

MAKING THE CASE FOR PREHABILITATION IN CANCER CARE

An evidence and insight review

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Background

There is a growing interest in prehabilitation across Macmillan Cancer Support as part of the broader rehabilitation pathway in cancer care and a sense that it is an important and valuable aspect of cancer care. However, it is poorly understood and inconsistently provided with limited centralised knowledge. The nine Macmillan geographic teams that cover the UK along with interested external stakeholders were keen to better understand prehabilitation and where and how healthcare staff can support people living with cancer.

Objectives included:

- Developing a centralised synthesis of prehabilitation resources and evidence and an internal shared definition and understanding of prehabilitation.
- Understanding Macmillan's current provision and funding of prehabilitation service models.
- Understand the wider provision of prehabilitation across the UK.
- Embedding prehabilitation into Macmillan's strategic priorities.

Methodology

These included:

- External and internal literature and data review.
- Evidence scan.
- Interviews with key Macmillan advisors and external experts.
- Workshop with key stakeholders to identify and present the work underway in this area from different teams and develop a shared understanding of prehabilitation.

Conclusions

A strong case has been made for facilitating networking between key stakeholders and influence policy with the current evidence available including:

- the recent commencement of the development of UK wide principles and guidance for prehabilitation in cancer care (The FACT project),
- developing practical information for both patients and healthcare professionals,
- developing guidance for internal Macmillan geographic teams and,
- strengthening the health economic case.

Results

Prehabilitation in cancer care definition

A definition of prehabilitation was identified as a process in the continuum of care, tailored to the individual and is for anyone with cancer, not just those undergoing surgery.

Much of the evidence for prehabilitation comes from the non-cancer population however there is a strong case for ensuring all cancer patients have prehabilitation in advance of treatments.

Rehabilitation maximises outcomes for patients by anticipating the problems they might face during their treatment and helping people to make changes to manage these before they happen therefore about providing personalised and proactive support. **Prehabilitation is integral to the rehabilitation pathway** as early interventions shortly after diagnosis can significantly improve the patient's ability to cope with treatments they may have, improve quality of life and reduce length of stay.

A case was made for prescribing prehabilitation.

Stages of prehabilitation

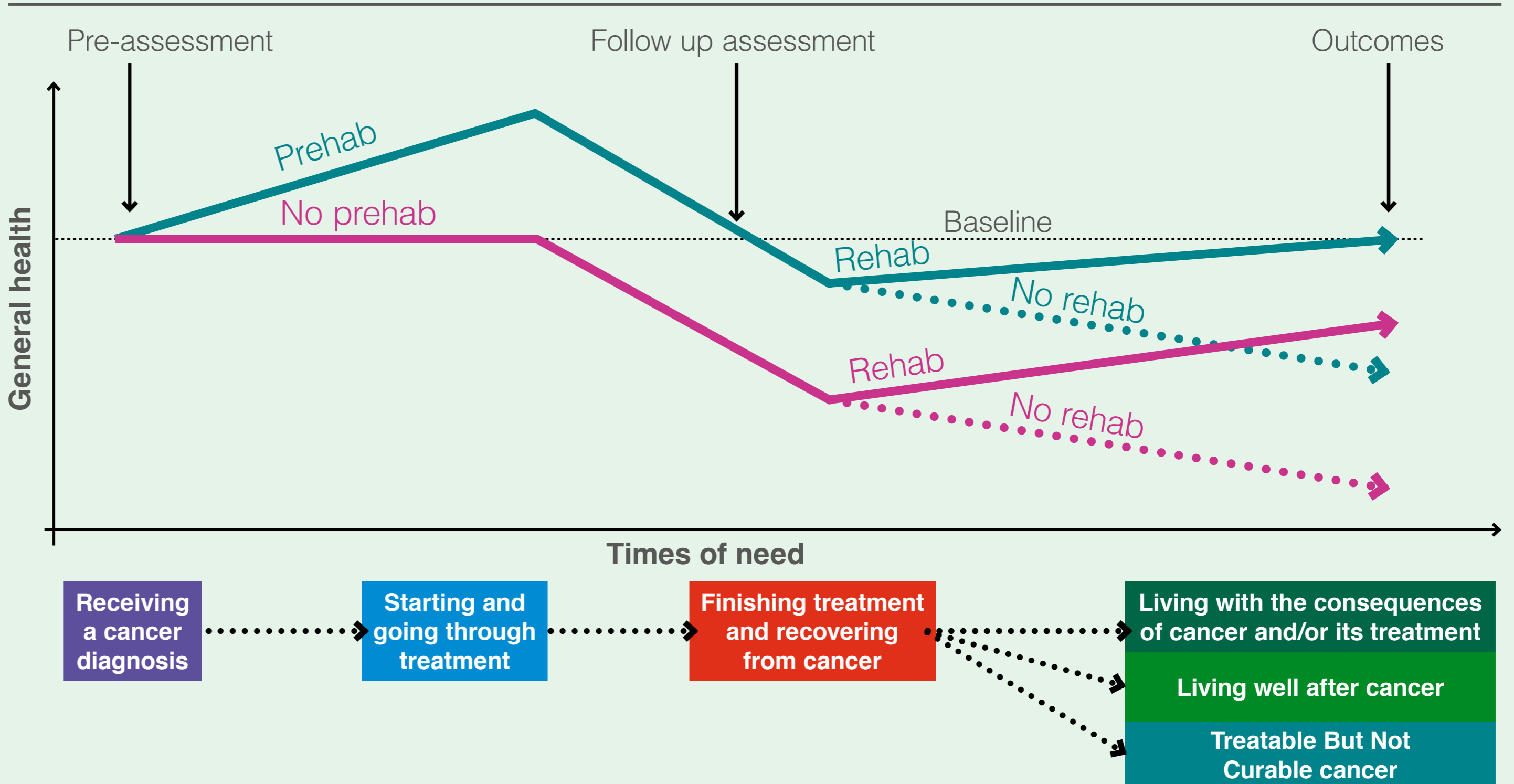
The prehabilitation model includes three stages: preassessment, prehabilitation interventions and follow up post treatment.

- 1. Pre-assessment** is used to **measure** the patients' baseline, identify risk factors, inform the patient and make joint decisions. and establishing the interventions required to support patients so they achieve the maximum benefit from interventions associated with prehabilitation. It also contributes to individual level data on the outcomes of prehabilitation, which can ultimately add to the wider evidence base supporting prehabilitation as part of cancer care.
- 2. Prehabilitation interventions** – there are a range of interventions

included in prehabilitation. **Physical Activity** is *always* present, **Dietary Support** and **Psychological Wellbeing** are *often* present whilst other interventions are seen less frequently (Figure 2).

- 3. Follow-up post-treatment** – used to determine progress made and to ensure appropriate **follow-up**.

Figure 1 Timeline of possible outcomes with cancer rehabilitation and prehabilitation



Prehabilitation interventions

Prehabilitation regimes **vary in their composition**, with some interventions seen in literature and service example *always*, some seen *often* and others *sometimes* as illustrated in Figure 2.

Prehabilitation is **applicable for any treatment** option including **surgery, radiotherapy and chemotherapy**.

Workforce

Existing evidence suggest there is no defined group of healthcare professionals to deliver prehabilitation however it is clear it can be provided by a multidisciplinary team.

Prehabilitation links well to Macmillan's internal strategy.

Figure 2 Prehabilitation interventions shown always, often or sometimes in the literature

Always	Often	Sometimes
 Physical activity	 Dietary support	 Smoking cessation and alcohol reduction
	 Psychological wellbeing	 Respiratory exercises
		 Medication and comorbidities review
		 Other (e.g. speech and language therapy, fatigue management, pain management, body image)
		 Anaemia management
		 Lymphoedema management

Data sources

- Patients' experience of exercise and cancer. Informing 'WESFIT' Pilot Patient Involvement Report Feedback to participants. 2017. University of Southampton and Wessex Voices.
- Shun SC, et al. Cancer Prehabilitation for Patients Starting from Active Treatment to Surveillance. Asia Pac J Nurse. 2016; 3(1): 37-40.
- Silver JK, et al. Cancer Prehabilitation. An Opportunity to Decrease Treatment-Related Morbidity, Increase Cancer Treatment Options, and Improve Physical and Psychological Health Outcomes. Am J Phys Med Rehabil. 2013; 92(8): 715-727.

*Diagram adapted from: Figure 4: Silver JK. Cancer prehabilitation and its role in improving health outcomes and reducing health care costs. Seminars in Oncology Nursing, 2015; 31(1): 13-30.