., Zhao, L., & Cogswell, M.E., Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. (2016). Prevalence of sodium intake in the United States. *64*(52),1394–1397. Retrieved from <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6452a1.htm>
- Karademas, E. C., Karamvakalis, N., & Zarogiannos, A. Life context and the experience of chronic illness: Is the stress of life associated with illness perceptions and coping? *Stress and Health*, *25*(5), 405–412. <https://doi.org/10.1002/smi.1252>
- Kiken, L. G., Shook, N. J., Robins, J. L., & Clore, J. N. Association between mindfulness and interoceptive accuracy in patients with diabetes: Preliminary evidence from blood glucose estimates. *Complementary Therapies in Medicine*, *36*, 90–92. <https://doi.org/10.1016/j.ctim.2017.12.003>
- Larsen, P. D. (2013). *Chronic illness: Impact and intervention*. Burlington, MA: Jones & Barlett Learning
- Mao, A. Y., Willard-Grace, R., Dubbin, L., Aronson, L., Fernandez, A., Burke, N. J., ... Davis, E. (2017). Perspectives of low-income chronically ill patients on complex care management. *Families, Systems & Health: The Journal of Collaborative Family Healthcare*, *35*(4), 399–408. <https://doi.org/10.1037/fsh0000260>
- Mason, A., Epel, E., Kristellar, J., Moran, P., Dallman, M., Lustif, R.,...Daubenmier, J. (2015). Effects of a mindfulness-based intervention on mindful eating, sweets consumption, and fasting glucose levels in obese adults: Data from the SHINE randomized control trial. *Journal of Behavioral Medicine*, *39*(2), 201-213. doi: 10.1007/s10865-015-9692-8

- Minich, D. M., & Bland, J. S. (2013). Personalized lifestyle medicine: Relevance for nutrition and lifestyle recommendations. *The Scientific World Journal*, 2013. doi: <http://dx.doi.org/10.1155/2013/129841>
- Park, S., Thompson, F., Pan, L., McGuire, L.C., Galuska, D., & Blanck, H.M. (2016). Sociodemographic and behavioral factors associated with added sugars intake among US adults. *Journal of the Academy of Nutrition and Dietetics*, 116(10),1589-1598.
- Partnership for Solutions (2004, September). *Chronic conditions: Making the case for ongoing care*. (September 2004 update). Retrieved from Partnership for Solutions website: <http://www.partnershipforsolutions.org/DMS/files/chronicbook2004.pdf>
- Sawatzky, R., Liu-Ambrose, T., Miller, W. C., & Marra, C. M. (2007). Physical activity as a mediator of the impact of chronic conditions on quality of life in older adults. *Health and Quality of Life Outcomes*, 5, 68-79. <https://doi.org/10.1186/1477-7525-5-68>.
- Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food insecurity is associated with chronic disease among low-income NHANES participants. *The Journal of Nutrition*, 4(2), 304-310. <https://doi.org/10.3945/jn.109.112573>
- Squires, D., & Anderson, C., The Commonwealth Fund. (2015, October). U.S. health care from a global perspective: Spending, use of services, prices, and health in 13 countries. Retrieved from <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>
- U.S. Department of Agriculture, Economic Research Service (2017). *Food security in the U.S.* Retrieved from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2018). Healthy People 2020: Physical activity. Retrieved from

<https://www.healthypeople.gov/2020/topics-objectives/topic/physical-activity/objectives>

U.S. Department of Health and Human Services, U.S. Department of Agriculture. (2015). *2015 – 2020 Dietary guidelines for Americans* (8th ed). Retrieved from <https://health.gov/dietaryguidelines/2015/guidelines/>.

Ward, B.W., Schiller, J.S., & Goodman, R.A., Centers for Disease Control and Prevention.

(2014, April). Multiple chronic conditions among US adults: A 2012 update. *Preventing Chronic Disease, 11*. Retrieved from https://www.cdc.gov/pcd/issues/2014/13_0389.htm

Whittemore, R., & Dixon, J. (2008). Chronic illness: The process of integration. *Journal of Clinical Nursing, 17*(7), 177–87. <https://doi.org/10.1111/j.1365-2702.2007.02244.x>

World Health Organization (2018). *Chronic diseases and health promotion, Part two: The urgent need for action, Chapter two: Chronic diseases and poverty*. Retrieved from World Health Organization website: http://www.who.int/chp/chronic_disease_report/part2_ch2/en/

Appendix A

Interview Questions for Engaged Healthy Lifestyles + OSW Patients

Can you describe your first experience and some of your first impressions of the program at Hayward Wellness?

As a patient participant, what parts of the program did you value/enjoy the most?

In your experience with the health coaches, what are some things that they do/say that are helpful for you?

What motivates you to come back every week?

What could the staff do to make it easier for you or others to return every week?

Are there any parts of the program that you do not enjoy?

Do you have any suggestions on how to improve this?

Do you have anything else you would like to share?

Appendix B

Interview Questions for Disengaged Healthy Lifestyles + OSW Patients

What did the referring provider describe the group as? was it different from your expectations?

Do you remember / can you describe your first experience to the Thursday group?

Was the social environment welcoming? - can we improve?

Did you enjoy having contact with a health coach? - was it helpful/unhelpful?

What part of the group did you value/enjoy the most?

What parts did you not like so much?

- Do you have any suggestion for improvement?

Why did you not return to continue the group every Thursday?

What could the staff do to make it easier for you or others like you to return?

What changes could we make to have you back?

Do you have anything else you would like to share about your experience?

Appendix C

Interview Questions for Healthy Lifestyles + OSW Staff Members

Can you describe some of your first impressions in your first experiences at OSW in Hayward Wellness?

Were there any parts of the program you could immediately see needing improvement?

As a health coach, what methods have you used to engage patients?

Which methods were successful/unsuccessful?

What are aspects of the program do you think patients value the most?

What patient values do you think we need to be more aware of?

What challenges do you see for a new patient to return?

Have you noticed any patterns between patients who do not return versus those who return frequently?

What areas do you think we should focus on improvement? ex: Social environment? Logistical areas?

Do you have any specific recommendations for improvement of the program?

Do you have recommendations/advice for me as I interview patients, and progress through my project?

Is there anything else you would like to share?

If you have any questions or concerns about what you said in this conversation, please feel free to contact me by phone or email.

Appendix D

Informed Consent Script

“I would like to go over some things before we start. This project’s goal is to gain feedback on some ways we can improve our Thursday afternoon group. I have about 8-10 questions to ask, and I expect it to take around 15-20 minutes. I am going to be recording this phone interview, however I will be the only one with access to the recordings because I will be the only one with the password to the account. From the recordings, I will be transcribing the interview. I will remove your name during transcription, and any other identifying factors to make sure you remain anonymous throughout my project. So it is up to you, what you want to share with me. I am conducting this project in part of completion of my graduate degree, and would like to remind you that I am a temporary intern with OSW. I hope knowing this helps you to share genuine responses. You are welcome to not answer any question that may make you feel uncomfortable answering, and you are also welcome to stop the interview at any point in time. Do you need me to repeat anything I just said? Do you have any questions or other concerns? After all of this information I shared with you, do you consent to this phone interview?”