



# COMPREHENSIVE EXERCISE ONCOLOGY PROGRAM

[mapletrecanceralliance.org](http://mapletrecanceralliance.org)



## PROFILE OF ORGANIZATION

Started in 2011, Maple Tree Cancer Alliance is a 501(c)(3) non-profit organization dedicated to improving the quality of life of individuals who battle cancer. We accomplish this through an evidence-based program of supervised, individualized exercise training. Grounded in research, our program has demonstrated improved patient outcomes in terms of increased fitness parameters, decreased symptom severity, and decreased health care utilization. To date, we have 60 clinical partners across the US and partnership sites in Brazil, China, Mexico, and New Zealand. We are in active conversations with other countries to grow our license program, and desire to continue to grow this program internationally.

## PROGRAM DESCRIPTION & METHODOLOGY

Maple Tree Cancer Alliance has created a unique phase system of exercise oncology that our patients progress through as they complete their treatment journey. Four basic phases are employed:

0

### Phase 0: Prehabilitation

Includes patients at the time of their diagnosis prior to the start of treatment. In this phase, baseline measurements are taken and the patient is provided with wellness education to equip them for their cancer journey. If time allows, exercise programming is initiated.

1

### Phase 1: Active Treatment

Includes patients who are currently in chemotherapy/radiation. The focus of this phase is to protect immune function and minimize treatment-related side effects.

2

### Phase 2: Pre-Survivorship

Includes patients who have either completed chemotherapy/radiation, or only received surgery and/or hormonal therapy. The primary goal in this program is to bridge the gap between the need for rehabilitation services following surgery/active treatment and survivorship, where the patient is cancer free and able to exercise on their own in a community-based setting.

3

### Phase 3: Survivorship

Consists of patients who have successfully completed treatment and are in remission from their cancer. This phase often takes place outside of the clinical setting in the community, with exercise trainers who have been trained and certified to work with a cancer survivor.



***On average, patients who participate in our exercise oncology program experience less fatigue, pain, cardiac abnormalities, anxiety, and depression than their sedentary counterparts.***

## PROGRAM OUTCOMES

The following data represent the outcomes we have measured on our patients who have completed our program at other Maple Tree locations across the United States. (n=11,328)

### Physical & Psychological Impact

- 58.7% INCREASE in Quality of Life
- 15.2% INCREASE in Cardiovascular Endurance
- 18.2% INCREASE in Muscular Endurance
- 31.9% INCREASE in Flexibility
- 75.9% INCREASE in Feeling More Positive
- 58.7% INCREASE in Feeling More Support

### Financial Impact on Healthcare & Patient

- 6% DECREASE in Inpatient Hospital Stays
- 19% DECREASE in Length of Hospital Stay
- 27% DECREASE in ER Visits
- 33% DECREASE in Total Patient Encounters
- 47% DECREASE in Hospital Readmissions

*Patients who have completed the Maple Tree program have noticed a **27% decrease** in ER visits compared to their sedentary counterparts*



# WHAT A CLINICAL MAPLE TREE PARTNERSHIP LOOKS LIKE

## What Maple Tree Provides

- Access to national database for research
- Trained and certified staff
- Referral system
- Evidence-based exercise programs
- Yearly training updates
- National brand recognition
- On-going collaboration with research
- Marketing materials
- Social media network (upon approval)

## Space

For in-person exercise training, we would need a space of a minimum of 64 sq ft to carry out programming. Often, we can do this in a conference room. Another option would be to train patients virtually, which does not require any space.

## Funding

We bill cancer centers based on a per-patient agreement. Hospitals are free to limit the number of patient appointments we see in order to meet budgetary constraints. Often, funding comes through a hospital foundation grant, or through the yearly overhead budget for the cancer center.

When all totaled, approximately \$50,000 will fully fund the first year of a pilot program.

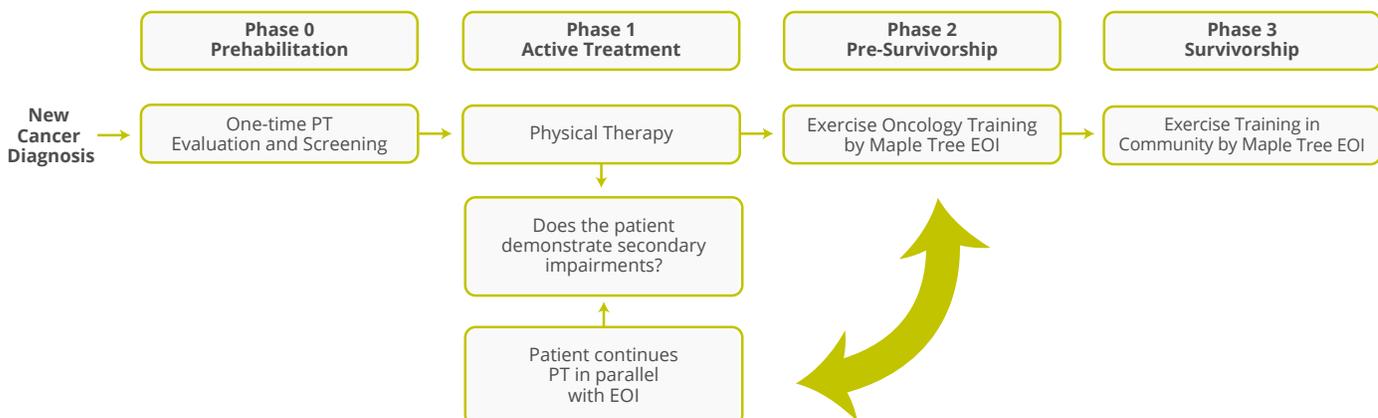
## Project Timeline

*Months 1-3:* Funding secured, hire and train exercise oncology staff, share marketing materials, education of physicians and staff on expanded program and referral system, integration with existing rehabilitation program, PR and marketing, purchase new exercise equipment (as needed).

*Month 4 - Ongoing:* Execution of integrated exercise oncology program on cancer patients within Hospital Partner Health Network and continual evaluation of our programming.

## Integration with Existing Rehabilitation Team

Oftentimes, our clinical partners have an oncology rehab team in place when they partner with Maple Tree. In these situations, it is the goal of Maple Tree to work with this team to create an integrative, multi-disciplinary continuum of care for patients. We feel that this is vital to ensure the best possible patient outcomes. We see our role as one that will bridge the gap as the patients progress through rehabilitation to remission. When fully integrated, the patient flow would be as follows:



## LEADERSHIP TEAM



### **Karen Wonders, Ph.D., FACS**

Karen Wonders, Ph.D., FACS, is the Founder and CEO of Maple Tree Cancer Alliance. She is a Professor of Exercise Physiology at Wright State University and Program Director of undergraduate Exercise Science Programming. Serving thousands of patients each week at locations around the world, Dr. Wonders is committed to evidence-based practice and she has published more than 100 peer-reviewed manuscripts and book chapters, in addition to serving as the lead author on two text books.



### **James S. Skinner, Ph.D., FACS**

James S. Skinner, Ph.D., FACS is the International Consultant for Maple Tree Cancer Alliance. He is a Professor Emeritus in the Department of Kinesiology, Indiana University. He is a former 1) president of the American College of Sports Medicine (ACSM), 2) Chair, International Advisory Council of Exercise as Medicine. 3) Vice President, International Council on Sport Sciences and Physical Education, and 4) Chair, Medical Advisory Committee of the YMCA of the USA. He has been actively investigating the relationships between exercise, training, and health for more than 55 years and has lectured in English, French, German and Spanish in 67 countries.



### **Jay Harness, MD, FACS**

Jay Harness, MD, FACS, is the Chief Medical Officer of Maple Tree Cancer Alliance. Dr. Harness is an emeritus breast surgeon at both St. Joseph Hospital in Orange, CA and Northern Inyo Hospital in Bishop, CA. He is a recent Clinical Professor of Surgery at the University of California, Irvine. Over the years, Dr. Harness has been known for his work in the fields of endocrine and breast surgery, as well as the use of ultrasound in surgical practice. He has authored over 100 scientific articles and book chapters and has been the lead editor of three textbooks.



### **Kathryn Schmitz, Ph.D., MPH, FACS**

Kathryn Schmitz, Ph.D., MPH, FACS is the Chief Scientist of Maple Tree Cancer Alliance. Dr. Schmitz is the Associate Director of Catchment Area Research at University of Pennsylvania's Department of Medicine, and, jointly, serves as Full Professor at the University of Pennsylvania's School of Medicine. Her research spans the role of physical activity in the prevention and etiology of obesity-related cancers to the usefulness of activity for rehabilitation and health promotion in survivors of all cancers.

**TO LEARN MORE** Contact our CEO, Karen Wonders, Ph.D. at [karen.wonders@mapletreecanceralliance.org](mailto:karen.wonders@mapletreecanceralliance.org)

