

# Exercise is Medicine in Oncology

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# Background

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- Over 150,000 Cancer Survivors in Ireland
- The majority are not physically active
- Lack of clarity from health professionals on assessing, advising and referring to exercise (ACSM)
- 9% of nurses and 23% of physicians refer oncology patients to exercise programmes
- We need education and changes in behaviour of clinicians

150 mins per  
week aerobic  
activity

X 2 strengthening  
sessions per  
week

# Benefits of Exercise in Oncology

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- Prevents new cancers
- Improves survival
- Reduces disease progression
- Reduces anxiety
- Fewer depressive symptoms
- Less fatigue
- Better Quality of life and function
- Improve tolerance of and recovery from treatment

# Evidence for Role of Exercise in Oncology

Colorectal  
cancer

Post diagnosis  
5 hours walking  
per week = 35%  
lower risk of  
death

Men who walked 3+  
hours/wk at a brisk

pace had **61%**

reduced rate of  
**prostate** cancer  
progression compared  
with men who walked  
less than 3 hours/ wk

Post diagnosis physical  
activity reduced

**breast** cancer

mortality by **34%**  
and disease recurrence  
by 24%. Sample size  
12,000

# Clinicians Barriers

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- Lack of awareness of value of exercise
- Uncertainty regarding safety or suitability
- Poor knowledge of local programmes
- Poor education on how to refer
- Belief referral to exercise is not within their scope of practise
- Time

## Assess

- Routinely assess levels of physical activity, 'as routinely as you assess vital signs'
- Use of 3 questions

## Advise

- Current Guidelines
- Educate on benefits of exercise
- If achieving guidelines, referral can still be valuable

## Refer

- Supervised exercise has better outcomes
- Community services or non specific oncology classes for low risk
- Specialist services if high risk

# ACSM Guide to referring oncology patients for exercise

## Oncology Clinician's Guide to Referring Patients to Exercise

### Step 1: ASSESS

**Question #1:** How many days during the past week have you performed physical activity where your heart beats faster and your breathing is harder than normal for 30 minutes or more?

**Question #2:** How many days during the past week have you performed physical activity to increase muscle strength, such as lifting weights?

**Question #3:** Would this patient be safe exercising without medical supervision (e.g.; walking, hiking, cycling, weight lifting)

### **Question #3 answer is Yes.**

(Patient is ambulatory,  
ECOG score 0-2)

- **Step 2: ADVISE**
  - EIM ExRx for Oncology, based on current report of activity to increase to:
    - Moderate intensity aerobic exercise (talk but not sing ) for up to 30 min, 3 times/wk
    - Resistance exercise 2x weekly 20-30 min
- **Step 3: REFER** to best available community program

### **Question #3 answer is No**

Or

### **I'm not sure and I don't have the capacity to evaluate.**

(ECOG score 3+ or other complications present)

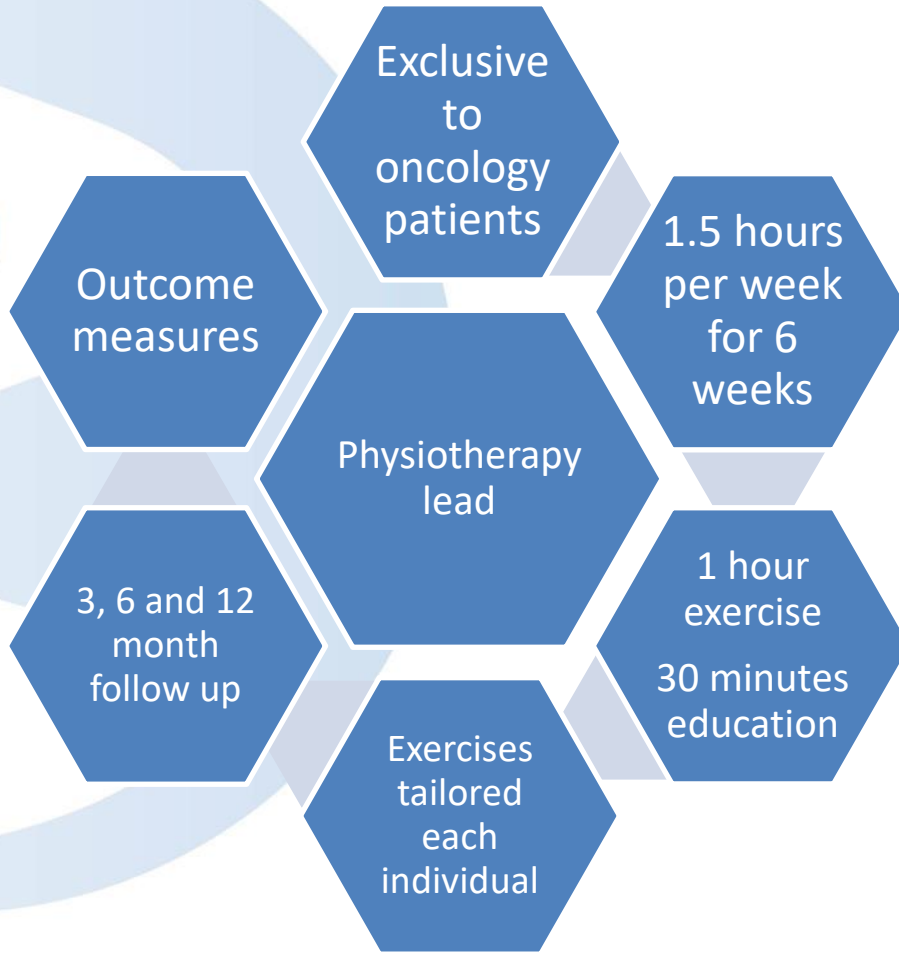
- **Step 2: ADVISE**
  - Advise patient to follow-up with outpatient rehabilitation healthcare professional for further evaluation
- **Step 3: REFER**
  - Outpatient rehabilitation health care professional will recommend best available program

**REPEAT AT REGULAR INTERVALS AT CLINICAL ENCOUNTERS DURING AND AFTER ACTIVE TREATMENT**

**FIGURE 1.** Oncology Clinicians' Guide to Referring Patients to Exercise. ECOG indicates Eastern Cooperative Oncology Group; EIM ExRx, Exercise Is Medicine exercise prescription.



# Fit for life Classes Beacon Hospital



# Eligibility criteria for Fit for Life

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- All Cancer Diagnosis
- Patients on or off treatment
- Metastatic disease with Consultant clearance
- All patients individually assessed- programs individually tailored
- Lymphoedema patients included
- Beacon and non Beacon patients

## Services Available

Services	Oncology Specific	Online
1:1 Specialist Oncology physio review at Beacon	Yes	Yes
Fit for Life Classes at Beacon	Yes	Yes
1:1 Lymphoedema or breast care review at Beacon	Yes	Yes
Siel Bleu classes nationwide	No	Yes
ExWell Classes	No	Yes
HSE community physiotherapy- home visit	Variable	No
Refer to private practise physiotherapist	Variable	Yes

## Innovation/ future projects at Beacon

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- Design of a clinical trial to evaluate impact of exercise on circulating tumour markers in breast cancer
- Feasibility study for use of a static exercise bike for day oncology patients
- Fitbit use on inpatient oncology ward
- Cardiopulmonary exercise testing (CPET) testing in Beacon Sports Lab

# Summary

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- Exercise is Medicine in Oncology
- Cancer survivorship population is increasing
- Cancer survivorship population are not meeting physical activity guidelines
- Vast body of evidence advocates the benefits on exercise in oncology
- It is all clinicians responsibility to educate patients on the benefits of exercise
- Screen patients and refer them to appropriate exercise programmes
- Look into what services are available close to your practise and the appropriate referral method

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# Thank you

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