A.C.E. : After Cancer Experience : a community-based occupational therapy program for women after breast cancer

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A.C.E.: After Cancer Experience: A Community-Based Occupational Therapy Program for
Women after Breast Cancer

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Note: This document describes a Capstone Dissemination project reflecting an individually planned experience conducted under faculty and site mentorship. The goal of the Capstone Experience is to provide the occupational therapy doctoral student with a unique experience whereby he/she can demonstrate leadership and autonomous decision-making in preparation for enhanced future practice as an occupational therapist. As such, the Capstone Dissemination is not formal research.
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Executive Summary

According to the Center for Disease Control and Prevention (2012), breast cancer is the most common cancer among American women. Advances in medical treatment of cancer have improved the prognosis for survival leading to more women living with the long term affects of cancer treatments. From 2001 to 2010 in the United States, deaths from breast cancer have decreased significantly by 2.0% per year in women (CDC, 2012). With more women surviving breast cancer, there is a need for more programming to be developed for the women after and during cancer and cancer treatments. The proposed program seeks to do just that. Common physical impairments due to breast cancer treatments include limited upper extremity range of motion, fatigue, and swelling. There are also other issues that occupational therapy can assist survivors with such as addressing self-esteem, intimacy concerns, cognitive exercises, community resources, lymphedema education and energy conservation.

The proposed occupational therapy program will be held on The University of Toledo’s campus at The Center for Health and Successful Living (CHSL). CHSL’s current mission is to improve the health and quality of life in adults in northwest Ohio who are living with chronic disease, including cancer. CHSL had their grand opening in October 2014. They aim to provide community programming to women in the Toledo area who have undergone breast cancer treatments as well as community screenings and educational events as a first step to reaching the local community.

The occupational therapy program goal is to assist women to carry on daily occupations to their best abilities. The program will accomplish this through education and occupation-based therapeutic interventions addressing side effects of breast cancer treatment that may have limited their physical, cognitive, and emotional capabilities. The goal will be met by occupational
therapy group interventions such as creative expression groups, cooking groups, support groups, and education seminars. Several forms of evaluations will be used to identify the effectiveness of the ACE program. Some of the evaluations will be more formal than others depending on how the objective needs to be measured. Listening and observation by the occupational therapist as well as formal assessments will determine the effectiveness of the program. Quantitative evaluations such as pre and post evaluations will also be performed to determine the perceived effectiveness of programming.
Introduction

Program’s Goal

The goal of the A.C.E.: After Cancer Experience: A Community-Based Occupational Therapy Program for Women after Breast Cancer program is to assist women in carrying on daily occupations to their best abilities during and after breast cancer treatment. The program will accomplish this through education and occupation-based therapeutic interventions after the affects of breast cancer treatment may have limited their physical, cognitive, and emotional capabilities.

Definitions:

**Daily occupations**-anything someone does that holds meaning or purpose. Examples include cooking, hobbies, grooming, dressing, and leisure activities among others.

**Occupation-based therapeutic interventions**-A type of occupational therapy intervention- a client-centered intervention in which the occupational therapy practitioner and client collaboratively select and design activities that have specific relevance or meaning to the client and support the client’s interests, needs, health, and participation in daily life (AOTA, 2008).

**Breast cancer treatment**-most common are radiation, surgery, chemotherapy, and pharmaceutical.

Sponsoring Agency

The sponsoring agency is The Center for Health and Successful Living on the Main Campus of The University of Toledo. The Center is a community hub for breast cancer survivors and their family members that provides education, resources, services, and support to improve quality of life and health. The facility is run by University of Toledo students and supervising
faculty. The mission of CHSL is to improve the health and quality of life of those in the local community with chronic disease, including cancer. This agency will be the home of A.C.E: After Cancer Experience: A Community-Based Occupational Therapy Program for Women after Breast Cancer.

**Organizational Chart**

The organizational structure of The Center for Health and Successful Living is fairly simple as it is a new center with a small staff. Although The Center does not have an organizational chart developed for their facility, they view all disciplines that are in contact with the members equally. An occupational therapist was added to the chart under the co-directors along with the recreational therapist, nutrition councilors, and student volunteers who assist in the daily needs of The Center (see Appendix A for example of organizational chart). CHSL also promotes using a team like method when planning events and there are sub-committees within the organization that are to be determined at a later date. The Center also plans to keep adding professions as it develops and may include physical therapy and mental health professionals who will be on the same tier as the occupational therapist.

**Investigation of Need**

**Stakeholders**

The stakeholders are Dr. Amy Thompson and Dr. Timothy Jordan as they are the co-directors of The Center for Health and Successful Living. Other stakeholders include other disciplines participating in the Center such as recreational therapy, the clients of the center, other staff members, and The University of Toledo.
Data Gathering Methods

1.) Semi-structured interview

This is the first method I used to gather data from the stakeholders. The reasoning behind this method is to assess what the needs are as viewed from the personnel already invested at The Center and other professions to build on in further methods. An interview also gives an opportunity to build rapport with the site and personnel that you will need to be in contact with in the future. Keeping the interview semi-structured left room for probing and elaboration on questions that may result in data and information that could have been missed with other methods (Kielhofner, 2006). Scheduling a time and place to meet for the interview is the first part to conducting an interview. Once a mutual time was agreed upon, I developed an outline of questions to ask. I held the initial interview with Dr. Jordan and Dr. Thompson in The Center’s conference room in November of 2014. Dr. Thomas accompanied me to the interview to build rapport and answer any questions that I was unable to. During the interview, a professional demeanor was kept by all and all parties took away important information about the future capstone. I sent a follow up thank you note within the week after the interview was conducted.

2.) Questionnaire

I chose a questionnaire to gather data for many reasons. A questionnaire is low in cost and very time efficient. This is important to get the fastest feedback and most efficient program. This is appropriate for the site because the members are not always available through The Center but all of the members gave their contact information for reasons such as participating in surveys to improve Center services. The clients are also still fulfilling their roles on a daily basis and may lead very busy lives, so a questionnaire that they could fill out at their leisure received the most
attentive answers along with the honesty that comes along with being anonymous (Fazio, 2008). The questionnaire was administered during the current programming offered by CHSL (see Appendix B for an example of the questionnaire). The questionnaire was also administered at similar facilities serving breast cancer survivors such as The Victory Center and Renee’s Survivor Shop. It was one page, front only, to ensure ease of use. At The Victory Center, I attended current groups and programming and then discussed my capstone goals so the women could understand why it was important and helpful to fill out my questionnaire. All but one woman was able to fill out the questionnaire at the time of administering so I was able to collect results immediately. The one questionnaire that was taken home was returned to the facility within a week and I was able to retrieve it and add it to my data. Overall, I collected 31 questionnaires, 27 from women with or in remission from breast cancer and four from women dealing with other types of cancer. Collecting the data from women already attending groups is beneficial to this program because they are the most likely participants in future programming.

**Cultural Factors**

With any method chosen above there will be cultural factors that may impact the data. The method that I believe culture would have the most impact on would be the questionnaire. The questionnaire was written at an appropriate literacy level that most adults could read and comprehend. I discussed the questionnaire with my faculty mentor, site mentors, and program directors in the community to seek advice about the readability and content. One suggestion was made to have clearly labeled “Y and N” at the end of the questions because these women fill out forms often and the ease of quickly circling a letter would elicit more participation. The suggestion was noted and the questionnaire was changed. None of the women were illiterate but I was prepared to conduct the questionnaire as an interview if necessary. An overall issue with
collecting data and needs about occupational therapy is the population’s lack of knowledge about our profession. Prior to and during administration of the questionnaire, I often gave a description and provided education about how occupational therapy can benefit women after and during cancer treatments.

**Prioritizing Needs**

Needs are to be prioritized after the needs assessment has been implemented. During the semi-structured interview, I took notes about opinions the stakeholders had and their goals for the semester long programming. Common themes that were raised were community education, survivor programming, and CHSL marketing. I have reached out to many community organizations that help women undergoing breast cancer treatment and after breast cancer treatment to build rapport and market for The Center and my program. I have also built relationships with key organizations by volunteering with them and educating them about my program. It is important to communicate to stakeholders what occupational therapy is and how it can meet the needs of the people that they want to serve.

The questionnaire has numerical data that I processed and then put the needs in order according to their “score” from the questionnaire. Comments from the questionnaire are also important data to collect and match with occupational-based approach. I listed my current needs assessment findings in Appendix C. Although my focus is on women surviving breast cancer, I also have a small sample of questionnaires from women with other types of cancers. These results can also generate programming ideas (see Appendix D for example of needs assessment findings from persons with cancers other than breast cancer). At all times, it is a good idea to keep practicality and space in mind, so as not to offer programming you cannot implement. I will
continue to administer the needs assessment questionnaire and revise my needs assessment summary throughout my program to identify additional needs and collect broad based input.

As shown in Appendix C, the average age of the women involved with the needs assessment was 61.4 years old. The predominate themes with the most “yes” answers were dealing with pain, fatigue, numbness/tingling in hands or feet, cognitive issues, and lymphedema/swelling. The goal is to tie as many of these needs into programming at The Center and in the community as possible. I will also consider the comments made by the women in the last two questions of the questionnaire regarding their specific needs and opinions. Another very apparent need shown by the needs assessment findings was that a little over half of the women were not referred to any kind of rehabilitation services during or after cancer treatment. As you will read in the Literature Review, rehabilitation is beneficial for women with breast cancer. Another goal of my program is to provide education to the health care community about the benefits that occupational therapy can bring to survivors, in hopes that more women will be referred and get the help they need.

**Literature Review**

Research is somewhat scarce in terms of occupational therapy’s role with breast cancer survivors. This is a new advocacy area in which more research on the benefits needs to be done. However, Karki, Simonen, Malkia, and Selfe, used a questionnaire in 2005 to study impairments 6 and 12 months after breast cancer operations. The most common impairments were breast and axilla scar tightness, axilla edema and neck-shoulder pain. At 12-month follow-up the breast scar tightness \(p=0.008\) and axilla edema \(p=0.023\) decreased, and limb ache \(p=0.005\) increased significantly. The most limiting impairments six months after surgery were axilla edema and
limb numbness, and at 12-month follow-up the most limiting impairment was axilla edema. Lifting, carrying and reaching outward caused worsening of impairments for more than half of the respondents at 6-month follow-up. Regression analysis showed that many impairments together were determinants of activity limitations and sleep impairment. Participation restrictions were constant throughout. Respondents had not given up participation in activities in the home, but some had abandoned leisure activities and felt that their work ability had decreased (Karki et al., 2005).

This study can help occupational therapists in the proposed program be educated on what a patient needs can look like based on where they are in their treatment. Also being aware of the most common general impairments will be helpful at the during programming. With this study finding leisure activities being abandoned it is also important not underestimate individual’s leisure activities when developing treatment ideas for patients to use at home and at the program.

Morimoto, Tamura, Ichihara, Minakawa, Kuwamura, Miki, and Sasa (2003) evaluated the efficacy of a recently designed rehabilitation program for postoperative patients with breast cancer. The authors evaluated specifically the range of motion (ROM) of the shoulder joint, postoperative pain, and recovery of activities of daily living (ADLs). A total of 72 patients were studied, comprising 39 who underwent pectoral muscle-conserving mastectomy and 33 who underwent breast-conserving surgery. The arm movement of forward raising (shoulder flexion) showed the greatest decline, followed by lateral lifting of the arm (shoulder abduction). Postoperative changes in internal/external arm rotation, as well as backward arm raising (shoulder hyperextension) were slight. Comparison of the operative procedures revealed differences only for lateral arm raising at postoperative week 4, while there were no differences in any of the shoulder joint movements. Lowering of the ROM of the shoulder joint was more
marked at an earlier time (week 1 to week 2) after surgery, but it was not statistically significant. Pain at night and operative wound pain were prolonged over the period, and reported in postoperative week 1 to week 12 by 3–15% of patients. All ADL items became almost normal in approximately 90% of patients at postoperative week 4. The efficacy of the present rehabilitation program early after surgery was demonstrated in terms of recovery of ADL as well as the ROM of the arm on the affected side (Morimoto et. al., 2003).

This study can help occupational therapists stay educated on what a patient will need based on where they are in their postoperative treatment. Even though this study found that ADLs were found “normal” after 4 weeks in 90% of the participants, the other 10% are most likely the clients who will need occupational therapy in this proposed program and more needs to be done to help this part of the population recover. It is also a great template to guide the proposed program due to its overall success in postoperative breast cancer patients.

Since occupational therapy is getting involved with breast cancer treatments, any information about current programs is helpful while trying to develop a new one. Hellen Vockins conducted a survey to record different assessments and treatments that are currently being used in a cancer center in the UK that uses occupational therapy. She created a log sheet for each occupational therapist to fill out to record different interventions and duration each month. At the end she found that significant amount of time was spent facilitating educational programs, teaching relaxation techniques and exploring strategies for managing breathlessness and fatigue. However, documentation and report writing consumed the largest proportion of the therapists’ time. Less time was spent on assessment of activities of daily living and home assessments, often perceived to be the traditional domain of occupational therapists (Vockins, 2004). This research article can help guide the proposed programming in ways of time management and intervention
techniques. Documentation is important to review patient progress but it should not make up the largest portion of time spent with a patient, especially in a community based setting like The Center where patients come to resolve mental, physical, emotional, and social issues.

Through an extensive literature review, I learned that postoperative treatment for those diagnosed with breast cancer is highly beneficial. It is also shown that common limitations after treatment are directly related to occupational therapy’s scope of practice such as decreased upper extremity ROM, fatigue, difficulty with ADLs, and self-esteem/body image issues. This also matches themes of needs from the stakeholders. As long as the focus of the proposed program remains on the client’s needs, the program should be a success for The Center for Health and Successful Living by using this evidence to educate members.

**Demographic Statistics**

According to the Center for Disease Control and Prevention (2012), breast cancer is the most common cancer among American women. In the state of Ohio, 106.3-114 women per 100,000 are diagnosed with breast cancer each year (CDC, 2012). Advances in medical treatment of cancer have improved the prognosis for survival leading to more women living with the long term affects of cancer treatment. From 2001 to 2010 in the United States, deaths from breast cancer have decreased significantly by 2.0% per year in women (CDC, 2012). With more survivors from breast cancer more programming needs to be developed for the women who survive cancer and cancer treatments once they have finished all medical management. The proposed program seeks to do just that. In 2010 there were approximately 56,496 women between the ages of 30-60 making up almost 20 percent of the population of Toledo, Ohio (United States Census Bureau, 2010). According to data, approximately 18% of those women
will develop breast cancer within 20 years (CDC, 2012). This means that over 10,000 women will be diagnosed with breast cancer in the Toledo area within the next 20 years if statistics stay the same. This is a large number of women who will be affected and that will be able to benefit from the proposed occupational therapy program being implemented in Toledo, Ohio.

**Governmental Initiatives**

Healthy People creates objectives every 10 years for improving the health of Americans (U.S. Department of Health and Human Services 2012). Healthy People 2020 is the latest 10 year agenda to help the U.S. be more aware and proactive about health issues we are currently facing. There are many topics and objectives covered by Healthy People 2020, with one major topic being cancer. The occupational therapy program at The Center will aim to meet a few of the stated objectives. Objective C-14 states there is a need to increase the mental and physical health-related quality of life of cancer survivors. The proposed program will help meet this objective by providing occupation-based treatment for the physical and emotional effects of cancer treatments such as radiation and chemotherapy. Objective C-17 states the need to increase the proportion of women who receive breast cancer screening based on the most recent guidelines (U.S. Department of Health and Human Services 2012). The Center will aim to meet this objective by attending and holding various community events to educate the surrounding area on screenings such as mammograms. The program will meet this objective by having the occupational therapist perform screenings developed by occupational therapy students at The University of Toledo.

The National Breast Cancer Coalition (NBCC) also has been making headway in the area of legislation and headlines. In October 2013, the Breast Cancer Deadline 2020 was released as a
progress report on the state of breast cancer and to update data collected in 2011 and 2012. The newest report showed that the scientific community’s understanding of breast cancer’s biology has increased but there have been no significant breakthroughs in treatment or outcomes to report on (National Breast Cancer Coalition, 2012). According to the report, the Accelerating the End of Breast Cancer Act, legislation developed by NBCC has been reintroduced in the 113th Congress. Currently the legislation has bipartisan support of 25 Senators and 173 Members in the House. The NBCC’s ultimate goal is to know how to end breast cancer by January 1st 2020 and through advocacy, education, and legislation they hope to achieve this goal. The proposed program will help advocate for and educate on screenings in the community to ultimately try to help with meeting this goal.

National Trends

In America, there is a growing number of cancer survivors with 1 in every 20 adults and almost 1 in 5 of people over 65 having survived cancer (Belluck, 2011). Advocating for these survivors and breast cancer survivors is a current trend in the occupational therapy profession because having occupational therapy involved with breast cancer is a relatively new idea. In 2011, Jennifer Hughes an occupational therapist participated in a conference call to gather clinician viewpoints to present at an upcoming American Cancer Society stakeholders meeting. The purpose of this meeting was to develop a collaborative clinical care model for breast cancer rehabilitation which occupational therapy had not been a part yet. Once considered an acute medical condition, breast cancer is now regarded as a chronic condition, with individuals often coping with long-term effects from treatment such as lymphedema, cognitive challenges, fatigue, and altered body image (Hughes, 2011). Now there is a clinical shift from focusing on the quantity to the quality of life of those diagnosed with breast cancer. This clinical shift fits well
with the occupational therapy profession, theory, and philosophies on holistic care, promoting health and wellness, advocating preventive care, client centered approach, and maximizing quality of life. The proposed occupational therapy program will work to advocate and help occupational therapy be more prominent in breast cancer care after women undergo medical treatment. Education on benefits that occupational therapy can provide to women post-breast cancer will be shown throughout the Toledo community through the proposed program and hopefully expand occupational therapy’s role in oncology treatment.

**Occupation-based Programming**

The proposed occupational therapy program will provide post-treatment care in a group and individual basis to help the members return to a baseline of function after their breast cancer treatments. Common effects of treatment have been previously stated and include swelling, upper extremity scaring, and fatigue. In order to help women return to their daily lives the program will use occupation-based treatment. Occupational therapists can address overcoming physical and emotional changes from cancer treatment in many different occupation-based treatments; this means that education and techniques will be provided in a functional way to help correlate new skills with tasks that the women perform every day. For example, to work on upper extremity range of motion a cooking group can be performed where participants need to reach around 90 degrees to obtain an ingredient. The cooking group would also serve other purposes like socialization, support, healthy habits, and energy conservation. Assessments used to evaluate progress can be occupation-based as well. The Manual Ability Measure-20 is a task-oriented, occupation-based hand assessment that was developed through extensive research, and it is very easy to use (Hill & Chen, 2012). This assessment can test hand abilities and disabilities in oncology patients using occupation-based and functional tasks. Techniques taught in occupation-
based treatment will be easy for the patient to translate into their common activities of daily living (ADLs) making the client more independent and productive. Other occupation based programming that has been considered includes creative expression groups, support groups, and educational seminars. Any group setting can bring a sense of community and being around women who can relate to each other’s situations is therapeutic in increasing self esteem and feeling more confident about their journey through cancer recovery.

**Models of Practice**

Two occupational therapy models of practice have been chosen to guide the A.C.E program. The first model of practice is the Canadian Model of Occupational Performance (Law, Baptiste, & Mills, 1994). This model was chosen due to its focus on the process of therapy and the relationship between client and therapy. In this model, the therapist and client work together to create goals related to physical, mental, and spiritual occupational performance. This model of practice relates to and will correlate well with the overall program goal of the A.C.E. program. In this program the relationship between the members of the facility and the therapist is key to provide the best therapeutic services to each individual as well as the group as a whole population.

The second model of practice that will guide the occupational therapy program at the Center for Health and Successful Living is Ann Mosey’s Role Acquisition model (Mosey, 1986). This model was chosen for its importance of active involvement in the learning process. Like the previously mentioned client centered model (Law, Baptiste, & Mills, 1994), the client provides a great deal of input during individual goal setting and the overall direction of therapy. As with the proposed program, this model focuses on long term goals that are set with the client’s naturalistic environment in mind to facilitate carryover of skills learned in therapy. With the members of The
Center all post-cancer treatment, the goals would likely focus on the member’s current or new roles they have. This model will help focus on how the members can return to their roles after cancer.

**Summary**

In review, there is a growing number of breast cancer survivors in the U.S. and there is a lack of community resources available for survivors to go to for emotional, physical, and mental services. The proposed program will address needs that members of The Center for Health and Successful Living identify due to effects that the breast cancer treatment had on activities of daily living. Trying to educate the community as well as medical professionals about The Center and benefits that occupational therapy can have for women affected by breast cancer treatments is a major objective to the proposed program. It will be important to look at the Canadian Model of Occupational Performance and Role Acquisition models of practice while developing the specific intervention and treatment sessions of the proposed program in order to meet all of the client’s needs that fall under the occupational therapy scope of practice. After reviewing literature on preexisting programs, I now have an idea on where to budget time between assessments, treatment, and group sessions to create the most beneficial outcomes for the members.

**Program Goal**

The goal of the A.C.E.: After Cancer Experience: A Community-Based Occupational Therapy Program for Women after Breast Cancer program is to assist women in carrying on daily occupations to their best abilities during and after cancer treatment. The program will accomplish this through education and occupation-based therapeutic interventions after the
effects of breast cancer treatment may have limited their physical, cognitive, and emotional capabilities.

**Objectives**

1.) By the halfway point of the program, 30 women will participate and complete the needs assessment questionnaire with minimal verbal prompting.

2.) By the halfway point of the program, 75% of the participants will identify 4 issues caused by breast cancer treatment that have caused a decrease in their ODL function with minimal verbal cueing from occupational therapist.

3.) By the end of the program, all of the participants will participate about 75% of the time in a complete 4-5 step occupation-based group in allotted time (approx. 90 min) with minimal assistance.

4.) By the end of the program, the occupational therapist will complete two educational services to the surrounding community on behalf of The Center for Health and Successful Living.

5.) By the end of the program, 75% of the participants will be able to demonstrate/state understanding of 3-4 energy conservation techniques they can use in their ODLs with minimal verbal cueing.

6.) By the end of the program, the OT will independently develop a variety of educational resources available to members of the facility and their caregivers based on information provided by the members.
Marketing and Recruitment

Sources of Participants

Recruitment of participants for the program will occur multiple ways. It should begin with current members of The Center for Health and Successful Living as potential participants in this program. The occupational therapist is encouraged to attend current programs such as book club to promote future events she will offer and build rapport. There are also many community resources available for survivors of breast cancer in Toledo that have agreed to post promotional material for programming at The Center. An example is the Victory Center, which holds groups daily and has over 200 women walking in their door daily. Reaching the women who already attend groups in the community and educating them on the services I offer is beneficial to my program’s ability to gain participants. Another source of participants I hope to use would be referrals from oncologists. It is important to make the physicians aware of the programs available at The Center and how their patients can benefit during or after cancer treatment.

Inclusion and Exclusion Criteria

The inclusion criteria for the program are as follows;

- Diagnosis of breast cancer
- Have undergone any amount of treatment for breast cancer
- Age 18-80
- Able to understand step-by-step directions

The exclusion criterion includes;

- Women who have orders that limit them from physically performing the occupations throughout the program
The approximate number of participants served by this program is 20. Each group can accommodate around 10 but with participants joining late or leaving the program early, I expect a total of 20 women to gain benefits from this program.

**Marketing Methods**

Some of the marketing methods that will be used are informational flyers, The Center’s preexisting social media, and promotional items such as calendars to hand out at community events.

1.) Flyer

   a. In terms of affordability, this is a feasible way to market. Color copies can be made at a local FedEx for around 9 cents apiece. Also, as a student at the University I am allotted a budget for printing and this has been useful for the first few hundred flyers (see Appendix E for an example of a flyer).

   b. This method is geared towards breast cancer survivors in the community who are either already attending offered programs or haven’t taken advantage of the community resources available in the Toledo area.

   c. These flyers will be placed around Toledo focusing on places like The Center, The Victory Center, Renee’s Survivor Shop, supermarkets, coffee shops, community bulletin boards, waiting room tables at oncology offices and cancer treatment centers. They will be placed one to two months out from the start date of the program to give ample time for planning and scheduling. Contact information located on the flyer for interested participants to ask questions or reserve spots. After the flyers are designed, they are to be presented at CHSL
meetings for group input on what to change and what is appealing or not appealing.

d. The flyers can also be shared electronically via social media or e-mail.

2.) E-mail list

a. The e-mails are free of cost and are gathered through events where people volunteer their contact information to receive updates on The Center’s programming and events.

b. This method is geared toward those who have been educated about The Center and believe that they or someone they know could benefit from services offered.

c. The e-mails are sent monthly as a newsletter and also a week before programming events as a reminder.

3.) The Center’s Social Media

a. This method is free of cost.

b. This method is geared towards current members of The Center and prospective members.

c. This will be used to gather participants to “like” The Center’s Facebook, Twitter, or Pinterest page where they will be notified of upcoming groups happening. It will be important in maintaining program attendance.

These marketing strategies are appropriate for the target population for several reasons. The flyers are an easy way to get the program’s basic information out in the community at a variety of settings without spending a lot of time or money. Social media is already used daily by current members of The Center and has established a base of “friends.”

1.) Example of social media use
Post: “Morning Ladies! Don’t forget next Tuesday is the 2nd art night with Hannah. We will be making a melted crayon canvas to get ready for the bright colors of spring. Remind your friends to be at The Center at 6:15 for this group. Enjoy your day!”

**Programming**

**Principles of Intervention**

Programming interventions have been selected based on the needs assessment findings along with input from all stakeholders. The programming interventions largely focus on physical and mental health. The two models of practice that provide a basis for the interventions are the Role Acquisition Model and the Canadian Model of Occupational Performance. Interventions are closely related to these models throughout the program. Interventions focus on client roles that have been affected by breast cancer treatment. The occupational therapist and the client work together to create goals related to physical, mental, and spiritual occupational performance. Interventions begin with a goal setting discussion between the client and occupational therapist to ensure that further programming will focus on the client’s preferred roles. The interventions also focus on the client as a holistic being. A structured literature review and needs assessment have played an integral role in program formation and planning.

A study on most the common issues after breast cancer concluded that most common impairments were breast and axilla scar tightness, axilla edema and neck-shoulder pain (Karki et al., 2005). This study gave a general guideline to base programming intervention ideas on such as upper extremity range of motion occupations, lymphedema education, and relaxation techniques.

The study done by Hellen Vokins in the UK is useful for managing time throughout the programming. Her research concluded that a significant amount of time during an efficient after
cancer therapy program was spent facilitating educational programs, teaching relaxation
techniques and exploring strategies for managing breathlessness and fatigue. This was helpful in
prioritizing time and interventions. The occupational therapy program hopes to relate to the
current objectives specifically through providing educational handouts for clients and client
caregivers during and after educational interventions. Examples of specific program intervention
ideas are to follow.

Assessments

The Manual Ability Measure-20 (MAM) is a task-oriented, occupation-based assessment
developed through extensive research (Hill & Chen, 2012). This assessment was chosen for a
number of reasons. It is a self-directed questionnaire where the patient gives a number value to
the level of difficulty they have performing daily tasks such as zipping a jacket or writing
legibly. The assessment will be used as a pre and post measurement of the program to evaluate
its effectiveness in terms of if the patient feels daily tasks are less difficult. The assessment is
short and does not take away valuable education intervention time. It is inexpensive, easy to
read, and will quantify the program’s effectiveness in the eyes of the participants. This rationale
makes the MAM a great tool for a community based program.

A goniometer is a useful tool to record pre and post program upper-extremity range of
motions to evaluate program effectiveness. Goniometry and the MAM-20 assessments will be
used for women with upper extremity impairments due to breast cancer treatments.

To assess fatigue and energy, the Multidimensional Assessment of Fatigue (MAF) will be
used. The MAF is self reported questionnaire that measures a person’s level of fatigue and its
effect on his/her daily activities. When a client reports fatigue as a problem, the occupational
therapist can administer a pre and post program MAF questionnaire to evaluate whether or not
the program was beneficial in educating the client on energy conservation techniques. A screening tool in development by occupational therapy student Kara Bryner is another form of assessment appropriate for the A.C.E. program.

**Program Sequence**

The program will be held once a week for six weeks from 6-7:30 p.m. All sessions are group based, excluding the initial consult that will be discussed in the following paragraph. Staff should try to always hold groups on the same day every week but could be flexible according to clients’ scheduling. Reasoning behind this is that some clients have full time jobs that require them to work into the early evening or they may have children they need to tend to before a significant others gets home from their job in the evening. This makes the 6 o’clock hour best for most of the interventions that may deal with cooking as well as interventions to learn energy conservation techniques. The women will be close to the end of their day and possibly out of energy, making them more aware of how fatigued they can get without using energy conservation techniques. If there is an issue with childcare, there will be free childcare offered by volunteer students from The University of Toledo who are involved with The Center such as public health or social work students.

The occupational therapist will also be available at The Center Monday and Tuesday from 10-6pm and every other Saturday before the program commences from 8-2pm for individual consultation by appointment. These hours offer time to evaluate and welcome each individual participant before the program begins. The aforementioned assessments will be completed along with a demographic questionnaire during an individual scheduled time of approximately 60 minutes. The occupational therapist will go over the results of the assessments during this initial meeting and decide if the participant is appropriate for the upcoming program.
Once the occupational therapist has deemed the person appropriate, he/she will also provide a brief description of the program to help the potential participant decide if she feels she will benefit from attending the program. This will reduce the risk of drop outs once the program begins. If the occupational therapist does not believe the person is appropriate for the program, he/she will provide the person with other community resources that the occupational therapist believes would be more beneficial based on the outcomes and discussion during this initial visit. All assessments and records will be kept in an individual folder in a locked cabinet in the Health and Human Service building.

Olivia Brown, a public health student at The University of Toledo has put together a community resource guide for breast cancer survivors in the Toledo area with help from the Komen Foundation and The Lucas County Breast Health Coalition. Any person who comes in for a program consult will receive a copy of this resource guide to use on her own whether she is invited to attend the program or not. This way, those that are not appropriate for the program offered at The Center can still find other ways to meet their needs and those who will be in the program can utilize other community resources simultaneously. The following describes each of the sessions in more depth.

**Session I**

The first intervention session will consist of an introduction to the program and occupational therapy. The first 30 minutes will be used for the occupational therapist to introduce him/her self and background, as well as some general information about the program. Around 5-10 minutes will be allotted for general questions from the clients about occupational therapy, the program, or the occupational therapist. Then an introduction of each individual, an interesting fact about them, and information about their journey with breast cancer can be shared
for around 30 minutes. Then, there will be time for a small break to enjoy refreshments and use the restroom. The remaining time will be used for an interactive ice-breaker. An example of an ice-breaker is a question web where a spool of wool is thrown from person to person creating a web. As the wool is thrown to each client, the previous client shouts a number from 1-21 and a corresponding question is read for the person to answer. Topics would cover general “get to know you” questions such as, “If you could go anywhere in the world, where would you go and why?” As the person throws the wool to the next person, she holds onto a section eventually creating a unique web while getting to know each other. This will hopefully make the women feel more comfortable with each other as the programming may address more serious personal information as time goes on.

**Session II**

For the second week intervention, the first 10 minutes will be used as a reintroduction, mingling, and address any questions. The next 30-40 minutes will be used as an educational session on energy conservation techniques. Examples of what the occupational therapist will discuss during this session include:

- Prioritizing
- Planning
- Modifying your environment (most used items in easy to reach areas etc)
- Rest breaks
- Eliminating unnecessary steps
- Body mechanics
Examples of each principle will be provided during the education so clients can fully understand how to incorporate the energy conservation techniques into their daily occupations. Then a short break of 10 minutes will be given to enjoy refreshments and use the restroom. Upon returning to group, the occupational therapist will have set up mock daily living tasks such as laundry in a hamper, pots and pans, and clothing for the clients to put on over their current outfit. Each of the tasks provides an opportunity for the client’s to practice and demonstrate some of the techniques they have learned. For example, the participants will slide full pots and pans across the counter top and compare this effort to picking up and carrying the full pans from one end of the counter to the other. A laundry basket filled with clothes can be pushed with their feet across the carpet instead of carried. We will also discuss body mechanics with the props such as carrying a laundry basket under one arm or out at arms length versus the better option of holding it with two hands as close to the body as possible. Thinking of ways to break a routine with unnecessary steps will come with a group discussion based on roles the individuals have on a daily basis. This will take around 30 minutes. The remaining time will be used to review the techniques discussed and hand out a summary educational flyer that goes over the information covered. The women will also receive a journal to document how their fatigue and emotions change throughout the week and to journal about the techniques they use. The clients will be asked to record any techniques they have started or realized they already were using throughout each day. The therapist will also ask them to journal their activities each day and rate their fatigue on a 1-10 scale each night. The journal can also be used in a personal manner to write down any struggles, thoughts, or questions they think of throughout the week. Participants will be given an opportunity to share their journal entries and significant findings at the beginning of each session. Journals are for the participants to keep after the program.
Session III

The third session will begin with a 5-10 minute mingling and question session. After this, the group will summarize what was discussed last week about energy conservation and be asked if they would like to share what they have written in their journal throughout the week. If everyone does share at least one thing from their journal, this will take approximately 20-30 minutes including conversation and discussion around the topics they have chosen to discuss. Then a short break will be given for about 5 minutes. Upon return, the women will be educated by the occupational therapist on benefits of relaxation and stress management. Some examples of ways to relax will be discussed such as aromatherapy, guided imagery, deep breathing, and writing a list of things you can be grateful for. The educational section of the group will take about 25 minutes. The rest of the session will be split into two groups. One group will be given a worksheet where they write and share things they can be thankful for in their life. The participants are trusted to complete this on their own without supervision in a separate room at The Center but an occupational therapy student may be in attendance for this break out session to help facilitate and answer questions as part of a Level I fieldwork experience. The other group is led through a guided imagery/deep breathing session. The groups will each last about 15 minutes each and then the members will switch to the next group. The session will end with a 10 minute summary and discussion. The women will also be asked to journal about energy conservation techniques and stress reducing techniques they use throughout the week.

Session IV

The fourth session will start with a 10 minute summary and question discussion covering the material that has been discussed so far during the program. Thirty minutes will then be allotted for the women to openly discuss their journal entries from the previous week. Then, 10
minutes will be allotted for a light refreshment break. Upon return, the women will be prompted to discuss their experience and current knowledge on lymphedema. The remainder of the session will be spent going over an educational brochure designed by the occupational therapist on lymphedema precautions and techniques to reduce lymphedema. Resources for where members can receive certified treatment will be given to those who feel like they may need it. An example of a resource is The Victory Center in Toledo, Oh that has lymphedema specialists. At the end of the group, the women will be reminded to continue journaling and discuss possible dishes to make during the next intervention. This is a time to document any food allergies as well.

**Session V**

The fifth group intervention will be a cooking intervention. Nutrition is important during rehabilitation from cancer. A healthy diet is key to feeling healthy and reducing fatigue but some people are not educated on what it takes to have a balanced diet. We will discuss healthy recipes along with including the nutritionist that works with The Center to speak about post-cancer diet suggestions. Just like the previous groups, the women will being with a 10-minute summary and question time about previous material. Then the remaining time will be needed to prep, cook, and enjoy the dish they have chosen to make. The options should all be nutritious and use fresh produce. The women should be able to demonstrate the energy conservation strategies that have been covered during the course of the program such as sliding the pots and pans or sitting while chopping vegetables. It should take the entire time to cook and eat the dish of choice. A summary and review of techniques that were used and some that may have been forgotten can be discussed at the end of the cooking group. Along with that, the women will be asked to prepare a special journal entry to read aloud to their family and the group members during the next and final intervention. The women can use this to tell their family what they’ve learned in the
program, thank their support system, and/or express any feelings they have about their journey with cancer in a safe environment.

**Session VI**

The sixth and final group will be a “graduation” from the program. Caregivers and family members are welcome to attend this group. Refreshments for all will be provided. The session will begin with a 15-minute summary and short background of the group from the occupational therapist. The women who have chosen to share a journal entry will then share how the group has helped them in their recovery from breast cancer. If six women share for 10 minutes each, this will last almost the entire session. Certificates will then be given to the women and any remaining time can be used socially to reflect on the group as a whole. If there are participants who feel they could benefit from another cycle of interventions, they are welcome to complete the program again during the next scheduled start date. Their eligibility will be based on the individual reassessment outcomes performed by the occupational therapist discussed in the “Discharge” section.

**Occupational Forms**

The occupational forms will vary somewhat for each group. In general, the programs will be held on the University of Toledo’s main campus in The Center for Health and Successful Living. The groups that are educational and focus on discussion can be held in the front room that has a tranquil atmosphere with an enclosed fireplace and large open area with large comfortable chairs. The occupational therapist, members, and volunteers will also be part of the occupational form. For specific interventions like the relaxation group, lights will be dimmed but adequate lighting will be necessary for all other groups. The mock ODL session will be held in the room in the back of the hallway at The Center because it has a large open area and very
good natural lighting. The cooking group will take place in a fully functioning kitchen on the second floor of the Health and Human Service building. Materials that will make up the occupational form for this six-week program will include, journals, educational handouts, typical ODL supplies (clothing, pots, pans, laundry bins, etc.), and kitchen equipment for the cooking group. During the final intervention, family members of all the participants will be included in addition to typical occupational form.

**Documentation**

Documentation will be used during every group. The majority of documentation will consist of an attendance sheet that participants write their name on at the beginning of each group. If individual consultation is needed there will be pre and post program documentation on Manual Ability Measure-20 or the Multidimensional Assessment of Fatigue assessments previously discussed. The main documentation will also include the prospective screening tool being completed by the occupational therapy student as a research project. The individual journals will also be used as the client’s form of informal documentation to remember their journey through the program.

**Care Coordination**

During the course of this program, Dr. Thompson and Dr. Jordan will be the co-care coordinators. They will fill this role well because they are also the co-coordinators of the facility and know the members of The Center the best. The occupational therapist and other disciplines involved with the center will be secondary care coordinators Examples of services offered by other health professionals are recreational therapy, nutrition, and social services. Documentation for the occupational therapy program will be completed by the occupational therapist and will be responsible for storing them. The care coordinators are able to recommend services that can be
beneficial to members. The occupational therapy program will work closely with the recreational therapist during the stress management and relaxation group. The nutritionist will also play a role during the cooking group. These are just two small examples of how many disciplines will be involved in the client’s care coordination.

**Discharge**

The clients will be discharged from the A.C.E. Program during the post program evaluation. After the program has ended, the occupational therapist will conduct a follow up call to schedule a post program re-evaluation. This individual session will give the therapist an opportunity to measure the progress of the program and reassess the client. Based on the assessment outcomes, the client can be formally discharged from the program, referred to an outpatient physical therapy or occupational therapy clinic for specific limitations, or offered the chance go through all or some of the six sessions of the program again. All of the program’s objectives should be met and the cycle of interventions will be completed. The goal is that all of the participants are discharged as a group, forming a bond between the women during their final “graduation” intervention. If there are unforeseen circumstances such as, moving out of the area, time conflicts, etc. an early discharge can be arranged. If there are participants who joined after the first group, they can still be discharged by the 6th intervention if they meet all of the objectives.

**Staffing**

The A.C.E program will be staffed by a part-time occupational therapist certified by the National Board for Certification in Occupational Therapy and licensed by the state of Ohio. A detailed job description has been provided (see Appendix F for sample job description). An advertisement for the occupational therapy position has also been attached (see Appendix G for sample job advertisement flyer). Applicants must be willing to work evening and weekend
Dissemination

hours, as this is a community program and some of the member’s availability will be after regular business hours.

The occupational therapist hired will work approximately 15 hours a week during the program. The expectations for the occupational therapist will vary depending on the stage of the program development. For example, during the needs assessment the occupational therapist will not have to hold as many “consultation” hours because he/she will be in the community trying to identify their needs. The hours per week will always remain part-time but can vary between 12-20 hours a week throughout the different stages of program development. Along with running weekly groups during the program run time, the occupational therapist will be available for initial consults and post program evaluations on an individual appointment basis two and a half days a week.

Additional staff members are not necessary to run the A.C.E. program, but Level I occupational therapy fieldwork students will be welcomed to observe and/or run certain groups. During the spring of the 2nd year of the Occupational Therapy Doctorate program at The University of Toledo, the students are required to observe and run a group dealing with mental health. The stress management and relaxation session (session III) would be a great opportunity for these students to complete their assignment. Including Occupational Therapy Assistant students from Owens Community College would be beneficial for the other sessions as well. This would provide a great fieldwork opportunity for surrounding therapy programs to educate students on oncology rehabilitation first hand. Using students in The Center is very beneficial due to their small budget and grant funding. The Student Occupational Therapy Association (SOTA) members could also complete volunteer hours at The Center during the various education or screening events. The students would go through a screening/health coaching
training provided by The Center before attending a screening event or health fair to help them learn the current breast health standards. Level I students or SOTA members could run the monthly art night events The Center already includes as part of their programming. The students would learn about marketing community events, planning groups, group dynamics, and interdisciplinary team work during any of the above listed opportunities.

The Center is currently run by volunteers who can play a role in the occupational therapy program. For example, the volunteers might be answering phone calls about the occupational therapy program or answer questions about program times etc.

**Budget**

A comprehensive budget has been provided (see Appendix H for the detailed program budget). This budget covers staffing and supplies for a full, six week cycle of the program. Each item includes a short description about the rationale behind it, a quantity, and a total cost. The majority of the cost estimates were found at amazon.com. In-kind costs of the A.C.E. program have been provided in the budget but are not added in the total cost because The Center for Health and Successful Living will be providing them. The indirect costs (i.e. utility expenses and internet fees) of the program are not mentioned in the budget because The University of Toledo does not charge The Center for these services since it is held in a university affiliated building.

**Funding**

**Potential Funding Sources**

**The Susan G. Komen Foundation**

This funding source was chosen for a variety of different reasons. The Susan G. Komen Foundation has invested more than $2.1 billion since 1982 to breast cancer research, survivors, and treatment (Susan G. Komen, 2014). It is the world’s largest grassroots network of breast
cancer survivors and activists and this is why it will be a good funding source for the program at The Center for Health and Successful Living. The foundation’s research focus has evolved over the years. In the beginning they focused on understanding the basic biology of breast cancer. As more has been learned about the factors that make cancer cells grow and spread, the ability to invest more in the translation of this knowledge into treatment, early detection and prevention has grown, with the goal of supporting work that has significant potential to lead to reductions in incidence and mortality within the decade. This foundation also has increasing opportunities specific for survivors of breast cancer.

Susan G. Komen Foundation utilizes a multi-step approach to application and review that requires submission of a pre-application and full application upon invitation only. Pre-applications are first administratively reviewed for eligibility, submission of required application materials, adherence to formatting requirements, and responsiveness to the RFA. A panel reviews each qualifying pre-applicant and assesses the strengths and weaknesses of each submission. Only Applicants with pre-applications deemed most meritorious and aligned with Komen’s research mission will be invited to submit full applications. They anticipate inviting approximately 20-25% of pre-applications to submit full applications. Applicants will be notified of pre-application review decisions via email. Once notifications are sent, Applicants will be granted access to reviewer comments. Applicants invited to submit a full application will then be granted access to the full application site. The due date for pre-applications is in September each year and the most efficient way to submit is by using the proposal central website at https://proposalcentral.altum.com. Questions should be directed to the Komen Research Programs Help Desk at helpdesk@komengrantsaccess.org or toll-free 1-866-921-9678. The potential amount that can be awarded varies, but I believe that the entire A.C.E. program could
be funded for the first cycle or at least $5,000 could be awarded to the program. The Center for Health and Successful Living has a committee of students that focus on writing grants to fund The Center throughout the year. They also have a seasoned faculty advisor to support the students and they are very successful at receiving funding from their proposals.

**American Cancer Society**

The American Cancer Society is a large private, not-for-profit source of funds for studying cancer. The Center for Health and Successful Living has already has received grants from this foundation to fund the start up expenses. The society focuses on many kinds of cancer and funds can go toward research, prevention, treatment, and survivors. Grant applications are ranked on the basis of merit by one of several discipline-specific, Peer Review Committees, each of which is composed of 12-25 advisors, or peers, who are experts in their fields. The Council for Extramural Grants, a committee of senior scientists, recommends funding based on the relative merit of the applications, the amount of available funds, and the Society's objectives. Stakeholders, including individuals with a personal interest in cancer, are full voting members of the Council and all Peer Review Committees. They improve the review process by bringing the perspective of the dedicated and impartial volunteers to the review process. To streamline the grant administration process, they include an electronic post award management system. The site is used to upload all requests for grant changes and related documents, and required reports. The site will house all reports, requests and correspondence pertaining to a grant and is accessible to both ACS program staff and grantees. Any questions about the grant process should be directed to proposal central customer support desk: by phone: 1-800-875-2562 toll free or by email: pcsupport@altum.com. This eliminates mailing applications and missing deadlines. Ohio has been awarded 34 grants averaging about $585,000 each grant (American Cancer Society, 2014).
I believe that The American Cancer Society could more than fund the proposed program and the grant writing committee has a history of receiving grant funding from this agency.

**Additional Funding**

The Toledo Rotary Foundation was established to support the educational and charitable efforts of the Rotary Club of Toledo. The Rotary Club of Toledo and Toledo Rotary Foundation annually support the community funding over $150,000 in grants to over 30 community organizations annually. Foundation funding is made possible through the generous contributions of members of the Rotary Club of Toledo and its friends. The funding maximum is $10,000. This would have been a good funding source except the policy states that no operational expenses will be funded. This means that the staffing could not be funded by this foundation and would not be appropriate for the proposed program. Another funding source found that was ruled out was the Avon Foundation for Women. This foundation grants breast cancer programs based on research and preventative care and actions. It also looks to understand the causes of breast cancer, which the proposed program does not address.

**Barriers to Funding**

While searching for funding for the A.C.E. program, there were barriers that I ran across. For example, a lot of grants are awarded based on geographic location and being located in only one state is limiting. An additional barrier to funding is that the proposed program is not a research project. Many organizations and foundations offer grants for more research-oriented programming. The A.C.E. has potential to grow to include research studies but research was not one of the initial goals of the program. As previously stated, some grants do not cover operational costs. The staffing for the A.C.E. program is the largest part of the programming budget and when grants do not provided funding for operations; they do not align with the
program’s financial need. Another barrier to some grants is that they do not openly state how much funding will be awarded. Without having a specified range of typical funding, the applicant can be denied because the organization cannot fund what was requested.

**Self-Sufficiency Plan**

A grant will be able to cover the first cycle of the A.C.E. program but other methods of funding will be necessary to continue the program in future months and years. It is likely that once the initial supplies are purchased, the cost to run this program will decrease significantly in further cycles. The Center prides itself on offering free services to its members so running the program on a fee-for-services basis is not realistic. Because this program is a community-based program, asking for donations from local businesses is a possibility to replenish supplies. Fundraisers can also be used to generate money to sustain the program. Ideas for fundraisers include 5k races or benefit dinners. Regardless of these measures being taken, having an occupational therapist facilitate the program remains the most costly. It is possible a Level I fieldwork student could direct the program with the right advisor and this would be a reduction in the program cost. Having an occupational therapist available to administer and interpret assessments would still be ideal and would most likely need further grant money.

**Program Evaluation**

Several forms of evaluations will be used to identify the effectiveness of the ACE program. Some of the evaluations will be more formal than others depending on how the specific objective needs to be measured. There will be six groups at one per week throughout the program. Summative and formative evaluations will be conducted according to the objective.

1. By the halfway point of the program, 30 women will participate and complete the needs assessment questionnaire with minimal verbal prompting.
The occupational therapist will evaluate whether the above objective has been met by observing the participants. The therapist will collect completed needs assessments and verify that they are complete by making sure every question has been answered. Once the therapist counts 30 completed needs assessment, the objective has been met.

2.) By the halfway point of the program, 75% of the participants will identify four issues caused by breast cancer treatment that have caused a decrease in their ODL function with minimal verbal cueing from occupational therapist.

This objective will be evaluated through an informal writing experience. The women will be asked to write four ways that breast cancer treatment has affected their daily activities using the journal provided to them. The women will then discuss what methods they have written, if they feel comfortable, as the occupational therapist notes if the objective is met.

3.) By the end of the program, all of the participants will participate about 75% of the time in a complete 4-5 step occupation-based group in allotted time (approx. 90 min) with minimal assistance.

This will be evaluated by observations done by the occupational therapist. The hope is that all of the participants will be able to work together in a social atmosphere, while using techniques making them able to participate in about 75% of the 90 minute group. The occupational therapist will observe the cooking intervention and document when any of the participants are not participating in the group in any way. Considering the group is working on energy conservation techniques, participation does not always have to be physically active, it can be planning and delegating if some participants are feeling fatigued. Each participant needs to participate in a minimum of 67 minutes to meet this objective. The next objective will also be
observed by the occupational therapist in a cooking occupation and evaluated by the observations and by discussion from the participants.

4.) By the end of the program, the occupational therapist will complete two educational services to the surrounding community on behalf of The Center for Health and Successful Living.

This fourth objective will be evaluated by the occupational therapist and his/her log of hours. The occupational therapist should also be promoting and marketing the program to gain future referrals and increase community awareness.

5.) By the end of the program, 75% of the participants will be able to demonstrate/state understanding of 3-4 energy conservation techniques they can use in their ODLs with minimal verbal cueing.

The occupational therapist will hold a discussion following the education on energy conservation where the women in the group will be asked to identify four techniques they have learned. The occupational therapist can use minimal verbal prompting to help the women recall some of the techniques if necessary.

6.) By the end of the program, the OT will independently develop a variety of educational resources available to members of the facility and their caregivers based on information provided by the members.

The occupational therapist and the program’s stakeholders will evaluate this objective. The stakeholders will approve the educational handouts before they are distributed.
Attached is another example of a formative evaluation the occupational therapist will use to document current participant satisfaction and make possible changes to the rest of the program (see Appendix I for example of Participant Satisfaction Questionnaire).

**Evaluation Results**

As previously stated, the formative evaluation results will be used to guide the rest of the program. If the data from the formative evaluations are conducive to continue the current program, no changes will need to be made. However, if data shows that objectives are not being met then teaching strategies may need to be reevaluated. The program director may need to review content depending upon the participants’ needs. Comments from the participant satisfaction questionnaire will be used when planning upcoming interventions for the current group. The data collected by the summative evaluations will be shared with the participants at the end of the program, to show their progress. The data will also be shared with the stakeholders to provide evidence that the program is effective and worth continuing. Data can also be used in future grant writing to apply for additional funding for the next program cycle.

**Timeline**

Appendix J is an example of a timeline for this program. Major tasks are correlated with a week number. There is an initial week for preparation and then a six week cycle. The program will ideally be held quarterly when there are enough participants.

**Letter of Support**

It is necessary for the A.C.E. program to have adequate support from stakeholders to be a successful program. Therefore, a letter of support has been provided (see Appendix K for a sample letter of support). The letter provided is from Dr. Amy Thompson, a co-director of The
Center of Health and Successful Living. Another possible letter could come from Dr. Jordan, the other co-director of The Center. Dr. Jordan is appropriate to ask for a letter of support because he also began the effort to launch The Center and he is passionate about helping breast cancer survivors in the community. He has a passion for public health and also understands the needs of community programming. The third person to approach to write a letter of support would be Dr. Thomas. She is a professor in the occupational therapy doctorate program and has expressed an interest in the role of occupational therapy in oncology rehabilitation. Dr. Thomas is an experienced occupational therapist with many resources available to her. Their contact information is as follows;

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References


Appendix A

Organizational Chart

Appendix B

Needs Assessment Questionnaire
Age:__________ Cancer Type:___________________________

1.) Where are you in your journey with cancer? (ex. just been diagnosed, undergoing chemotherapy, post surgery?)
___________________________________________________________________________
___________________________________________________________________________

2.) Have you been referred to any rehabilitation services such as physical, occupational, or speech therapy? ________________
If so, which one/s and for what issue?
___________________________________________________________________________
___________________________________________________________________________

Please answer the following circling Yes or No with explanation if needed.

Do you feel too tired to do the things you need to do? Y/N____________________________

Are you feeling weak? Y/N____________________________

Do you have trouble getting around or are you afraid of falling? Y/N____________________________

Are you having any pain in your body? Y/N____________________________

Do your hands and/or feet tingle or feel numb at times? Y/N____________________________

Does any part of your body feel swollen or filled with fluid? Y/N____________________________

Do you have trouble concentrating or remembering things? Y/N____________________________

Are you having trouble taking care of yourself? (bathing, dressing, toileting) Y/N____________________________

Has driving become more difficult for you? Y/N____________________________

Are you having trouble returning to work or completing your tasks at work? Y/N____________________________

Are you having issues with intimacy? Y/N____________________________

Have your daily tasks such as shopping/chores become more difficult? Y/N____________________________

What are some other concerns you have with your physical or emotional well being?
___________________________________________________________________________
___________________________________________________________________________

What kind of support/help do you feel would benefit you most at this time? (ex .mentorship program, knowledge of community resources) Please list what services you would like to see.
___________________________________________________________________________
___________________________________________________________________________
Appendix C

Needs Assessment Findings (Breast Cancer)

Age Range: 41-85 years  n=27
Average age-61.44  Cancer Type: All Breast

Where are you in your journey with cancer? (ex. just been diagnosed, undergoing chemotherapy, post surgery?) _ Ranges from in chemotherapy and radiation to 29.5 years in remission

Have you been referred to any rehabilitation services such as physical, occupational, or speech therapy? Yes -13 No -14

If so, which one/s and for what issue?

11-Physical Therapy (neuropathy and movement in arms, lymphedema(x3), 1-Occupational Therapy (lymphedema) 1-STAR Program

Please answer the following circling Yes or No with explanation if needed.

Do you feel too tired to do the things you need to do?  Y-13 N-14

Are you feeling weak?  Y-9 N-18

Do you have trouble getting around or are you afraid of falling?  Y-6 N-21

Are you having any pain in your body?  Y-17 N-10

Do your hands and/or feet tingle or feel numb at times?  Y-17 N-10

Does any part of your body feel swollen or filled with fluid?  Y-14 N-13

Do you have trouble concentrating or remembering things?  Y-18 N-9

Are you having trouble taking care of yourself? (bathing, dressing, toileting) Y-1 N-26

Has driving become more difficult for you?  Y-2 N-25

Are you having trouble returning to work or completing your tasks at work?  Y-5 N-13 N/A-9

Are you having issues with intimacy?  Y-8 N-14 N/A-5

Have your daily tasks such as shopping/chores become more difficult? Y-7 N-20

What are some other concerns you have with your physical or emotional well being?

Family members not understanding the difficulties, exercise, for those who have loss emotional support is needed, tired of Doctors and tests at least 3-4 X a week, fear of recurrence what to look for, sometimes get depressed, get frustrated easy with memory, afraid of romance

What kind of support/help do you feel would benefit you most at this time? (ex .mentorship program, knowledge of community resources) Please list what services you would like to see.

Fitness class, list of resources for survivors, community resources, mentorship, mentorship education from someone other than your doctor, how to manage pain, massages in evening, exercise, cooking class at no or very low cost, cooking to be healthy, help with fluid entrapment, community resources.
Appendix D

Needs Assessment Findings (Other Cancer)

Age: 65,69,70,75  Average age-69.75  Cancer Type: ovarian-2 and lung-2

Where are you in your journey with cancer? (ex. just been diagnosed, undergoing chemotherapy, post surgery?) Ranges from in chemotherapy to 3 years post operative

Have you been referred to any rehabilitation services such as physical, occupational, or speech therapy? Yes-1 No-3

If so, which one/s and for what issue?

1-pulmonary therapy at Flower

Please answer the following circling Yes or No with explanation if needed.

Do you feel too tired to do the things you need to do?  Y-2 N-2

Are you feeling weak?  Y-1 N-3

Do you have trouble getting around or are you afraid of falling?  Y-2 N-2

Are you having any pain in your body?  Y-1 N-3

Do your hands and/or feet tingle or feel numb at times?  Y-2 N-2

Does any part of your body feel swollen or filled with fluid?  Y-1 N-3

Do you have trouble concentrating or remembering things?  Y-3 N-1

Are you having trouble taking care of yourself? (bathing, dressing, toileting)  Y-1 N-3

Has driving become more difficult for you?  Y-0 N-4

Are you having trouble returning to work or completing your tasks at work?  Y-1 N-1 N/A-2

Are you having issues with intimacy?  Y-1 N-2 N/A-1

Have your daily tasks such as shopping/chores become more difficult?  Y-3 N-1

What are some other concerns you have with your physical or emotional well being? Weight has been an issue

What kind of support/help do you feel would benefit you most at this time? (ex. mentorship program, knowledge of community resources) Please list what services you would like to see.

To be involved with activities of interest
Appendix E
Marketing Flyer

Art Night

Spring Flowers
Melted Crayon Art

When: Wednesday, March 18th
Time: 6:00pm
Cost: FREE
Where: Center for Health and Successful Living–2801 West Bancroft St, Toledo OH 43606

No art skills necessary!
Join us for a good time!

To Register: Contact Hannah at 419-530-5199
All materials will be provided, see you there!

For more information contact Jeannine
Phone: 419-530-5199
Email: chsl.toledo.edu
Find us on Facebook and Twitter!
Appendix F

Job Description

Position Title: Occupational Therapist-OT

Position Summary: The primary goal of the occupational therapy position is to complement the services and goal of The Center for Health and Successful Living. The therapist will do so by coordinating, planning, and facilitating a community-based OT program for survivors of breast cancer based on the needs of the members of The Center. The OT will be responsible for group interventions as well as individual consultation in a creative and holistic manner. The OT will also oversee occupational therapy students, as needed. The occupational therapist will hold a part-time position.

Reports to: Dr. Timothy Jordan and Dr. Amy Thompson, Co-Directors of The Center for Health and Successful Living

Job Functions:

- Market the program
- Recruit participants
- Create individual and group interventions
- Plan and facilitate weekly program sessions
- Complete documentation, as needed
- Supervise students
- Evaluate effectiveness of program
- Cooperate with other staff at The Center
- Perform other duties as assigned

Competencies:

- Demonstrate creativity
- Experience with women who have cancer
- Good organization skills
- Enthusiasm and passion for working with this population
- Ability to listen and observe others
- Maintain self motivation
- Leadership skills
- First aid and CPR/AED certified
- Lymphedema certification, preferred
Working Condition:

- The Center of Health and Successful Living at The University of Toledo
- Evening and weekend hours required

Professional Qualifications:

- Currently licensed to practice in the state of Ohio
- Experience providing occupational therapy to those with cancer
The Center for Health and Successful Living at The University of Toledo is currently seeking a

**Part-time Occupational Therapist**

to facilitate a community based program for survivors of breast cancer.

**Position overview:**

- Administer and interpret appropriate assessments
- Consult with individual members of The Center
- Plan and implement weekly OT interventions
- Document progress

**Qualifications:**

- Licensed in Ohio
- Available during evening hours and occasional weekend hours

If interested, please send resume and names of three references to:
The Center for Health and Successful Living
c/o Dr. Jordan
2801 W. Bancroft Street
Toledo, Ohio 43606
Applications accepted until position is filled.
Appendix H

Budget

<table>
<thead>
<tr>
<th>Position</th>
<th>Hours Per Program Cycle</th>
<th>Wages</th>
<th>Fringe Benefits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Therapist</td>
<td>130x 4 cycles/yr</td>
<td>39/hour¹</td>
<td>None²</td>
<td>$5,070 per cycle</td>
</tr>
</tbody>
</table>

**Personnel Subtotal:** $20,280 per year

¹ According to the American Occupational Therapy Association (2010), the average pay rate for a part-time occupational therapist in the United States is $34 an hour. I have chosen to raise the average pay per hour due to the part-time therapist not receiving benefits.

² Because the OT position is part time, there will be no fringe benefits provided.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Justification</th>
<th>Quantity</th>
<th>Cost Per Item</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journals</td>
<td>Lined notebook paper with binding</td>
<td>Clients will have activities where they need to write about private feelings and look back on them</td>
<td>25</td>
<td>$1</td>
<td>$25.00</td>
</tr>
<tr>
<td>Refreshments</td>
<td>Food and beverages for the members</td>
<td>Groups will be held around dinner and food can be beneficial for socializing</td>
<td>----</td>
<td>----</td>
<td>$150.00</td>
</tr>
<tr>
<td>Ice Breaker materials</td>
<td>Spool of wool, games, worksheets</td>
<td>Important for socializing and building a group bond</td>
<td>----</td>
<td>----</td>
<td>$20.00</td>
</tr>
<tr>
<td>Folders</td>
<td>Side by side pocket folders</td>
<td>For clients to keep educational handouts and journal in a safe spot</td>
<td>25</td>
<td>.30</td>
<td>$7.50</td>
</tr>
<tr>
<td>Laundry basket</td>
<td>27”x18”x12” Plastic hamper for clothes</td>
<td>For simulated energy conservation activity</td>
<td>1</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Pot/pans</td>
<td>5 pc. Stainless steel cookware</td>
<td>For simulated energy conservation activity</td>
<td>1</td>
<td>$19.99</td>
<td>$19.99</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Justification</td>
<td>Quantity</td>
<td>Cost Per Item</td>
<td>Total Cost</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>----------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Cooking utensils</td>
<td>Spatula, spoon, tongs, knives</td>
<td>Clients will need these to practice energy conservation techniques during cooking intervention</td>
<td>---</td>
<td>---</td>
<td>$15.00 Allotted</td>
</tr>
<tr>
<td>Name tags</td>
<td>25 pack white adhesive nametags</td>
<td>For individuals to write their first name on to help socialization between group members</td>
<td>6</td>
<td>$5.39</td>
<td>$32.34</td>
</tr>
<tr>
<td>Relaxation Music</td>
<td>2-disc relaxation CD set</td>
<td>Necessary for program on relation and stress management</td>
<td>1</td>
<td>$15.99</td>
<td>15.99</td>
</tr>
<tr>
<td>CD player</td>
<td>Portable CD player with AM/FM radio</td>
<td>Necessary for program on relation and stress management and for background music in other groups</td>
<td>1</td>
<td>$7.99</td>
<td>$7.99</td>
</tr>
<tr>
<td>Miscellaneous Office Supplies</td>
<td>Stapler, staples, paper clips, pens, etc.</td>
<td>Used to organize and complete daily paperwork</td>
<td>---</td>
<td>---</td>
<td>$40.00 Allotted</td>
</tr>
<tr>
<td>Filing Cabinet</td>
<td>2 drawer locking vertical file cabinet</td>
<td>Necessary to store client documentation and records</td>
<td>1</td>
<td>$253.00</td>
<td>$253.00</td>
</tr>
<tr>
<td>Promotional items</td>
<td>Magnet calendars</td>
<td>Needed to promote and market programming</td>
<td>500</td>
<td>$0.48</td>
<td>$240.00</td>
</tr>
<tr>
<td>Promotional items</td>
<td>Flyers</td>
<td>Needed to promote and market programming</td>
<td>500</td>
<td>$0.09</td>
<td>$45.00</td>
</tr>
<tr>
<td><strong>Program Supplies and Equipment Subtotal Per Cycle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$881.81</strong></td>
</tr>
<tr>
<td><strong>Program Supplies Per Year (minus one time purchase equipment)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1443.03</strong></td>
</tr>
</tbody>
</table>

**In-Kind Program Supplies and Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Justification</th>
<th>Quantity</th>
<th>Cost Per Item</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairs</td>
<td>Lounge chairs</td>
<td>Comfortable</td>
<td>12</td>
<td>$119.00</td>
<td>$1,428</td>
</tr>
<tr>
<td>Supply</td>
<td>Description</td>
<td>Quantity</td>
<td>Cost (Per Cycle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairs</td>
<td>Needed for clients during groups</td>
<td>2</td>
<td>$299.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tables</td>
<td>42 in. round conference table</td>
<td>2</td>
<td>$598.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td>Dell desktop computer</td>
<td>1</td>
<td>$145.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer desk</td>
<td>Wooden desk</td>
<td>1</td>
<td>$65.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>AT&amp;T landline handset phone</td>
<td>1</td>
<td>$24.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td>Wireless color printer and scanner</td>
<td>1</td>
<td>$53.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>3-pack of 8.5x11 paper</td>
<td>1</td>
<td>$14.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td>University of Toledo Students</td>
<td>~3</td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PowerPoint Screen</td>
<td>Pull down projector screen</td>
<td>1</td>
<td>$85.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**In-kind Program Supplies and Equipment Subtotal:** $2,412.64

**Total Cost of the A.C.E. Program Per Cycle**

<table>
<thead>
<tr>
<th>Subtotal</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Subtotal</td>
<td>$5,070</td>
</tr>
<tr>
<td>Program Supplies and Equipment Subtotal</td>
<td>$881.81</td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>$5,951.81</strong></td>
</tr>
</tbody>
</table>

*The Center will provide the in-kind costs for the A.C.E. Program.*
The Center will provide the in-kind costs for the A.C.E. Program.

<table>
<thead>
<tr>
<th>Total Cost of the A.C.E. Program Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Subtotal:</td>
</tr>
<tr>
<td>Program Supplies and Equipment Subtotal:</td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
</tr>
</tbody>
</table>
Appendix I

Participant Satisfaction Questionnaire

1.) Rate the program in terms of meeting your needs or expectations so far.

5 4 3 2 1
Excellent Satisfactory Neutral Unsatisfactory Poor

2.) Rate the program facilities. How comfortable and appropriate are they?

5 4 3 2 1
Excellent Satisfactory Neutral Unsatisfactory Poor

3.) Rate the program materials provided to you. How appropriate and helpful are they?

5 4 3 2 1
Excellent Satisfactory Neutral Unsatisfactory Poor

4.) How would you rate the quality of the program so far?

5 4 3 2 1
Excellent Satisfactory Neutral Unsatisfactory Poor

5.) The length of the program session are...(circle one)

Too long Just right Too short Undecided

Please add any comments below that you feel will help us make the program better.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
## Appendix J

### Timeline

<table>
<thead>
<tr>
<th>Task</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase office/group Supplies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post flyers around facility and community</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send reminder social media Post</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Manual Ability Measure</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Run weekly interventions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Develop educational resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Participants complete Formative evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement changes from formative evaluation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule Discharge Appointment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Stakeholders summative evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix I

Letter of Support

To Whom It May Concern:

I am writing to show my support and enthusiasm for program developed for breast cancer survivors developed by Hannah Robinson, an occupational therapist. This program, developed for survivors of breast cancer will be extremely beneficial for the programming currently offered by The Center of Health and Successful Aging at The University of Toledo.

In my experience with women at The Center, I have seen an increased need for programming in topics that Hannah has incorporated in her program. For example, I have noticed that the women can benefit from having a social group experience to develop a sense of camaraderie with peers. I have also noticed that the women state that they are having difficulties with their daily tasks on a regular basis and I believe the occupational therapy program that Hannah has created can prove highly beneficial for these women.

I firmly believe that this program will enhance the women’s self esteem, strengthen a sense of community, and help women fully recover from their breast cancer journey. With this being said, the occupational therapy program at The Center for Health and Successful Living will be an asset to the Toledo community and the women served by The Center.

Sincerely,

Dr. Amy Thompson

Co-director of The Center of Health and Successful Living