

What is OWL?

Our Whole Lives is an e-health toolkit containing 9 modules aimed to educate patients on management of hypertension and associated conditions (stress reactivity, insomnia, poor nutrition, inflammation) to reduce this and other cardiac risk factors.



O.W.L. Content, In-Depth:

Title of Session	Theme /Activities
Session 1 – Online Orientation to OWL-Hypertension	Awareness of Breath meditation, ground rules for website communication, introduction to mindfulness
Session 2 – Our Reactions to Stress	Non-pharmacological approaches to stress
Session 3 – Our Bodies and Healthy Sleep	Non-pharmacological approaches to sleep
Session 4 – Movement and Food as Medicine	Movement and Healthy eating skills
Session 5 – Our Bodies' Response to Pain	Non-pharmacological pain approaches to pain management
Session 6 – Our Bodies and Inflammation	Non-pharmacological approaches to treating inflammation
Session 7 – Our Bodies and Depression	Non-pharmacological approaches to depression and challenging communications
Session 8 – Understanding the Role of Food in Our Body	Mindful eating
Session 9 – Wellness Review	Wellness Review



The Current Study:

Reducing Disparities in the Treatment of Hypertension using the OWL e-Health Tool

Background

- Nearly 80 million adults in the United States have high blood pressure. Few studies have specifically targeted minority populations with hypertension (Bartolome, Chen, Handler, Platt, & Gould, 2016; Fang, Yang, Ayala, & Loustalot, 2014).
- OWL for Chronic Pain (OWL-CP), the original version of OWL, was developed and tested with subjects with chronic pain and conditions with funding from the Patient Centered Outcomes Research Institute (2013-2017) (Gardiner, Dresner, Barnett, Sadikova, & Saper, 2014). OWL-CP was also tested in a sample of 46 with funding from the Aetna Foundation.
- Preliminary results from the Aetna foundation study showed a reduction in cardiac risk factors such as systolic blood pressure, stress, unhealthy eating, and sedentary behavior among subjects participating in the self-management program delivered by the OWL platform (Gardiner et al., 2017).
- For this study, a transdisciplinary team will be collecting quantitative and qualitative outcomes to transition and refine the system for use in a hypertension and cardiac risk patient population.
- Long term plans include a large RCT testing the OWL platform in reducing hypertension and cardiac risk factors.

Participants

- We will recruit 26 participants (2 cohorts of 13) to participate in an 8 week adaptability and feasibility trial of the newly transitioned OWL for hypertension and cardiac risk platform (OWL-H)
- Participants will be age 18 or older; recruited from a UMass Memorial primary care clinic; currently on a hypertension medication; easily able to access OWL-H on the internet; not suffering from any comorbid conditions that might affect their participation in the study (e.g., substance abuse, severe mental health disorders, or pregnancy)

Specific Aims

1. To pilot test OWL-H to refine its utility for home self-monitoring (number of times patients record home blood pressure and input this data onto OWL-H and engagement of self-management tools (i.e. #of logins, # of mind body sessions completed, # of times modules accessed each day)). Hypothesis 1: eighty percent of patients will log in and record their blood pressures.
2. At the end of each cohort, conduct a focus group to obtain information about: 1) The barriers and facilitators of using the OWL platform and using OWL to self-monitor blood pressure at home, 2) Satisfaction with OWL, 3) How OWL helped with reduction of number of cardiac risk factors (e.g., smoking, eating habits, perceived stress, and amount of exercise and health-related quality of life).

Method

Each cohort will complete an 8 week trial of OWL-H, utilizing the 9 online modules, and following the below procedure:

Time Point	Activities
Baseline	<ul style="list-style-type: none"> • Baseline questionnaire completed (technology usability, diet, knowledge of htn, average activity, medications) • Orientation session to orient patients to OWL-H; give and teach patients to use a BP cuff; and collect baseline vitals and physical data (height, weight, waist circumference) • First of 3 cooking demonstrations (taped to upload to OWL-H)
Week 4	<ul style="list-style-type: none"> • Mid-point survey about OWL-H usage and feedback • Second cooking demonstration (videotaped to upload)
Week 8	<ul style="list-style-type: none"> • Follow-up questionnaire collected • Post-intervention collection of vitals and physical data • Final cooking demonstration (videotaped to upload)
Focus Group (At Week 8 Session)	<ul style="list-style-type: none"> • Collection of qualitative data regarding OWL-H tool