Project Overview

The Medical Library of the Oakland University William Beaumont School of Medicine (OUWB) collaborated with the HOPE Hospitality & Warming Center in Pontiac, Michigan to empower discharged homeless patients in its Recuperative Care Center with better health information seeking and literacy skills. Launched in 2015, the HOPE Recuperative Care Center is the only place in Michigan that offers medically supervised shelter to patients discharged from area hospitals with conditions that would be exacerbated by living on the street, in traditional shelters, or other unsuitable places. The primary goal for the outreach project was to expand HOPE's capacity to help homeless patients recover from an acute illness, surgery, or injury in its Recuperative Care Center by connecting homeless clients with NLM and other related health information resources on health issues of most concern to the homeless patients.

The implementation of the project resulted in a website constructed for and dedicated to health information literacy education for homeless patients at the Recuperative Care Center, a collection of free, easy-to-read educational materials including brochures, flyers, and other handouts on topics most relevant to health issues facing the homeless, a health information station equipped with a printer and iMac computer, and health information literacy training sessions provided for homeless patients and staff at the Center. Thanks to the NLM sponsored health information outreach project, the HOPE Recuperative Care Center now has its first health information resources station dedicated to online health information searching and health information literacy training. Homeless patients can use the computer to look up for reliable health information and get educated about their health issue. The health information literacy training has developed homeless patients' awareness of NLM consumer health information resources (e.g., MedlinePLUS.gov) and other resources and developed an ability to search for reliable health information.

Staff members who received training have developed awareness of the trusted information resources, and they are using the health information station to look up for reliable health information for patient care and education.

Approaches and Interventions Used

The project was developed to accomplish the following goals:

Goal 1: Partner with HOPE to provide homeless patients with easy access to NLM health information resources.

Objective 1: Establish a health information resource station in the Recuperative Center that houses a computer, a printer, and quality patient education materials (pamphlets, brochures, flyers, etc.).

The funding received from the Express Outreach Award allowed us to set up a health information resources station for the HOPE Recuperative Care Center. Mitchell Roe (technology specialist, one of the

project personnel) identified and got a quote for an iMac computer, printer, tablet, print toner cartridges, flash memory sticks, data projector, and screen. Library assistants, Shirley Anderson and Evan Sprague, helped with the order for the hardware and software items and supplies for the project. Annette Healy (project assistant) and Misa Mi (project manager) identified and acquired easy-to-read patient education materials. Sameen Ansari (a first-year medical student, a mentee of Jason Wasserman and Misa printed patient materials. Misa shelved and displayed these materials on a bookcase. These materials are related to health topics most relevant to homeless persons such as frostbite, asthma, diabetes, surgical wound care (e.g., suture, staples), COPD, burns, fracture, dialysis, depression, etc. Mitchell installed software programs on the computer, configured the computer, set up the computer and printer, and connected them with the HOPE computer network.

Objective 2: Develop and disseminate health education resources for the homeless patients.

Misa developed a website structure and resources topic categories for the Recuperative Care Center Health Information Resources Website that serves an access point to a collection of links to trusted health information resources on topics most relevant to the homeless. Annette curated websites from MedlinePlus and other sources, created web pages with links to these resources grouped under Diseases and Conditions, Mental Health, Healthy Living, Services, and Training. Misa developed an Ask a Librarian online form to extend library health information service to homeless patients and staff at the HOPE Center.

Goal 2: Facilitate homeless patients' access to and use of NLM and related health information resources.

Objective 1: Design a training program to engage homeless clients in learning how to use the computer and printer and how to find trustworthy health information related to their health condition or illness or injury.

Annette, Sameen, and Misa developed a face-to-face training program for staff and homeless patients. To help staff and patients review or reinforce what they learn or to provide an opportunity for self-directed learning, Sameen developed three online training modules: how to use an iMac computer, search for health information, and evaluate health Information. Annette contributed to the initial scripts and Power Point slides for these training modules.

Objective 2: Develop homeless patients' awareness of NLM consumer/patient health information resources and ability to use a computer to identify these resources and find quality health information.

Misa offered 4 small-group face-to-face training sessions at the Center: two sessions for staff and two for the homeless. So far, 9 patients participated in the training; 6 staff members attended the training. The training session covers the content on how to navigate the health information resources website created for the Center, how to use MedlinePlus, and how to search for and evaluate health information on the Internet. As a result of the training, participants developed awareness of NLN health information resources and an ability to search for and evaluate health information. The training is ongoing and will continue throughout the summer 2017.

Objective 3: Train HOPE staff (including nurses and service coordinators) on how to seek and evaluate health information.

Staff members have a need for finding quality health information to meet their own information need in caring for homeless patients or guide or assist patients in searching for quality health information.

Misa worked with the manager of the Center to schedule 2 training sessions for HOPE staff. Out of 13 staff members, 6 participated in the training. It is hoped that the staff will be better positioned to assume the primary responsibility for delivering the health information literacy training or to guide or assist their clients in searching for trusted health information using credible resources, so that there will be a sustainable effort to improve health information literacy of their clients. The training is ongoing. It is hoped that all staff members working at the Center will complete the training by the end of August 2017.

Health Information Resources Website developed for the HOPE Recuperative Care Center:

https://sites.google.com/a/oakland.edu/resourcesforhomeless/home

Problems or Barriers Encountered

There were several major barriers or challenges that slowed down the progress and implementation of the project. These barriers were related to the time taken in processing all paperwork, attending to logistic issues related to planning and implementing the project, and time and resources constraints. Examples of barriers:

- There was a delay in getting all paperwork processed. I received the NN/LM GMR Express Outreach Award notification on October 4, 2016 and the Proposed Subaward Contract on December 6, 2017. The Oakland University Office of Legal Affairs and General Counsel had to review and signed off the contract on December 13, 2017. I did not receive a fund number from the OU Office of Research Administration until January 4, 2017.
- It took many steps throughout the process of planning and implementing the project before getting the project off the ground. (The first training session was offered on April 18.) These steps included hiring a project assistant, waiting for approval from HR, filing an IRB application and getting

approval for studying the impact of the planned health information literacy training, procuring hardware and software items, and getting clearance from the OU Office of Research Administration and Account Payable Office for purchasing gift cards with the award fund (incentives for HOPE staff and homeless patients to participate in the study).

• The HOPE Recuperative Care Center is located in an old church. It has capability for accommodating 10 homeless patients at a time because it only has 10 beds. All beds, a dinning area, a sitting area with a TV set and some shelves of donated books are all in the same open area. Jason and I identified a small area for the health information resources station. We hoped that it would be easy to find used furniture for the station at the facility. However, what HOPE could provide was a chair. I had to look for furniture for the health information station. I was grateful to the director of the Oakland University warehouse who was willing to support our outreach project by donating a large bookcase, a slightly used large desk for the computer, and a small table for the printer.

After getting the donated furniture, the next step was to figure out how to ship the furniture to the Center. I had to look for someone who had a pick-up truck and who was willing to move the furniture to the Center. I asked for help from a pick-up truck driver, Doug, whom I ran into outside my library building. He works for OU Facilities. After I told him about the project and my desperate need for help with the furniture delivery, he was gracious to lend his support by moving the furniture to HOPE. I also got help from two library staff members who helped Doug load the furniture to his pick-up truck. Setting up a schedule for moving the furniture that worked for everyone was also challenging. It was gratifying to see that all things eventually fell into place thanks to the support of OU staff for the project.

• The HOPE Center has a capacity for admitting 10 homeless patients. They are discharged from local area hospitals and are admitted to and leave the Center at different times. On a daily basis, these patients have different schedules for doctor appointments or medication administration. All staff (case manager, nurses, coordinators, etc.) work part time on different shifts. Due to time constraint, I scheduled and provided the first round of training sessions for homeless patients in small groups in April 18 and April 28, so they could get the training before they left the Center.

Evaluation

A pre- and post-training questionnaires were developed to assess the effect of the project on participants' health literacy, health information orientation, information-seeking skills, and computer skills. A sign-up sheet for using the computer was created to tally the usage of the computer. The stated goals and objectives for the project (90%) were reached. The health information station was successfully established; a collection of print educational handouts was developed; a website of health information resources of most concern to the homeless patients was constructed and is up and running; 3 online training modules were developed; and the first round of training sessions was offered to staff and homeless patients at the Recuperative Care Center. Because the actual training got off to a late start, only 6 staff (out of 13) and 9 patients participated in the initial training sessions. Pre- and post-training questionnaires from the 6 staff and 9 patients have been collected.

In addition to the pre- and post-training questionnaires, a list of scenarios for hands-on searching and a search performance checklist were created to gauge participants' performance in identifying resources and conducting searches for information relevant to their health issues. There is only one computer that is used for the training, and the initial training sessions in April were provided in a small group setting,

which precluded individual participants from having hands-on practices using the computer to search for health information. Therefore, participants' skills in identifying resources and searching for information were not observed and evaluated with the search performance checklist.

Continuation Plans

The HOPE Recuperative Care Center can only accommodate 10 homeless patients at a time. How long each patient stays at the Center depends on his or her health condition and recovery. As patients leave the Center following their recovery, new patients discharged from local hospitals will be admitted to the Center. Given the circumstance at the facility, we will continue the training in the summer to ensure that the rest of the staff and more patients will receive the information literacy training to maximize the impact of the project. The director of HOPE and manager of the Center are very supportive of the outreach project, which makes it possible for us to provide training and solicit study participation from staff and patients.

At the Oakland University William Beaumont School of Medicine, each medical student is required to conduct a Capstone research project. Sameen Ansari (first year medical student) is working along with Misa and another key personnel (Jason Wasserman) who are her mentors. Sameen will work on the project to fulfill the school's requirement for a Capstone research project. She will receive training from Misa and take over subsequent training sessions once she completes her final exams on May 26. The plan is for her to revise and improve the current online training modules, offer individual training sessions, administer the pre- and post-training questionnaires, and observe each participant's search performance on the computer.

To expand the project, she will follow up on those homeless patients who participate in the training and determine any long-term effect of the training on their health information searching behaviors and self-care of their health condition.

Lessons Learned

There is no small room for training at the Recuperative Care Center. The computer station is in an open area, which makes it hard to protect any privacy of patients who need to search for information related to their own specific health issue. The physical setting could potentially impact information seeking behaviors. Also, there is only one computer acquired from the award funding. One computer is not ideal for hands-on practices during small group training sessions. When more training sessions are provided over the summer, participants will receive individual training sessions and have chance for hands-on practice navigating the HOPE Recuperative Care Center Information Resources Website, searching MedlinePlus, searching for and evaluating information retrieved on the Internet.

The Express Outreach Award funded the project targeted to homeless patients at the Recuperative Care Center of the HOPE Hospitality & Warming Center, a shelter for homeless people. The Care Center, established in 2015, is the first one of its kind in Michigan. It is currently housed in an old church. There is a dire need for funding, space, and other resources to maintain and run the Center. There was a great need for health information literacy training or service provided for staff and homeless patients at the Center. For those who plan to apply for the Express Outreach Award, it is necessary to identify a real

need for an outreach program and to consider the physical setting for implementing the program. Most of all, partnership with a community organization where the program is implemented is crucial to ensure the success of the program. It takes a team to carry out such a project. Also, it is important to garner support of the library administration and library staff. Mitchell Roe, Technology Specialist at the OUWB Medical Library, handled tasks related to selecting hardware and software items and equipment, configuring the computer, setting up the computer and printer to ensure they are connected in the network of the HOPE Center for the Internet access and printing work. Two library assistants, Shirley Anderson and Evan Sprague at the Library, helped with the ordering and acquirement of items for the project. The project assistant recruited for the project, a part-time health sciences librarian, Annette Healy, worked closely with the project manager (Misa) to build the HOPE Health Information Resources Website. There were those people who donated the furniture and helped with the delivery of the furniture at the Center

For a project manager, to ensure the successful implementation of a similar project, it is vital to have a forward-thinking mindset and get a grip on and prioritize multiple tasks that could be going on at the same time. For the HOPE project, the project manager had to handle multiple tasks simultaneously, including building a website, communicating with the team, mentoring a medical student, developing pre- and post-training questionnaires, completing a IRB application and responding to IRB reviewers' comments and questions, keeping track of items to be ordered.... It takes planning, persistence, dedication, teamwork, critical decision making, and patience, to carry on such an outreach project with potential for leading to an impactful and beneficial effect on the vulnerable and underserved populations that it serves.

Impact

People experiencing homelessness have high rates of physical and mental illness, increased mortality, and frequent emergency department visits and hospitalizations. According to the National Health Care for the Homeless Council policy brief (Medical Respite Care: Reducing Costs and Improving Care April 2011), homeless persons are three to four times more likely to die prematurely than their housed counterparts. Frequently, people who are homeless are discharged from hospitals with care instructions that are difficult to follow while living on the street, and the lack of a stable home diminishes the effectiveness of their hospital care. These various health challenges predispose those who are homeless to greater hospital use, while the discharge of patients who are homeless who technically no longer qualify for hospital level care but who have no place to recuperate safely results in high rates of recidivism. Launched in 2015, the HOPE Recuperative Care Center is the only place in Michigan that offers medically supervised shelter to patients discharged from area hospitals with conditions that would be exacerbated by living on the street, in traditional shelters, or other unsuitable places. The center provides services such as health assessment, chronic disease management and education, and life skills training. Health education efforts are conducted informally during meetings with nurses. There is neither provision of any health information resources nor health information literacy education.

The HOPE project has addressed the dire need for access to quality patient education materials and health information literacy training for patients and staff at the Center. Through the project, a health information resources station has been established to house a printer, an iMac computer for health information searching and retrieval, as well as a collection of free, easy-to-understand, patient

education materials including pamphlets, brochures, and flyers. Also part of outcomes of the project, an information resources website for the homeless has been created for easy access to reliable health information and assistance programs; health literacy training sessions are being offered to homeless patients and staff at the Center. Some degree of self-empowerment and self-advocacy, particularly with respect to chronic illness management, is a prerequisite for successful preventative and primary care. The project has expanded the HOPE's capacity to help homeless persons recover from an acute illness, surgery, or injury in its Recuperative Care Center by connecting homeless patients with NLM and other related health information resources on health issues of most concern to the patients. The project facilitates use of and access to reliable health information by the homeless and helps empower them with an ability to seek and understand health information that in turn enables them to integrate that information into self-management of their illnesses and self-advocacy in their clinical interactions.

Based on the preliminary findings, all homeless clients and staff who went through training reported that they never heard about NLM resources such as MedlinePLUS, let alone using it to search for health information. The health information literacy education outreach program has not only expanded HOPE's capacity to serve homeless patients by helping them recover from an acute illness, surgery, or injury in the facility, but also enhanced homeless patients' health information literacy. Those who have been trained have developed awareness of NLM health information resources (e.g., MedlinePLUS) and reported to know how to use the HOPE Information Resources Website and MedlinePLUS as an access point for reliable health information/patient education materials when they have questions about their health.

Since its inception, OUWB has placed great value in community service and engagement manifested in its mission:

"Oakland University William Beaumont School of Medicine is a collaborative, diverse, inclusive, and technologically advanced learning community, dedicated to enabling students to become skillful, ethical, and compassionate physicians, inquisitive scientists who are invested in the scholarship of discovery, and dynamic and effective medical educators" (Mission of OUWB).

Jason Wasserman and Misa Mi serve as mentors for a first-year medical student, Sameen Ansari, who has opted for the HOPE project as a service learning opportunity. She is committed to studying the impact of health information literacy training on the homeless as her Embark Capstone project, a required component of the OUWB's medical curriculum. Under Misa Mi' guidance, she has learned the process of IRB application, gained knowledge of and proficiency in using NLM health information resources (e.g., MedlinePlus), and developed an ability to use Camtasia to create online tutorials. She is planning on spending her entire summer at the HOPE Center to work with homeless patients, conduct information literacy assessment, and provide training for homeless patients at the Center.

Misa Mi

Express Outreach: Health Information Outreach to Homeless...

This important, timely health information outreach project targeted to the vulnerable and underserved population has contributed to the community engagement-related goals of OUWB pertaining to increasing community awareness of the Medical School's impact on the health of the community and promoting the identity of the School. The project has also played a part in the formation of the medical student's professional identity as a compassionate physician, inquisitive investigate, and effective educator.

Other

An article published on the OUWB Website about the HOPE project:

https://www.oakland.edu/medicine/news/auto-list-news/10000-grant-awarded-will-impact-health-of-homeless-patients-at-hope