



ONCOLOGY CARE
CLINICAL GUIDELINES

S U P P O R T I V E O N C O L O G Y

Exercise is Medicine In Oncology

BREAST CANCER TREATMENT



PRESENTED BY

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Objectives

EXERCISE IS MEDICINE IN BREAST CANCER TREATMENT

- 01 Describe the role of exercise as an evidence-based component of cancer care and its relevance to current Commission on Cancer (CoC) standards.

- 02 Identify the essential components of implementing a sustainable exercise oncology program, including referral pathways, interdisciplinary collaboration, and workforce development.

- 03 Recognize practical strategies to integrate exercise into routine oncology care, including engaging physician champions, educating clinical staff, and supporting patient participation.

- 04 Evaluate the clinical and operational benefits of implementing exercise oncology services, including patient outcomes, quality metrics, and strategies that support long-term program sustainability

Exercise: A Supportive Care Intervention

THE PARADIGM SHIFT

The clinical question is no longer "Should patients exercise?" but "How do we make exercise routine?"

CLINICAL EVIDENCE-BASED GUIDELINES

— Not an Adjunct

Exercise is a vital intervention during and after breast cancer treatment. It reduces fatigue, anxiety, and depression while preserving overall strength.

AEROBIC



RESISTANCE



CLINICAL GUIDELINES

ASCO recommends exercise during active treatment

IMMEDIATE INITIATION

ACS urges assessment immediately after diagnosis

PHYSIOLOGICAL PRESERVATION

Maintains muscle mass
Enhances cardiorespiratory fitness
May reduce the risk of lymphedema
Improves symptom burden across multiple adjuvant treatments
Supports maintenance of ideal body weight

CONTINUUM OF CARE & CONTINUOUS MOVEMENT

Diagnosis



Surgery



Systemic
Therapy



Radiation



Survivorship

CLINICAL EVIDENCE

The Evidence Is Mature

Exercise directly **improves outcomes** that breast cancer treatments commonly disrupt.

Move past asking whether exercise works; focus on identifying the right intervention for the right patient at the right time across the care continuum."



META-ANALYSIS EVIDENCE BASE

A 2026 network meta-analysis of 64 RCTs (5,156 women) shows combined aerobic/resistance training is most effective for fatigue and lean mass, while resistance training best improves physical function.

A 2025 meta-analysis of 35 RCTs demonstrates significant improvements in multiple quality of life measures, especially with combined exercise training.

SIX KEY BENEFIT AREAS



Fatigue Decreased
COMBINED TRAINING



Strength Increased
RESISTANCE FOCUS



Physical Function
MOBILITY & POWER



Fitness Increased
AEROBIC CAPACITY



Quality of Life
OVERALL WELL-BEING



Muscle & Lean Mass
PRESERVED FUNCTIONS

Exercise Is Safe

Breast cancer treatment changes exercise needs — but it does not mean patients should avoid physical activity.

ACSM EXERCISE ONCOLOGY

EVIDENCE & GUIDANCE

MYTH & MISCONCEPTION

Post-surgery or axillary treatment patients must avoid resistance exercise



EVIDENCE & OUTCOMES

Progressive resistance training safely improves body strength and reduces disability



LYMPHEDEMA SAFETY & NUANCE

Safe based on tolerance, though evidence does not prove it prevents lymphedema



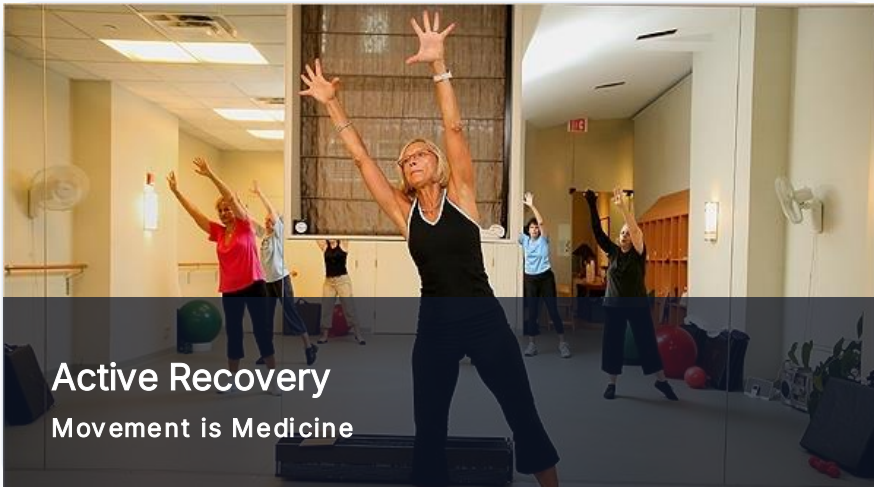
CLINICAL ACTION

Treat impairment with assessment and movement, not activity restriction



CLINICAL RECOMMENDATION

What Should We Recommend?



Active Recovery
Movement is Medicine



Simple Directive

AVOID INACTIVITY

Target Aerobic (150 min/wk) and Resistance (2+ days/wk).

Step 1



Clinical Guide

SYMPTOM-BASED ADJUSTMENT

Some exercise is better than none; modify dose based on clinical symptoms and baseline.

Step 2



Provider Mission

ASSESS, ADVISE, REFER

Oncology providers **do not need to be exercise specialists**; they need to advocate and refer patients.

CORE MESSAGE

CLINICAL WORKFLOW CYCLE:
ASSESS → ADVISE → REFER → REASSESS

Assessment Across the Treatment Continuum

Physical function changes dynamically during cancer care, making single baseline assessments insufficient.

STANDARD COMPLIANCE

NAPBC Standard 5.7

Effective January 1, 2027: Programs must screen functional status and refer patients to structured movement programming starting before treatment.

DIAGNOSIS & SURGERY

Pre-treatment Baseline

Establish initial physical activity levels. Post-surgery, evaluate range of motion (ROM) and upper-extremity functions.

ACTIVE ONCOLOGY THERAPIES

Systemic Therapy & Radiation

Monitor and manage treatment-induced fatigue, chemotherapy-induced neuropathy, strength loss, and localized stiffness.

SURVIVORSHIP

Post-Treatment & Long-Term Recovery

Facilitate physical rehabilitation while targeting long-term bone health and protecting cardiovascular wellness.

Make Exercise a Care Pathway

Replacing Vague Advice with a Closed-Loop Clinical Referral Pathway

Every patient does not need the same exercise intervention, but **every patient does need a pathway..**



PROTOCOL

Five-Step Pathway

Screen (defined tool) → Document (EHR) → Triage (exercise vs rehab) → Refer (internal/community) → Reassess (track function).



CLINICAL SETUP

Infrastructure Needs

MA, nurse, navigator, APP, or clinician screens; workflow embedded in the EHR at baseline and transitions.



EVALUATION & IMPACT

Metrics & Standards

Track completion rates, referral outcomes, and functional changes. Exercise must be a longitudinal pathway, not an afterthought.



Exercise is Medicine in Oncology:

From Evidence to Implementation

Karen Wonders, Ph.D., FACSM



Evolution of Key Recommendations



Proposed Commission on Cancer Exercise Standard

- Assess patients with newly diagnosed cancer at an initial encounter or treatment consultation using a validated tool
- Refer patients to the appropriate level of care: oncology rehabilitation, exercise oncology, or an onsite, community-based, or virtual exercise program
- Programs without onsite services must still establish an assessment and referral process

Key Takeaway: Exercise should be integrated into cancer care beginning at diagnosis!

Exercise Oncology Services

Definitions and Requirements

A protocol is in place to guide referrals for patients with newly diagnosed cancer of any site to appropriate exercise oncology services. These services may include oncology rehabilitation, exercise oncology programs provided by nationally certified exercise professionals, or community-based options, including online programs, for exercise during and after cancer treatment.

The cancer committee must implement an assessment and referral process for newly diagnosed patients to be performed at an initial patient encounter or consultation for cancer treatment within the accredited program. The assessment and referral process may be provided by any member of the patient care team, including, but not limited to, medical assistants, physical therapists, occupational therapists, nurses, advanced practice providers, and physicians. For those referred to oncology rehabilitation, the referral may be made by licensed providers such as advanced practice providers and physicians.

Cancer treatments can result in a multitude of symptoms that can impair the ability of patients to complete lifesaving treatments. Many of these symptoms are addressed with exercise during and after treatment. The most appropriate setting for addressing these symptoms varies according to the overall medical condition and severity of symptoms experienced by the patient. Based on the initial assessment, referrals must be offered to the most appropriate available service for that patient. These services can include:

- Oncology rehabilitation
- Exercise oncology programs

Within these services, providers are trained to address treatment-related symptom management and quality-of-life concerns through exercise therapy and make exercise recommendations for survivorship, health promotion, and disease prevention. For cancer programs that do not offer exercise oncology on-site, there are a variety of programs to which patients can be referred, including programs offered online and some offered for free.

Patients who are otherwise healthy or already physically active can be referred to community-based programs.

Exercise Oncology Clinical Pathway

A pink starburst graphic located to the left of the first step box.

**Referral &
Medical
Clearance**

**Clinical &
Functional
Assessment**

**Individualized
Exercise
Prescription**

**Supervised,
Symptom-
Responsive
Exercise**

**Communication
with Oncology
Team**

**Reassessment
+ Outcomes
Reporting**

A large, dark green arrow pointing to the right, which serves as the background for the final step of the pathway.

Four Ingredients to Build a Clinical Exercise Oncology Program

CHAMPION

- Opens doors
- Builds clinical trust

REFERRAL

- Connects patients to care without friction

WORKFORCE

- Delivers safe, individualized care

OUTCOMES

- Demonstrates clinical and financial value



Operationalizing Referrals



Standardized Referral Trigger

Simple EHR Order or Referral Form

Medical Clearance Pathway

Navigator Handoff + Patient Contact

Closed-Loop Communication

Components of an Individualized Exercise Program



1 Prescreening

2 Fitness Assessment

3 Exercise Prescription

4 Exercise Programming

5 Re-evaluations



Track Patient Outcomes

Pre- Post-testing; 12-week program



- Referral rates
- Patient conversion rates into the program
- Patient adherence to the program
- Physical function
- Fatigue levels
- Health-Related Quality of Life
- Body composition
- Range of motion
- Balance
- Symptom severity
- Patient satisfaction



Try Some Sample Exercises!

Shoulder Abduction



Seated Exercises with Band

Triceps Extension



Bow & Arrow



Seated Exercises with Band

Hip Abduction



Knee Raises

