



# CANCER AND EXERCISE

SEPTEMBER 2021

## Option Paper

## Advanced Physiotherapy Exercise Rehabilitation for Cancer Care in Australia

### Objective

Supporting the integration of exercise into cancer supportive care through physiotherapy-led exercise rehabilitation for patients undergoing or post-cancer treatment.

### Exec summary

Group-based rehabilitation that includes exercise for cancer survivors delivered by qualified physiotherapists improves patient outcomes, reduces recurrence risks and side effects of treatment. Access to specific, tailored group exercise programs is limited, particularly in rural and regional Australia. Funding exercise rehabilitation will result in a range of evidence-based benefits for cancer patients by improving their physical and mental health and wellbeing.

### Prepared by

Australian Physiotherapy Association (APA) – September 2021

## 1. Australians need access to Physiotherapy during and after cancer treatment



**1 in 2**

Australians will be diagnosed with cancer by the age of 85



Cancer is a leading cause of death in Australia

Almost **50,000 deaths** from cancer were estimated for 2019



Today, almost **7 in 10** Australians will **survive for at least five years** after a cancer diagnosis

Source:

Cancer Council of Australia, 2021

With increasing numbers of cancer survivors in Australia, delivering evidence-based interventions that prevent cancer recurrence and mitigate the adverse effects of cancer and its treatment is critical.

Exercise is an essential component of cancer rehabilitation; the benefits of exercise can be realised before, during and after cancer treatment. It helps patients improve and manage both physically and psychologically by maintaining and restoring function and mobility, and by reducing symptom burden such as fatigue. Exercise increases independence and improves quality of life; it also reduces the risk of dying from cancer, reduces the risk of cancer recurrence, and reduces the development of other chronic diseases such as cardiovascular disease.

The majority of patients undergoing (and following) cancer treatments do not meet exercise recommendations and are unable to access physiotherapy-led exercise programs with less than one in 200 cancer survivors having access to a specialised cancer rehabilitation program. Those living in rural, regional, and remote areas who are at greater risk of cancer-related mortality, cancer recurrence, and cardiovascular disease than their metropolitan peers have additional distance-related barriers to accessing cancer rehabilitation programs.

### Our solution

Physiotherapists are well placed within the community and the public health system to offer exercise as a component of cancer rehabilitation.

Delivering specific cancer-based exercise programs by specially trained physiotherapists will improve patient outcomes, reduce the burden on health services and provide better coordinated cancer care across Australia.

This is consistent with the nationally approved Optimal Care Pathways which aims to “improve patient outcomes through promoting quality cancer care and ensuring that all people diagnosed with cancer receive the best care, irrespective of where they live or receive cancer treatment” (Cancer Council of Australia, 2021).

## 2. Physiotherapy and Cancer care

- Physiotherapists have the high value skills and expertise to deliver advice and beneficial exercise treatment programs that ensure cancer patients are participating in exercise and physical activity appropriate to their current health status.
- Physiotherapists improve outcomes for cancer patients both with techniques to address specific problems, and via exercise programs to improve general physical and mental wellbeing.
- Physiotherapists have specialised skills in assessing the needs of people with cancer and managing effective treatments as part of multidisciplinary teams.
- Physiotherapists prescribe physical activity which can reduce the risk of many cancers.
- Prehabilitation can maximise adherence to cancer therapy (e.g. chemotherapy) and reduce complications and hospital length of stay.
- Exercise is safe and beneficial during and after cancer treatment when supervised/prescribed by a suitably qualified health professional.
- Early detection and management of treatment problems can improve outcomes.
- The role of physiotherapy in palliative care is diverse, and patient-specific.

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Source:

- Australian Physiotherapy Association. (2021). *5 facts about physio cancer care*.

### 3. The evidence for the role of physiotherapy across the cancer continuum of care

Physiotherapists in Australia are leading research about the benefits of exercise and physiotherapy for improving patient outcomes associated with cancer recovery, with new emerging evidence focused on exercise throughout treatment.

Dr Amy Dennett has published a systematic review of oncology rehabilitation programs and investigated the feasibility of embedding exercise into a cancer unit (including costs). She has also recently developed a website, Cancer Exercise Toolkit (<https://cancerexercisetoolkit.trekeeducation.org>), to support physiotherapists in delivering evidence-based physiotherapy care.

#### A selection of the most recent references – Australia and overseas:

- Adams, JL., Martin, MY., Pisu, M., et al. (2021). Determining patient needs to enhance exercise program implementation and uptake in rural settings for women after a cancer diagnosis. *Supportive Care in Cancer*.
- Campbell, KL., Winters-Stone, KM., Wiskemann, J., et al. (2019). Exercise guidelines for cancer survivors: consensus statement from international multidisciplinary roundtable. *Medicine & science in sports & exercise*.
- Dennett, AM., et al. (2017). Exercise therapy in oncology rehabilitation in Australia: A mixed-methods study. *Asia-Pacific Journal of Clinical Oncology*.
- Dennett, AM., et al. (2021). Clinician's perspectives of implementing exercise-based rehabilitation in a cancer unit: a qualitative study. *Supportive Care in Cancer*
- Dennett, AM., Sarkies, M., Shields, N., et al. (2021). Multidisciplinary, exercise-based oncology rehabilitation programs improve patient outcomes but their effects on healthcare service-level outcomes remain uncertain: a systematic review. *Journal of Physiotherapy*.
- Dennett, AM., Zappa, B., Wong, R., et al. (2021). Bridging the gap: a pre-post feasibility study of embedding exercise therapy into a co-located cancer unit. *Supportive Care in Cancer*.
- Ferri, A., Gane, E., Smith, MD., Pinkham, EP., et al. (2020). Experiences of people with cancer who have participated in a hospital-based exercise program: a qualitative study. *Supportive Care in Cancer*.
- Gordon LG, Eakin EG, Spence RR, et al. (2020). Cost-Effectiveness Analysis from a Randomized Controlled Trial of Tailored Exercise Prescription for Women with Breast Cancer with 8-Year Follow-Up. *International Journal of Environmental Research and Public Health*.
- Potiaumpai M, Doerksen SE, Chinchilli VM, et al. (2021). Cost evaluation of an exercise oncology intervention: The exercise in all chemotherapy trial. *Cancer Reports*.

### 4. A pilot for Physiotherapy-led rehabilitation for cancer care

#### What

#### **A trial of a specifically designed Advanced Physiotherapy Exercise Rehabilitation program for Cancer Care.**

This pilot study will aim to investigate the adherence to, and clinical effects of, physiotherapy-led exercise in people with cancer from a selected regional centre.

Two group sessions per week lasting 60 minutes for 12 weeks would be offered to people with cancer in non-hospital environments (preferred setting), and delivered by specifically qualified physiotherapists. A third session would be undertaken at home by the patient as a home exercise program.

Individualised exercise programs will be provided within a group environment to ensure high-value care which is safe and appropriate to patient's conditions and needs.

As the pilot would target rural and regional areas, there could be a telehealth component to the program in order to increase opportunities of access.

Funded programs is also a mechanism for overcoming identified barriers to essential exercise.

## Where

Primarily delivered by appropriately qualified physiotherapists in rural / regional Australia.

## When

2021-2022

## Who

Led by physiotherapists who receive professional development support to implement and deliver cancer exercise rehabilitation.

## Other aspects to take into consideration

Similar programs are already in practice in major cancer hospitals.

Promotion and information on advanced physiotherapy exercise rehabilitation for cancer care in Australia will benefit all cancer patients and their families by increasing the supports available to them.

## Expected budget

Costing will be determined by scope and size of the pilot project.

## Evaluation

This pilot study aims to test the effects of the intervention on people with cancer on their levels of cardiovascular fitness, upper limb and lower limb muscle strength, and cancer related fatigue. The pilot will allow for measurement and evaluation of program outcomes, both from a patient quality of life and health and wellbeing point of view, and from an implementation point of view under real world conditions to support further implementation.

## 5. Expected outcomes – for patients and for the healthcare system

### KEY BENEFITS

#### CONSUMERS

##### + Improved physical fitness

+ Reduced number and severity of symptoms e.g. cancer-related fatigue

+ Reduced risk of being diagnosed with another cancer

+ Reduced risk of dying from cancer



#### REFERRERS

Improved patient health means reduction in need for other health interventions to treat side effects (e.g. medications)

#### PHYSIOTHERAPISTS

Upskilling of workforce in cancer care



#### HEALTHCARE SYSTEM

More patients managed in their local community and not in metro hospitals



**Reduced costs** associated with diagnoses of secondary cancers or other health conditions