Enhancing Multidisciplinary Prehabilitation: The Value of a Dedicated Prehabilitation Nurse

A Practice Based Case Study

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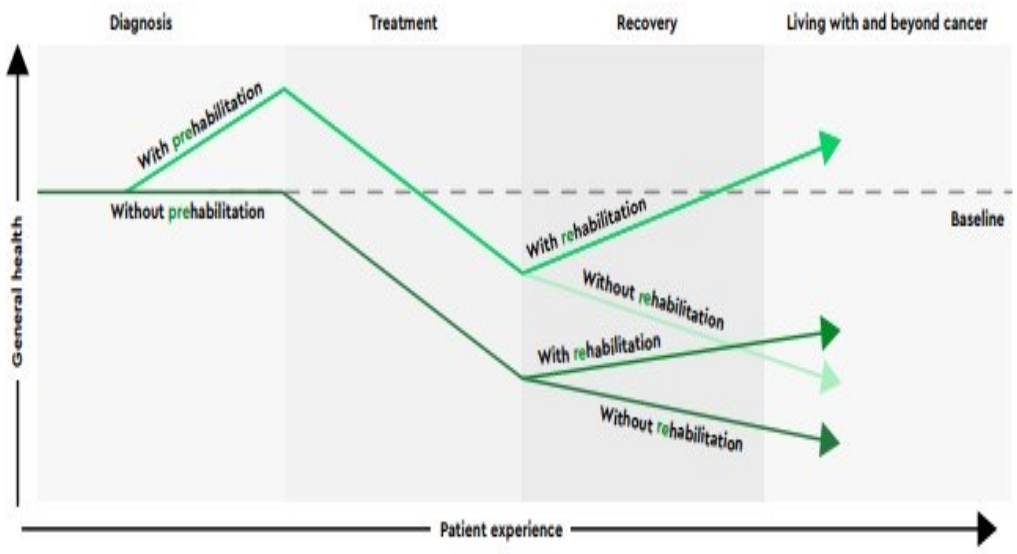
WHAT IS PREHABILITATION

Prehabilitation is a:

- A needs-based multi modal intervention
- Before cancer surgery
- To optimise physical, nutritional and psychological status
- To enhance readiness for surgery and improve recovery after surgery

✓ Exercise
✓ Nutrition
✓ Psychological support
✓ Medical optimisation

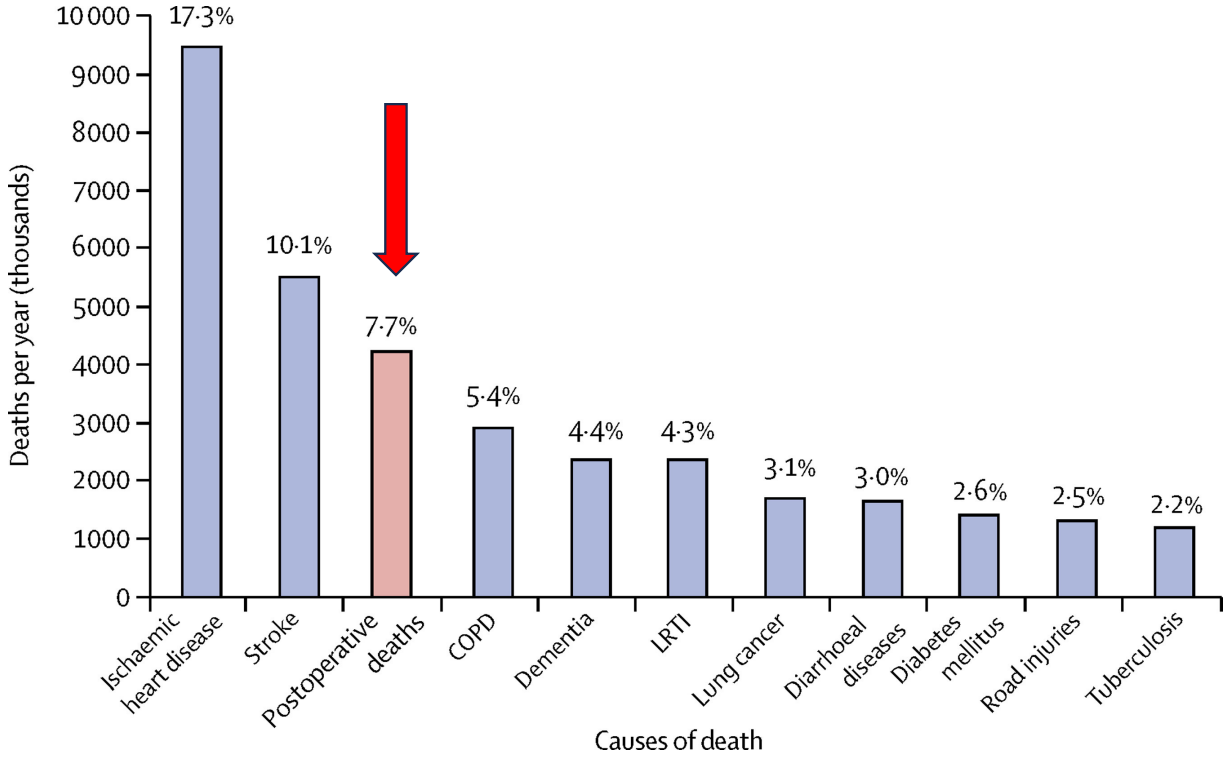
Figure 2 – Patient benefits of prehabilitation and rehabilitation



Prehabilitation resources for healthcare professionals | Macmillan Cancer Support

WHY IS PREHABILITATION IMPORTANT?

- Surgical stress
- Frailty
- Patient complexity
- Post-operative morbidity + mortality
- Opportunity to improve patient outcomes



Nepogodiev et al. Lancet, 393:401, 2019

WHAT DOES PREHABILITATION INVOLVE?

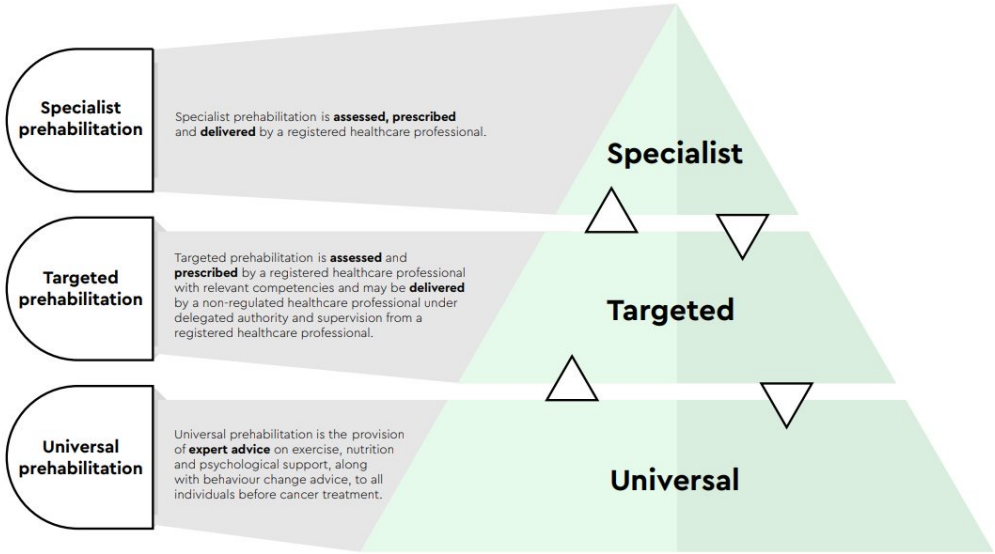
Prehab includes:

- Exercise
- Nutrition
- Psychological support
- Medical optimisation

Tools to identify modifiable risk for targeted prehab:

Functional capacity: **DASI,** 6MWT, CPET
Nutrition: **MST**, MUST, PGSA
Psychosocial: **PHQ-4**, distress thermometer, GAD7

Figure 1 – Levels of prehabilitation

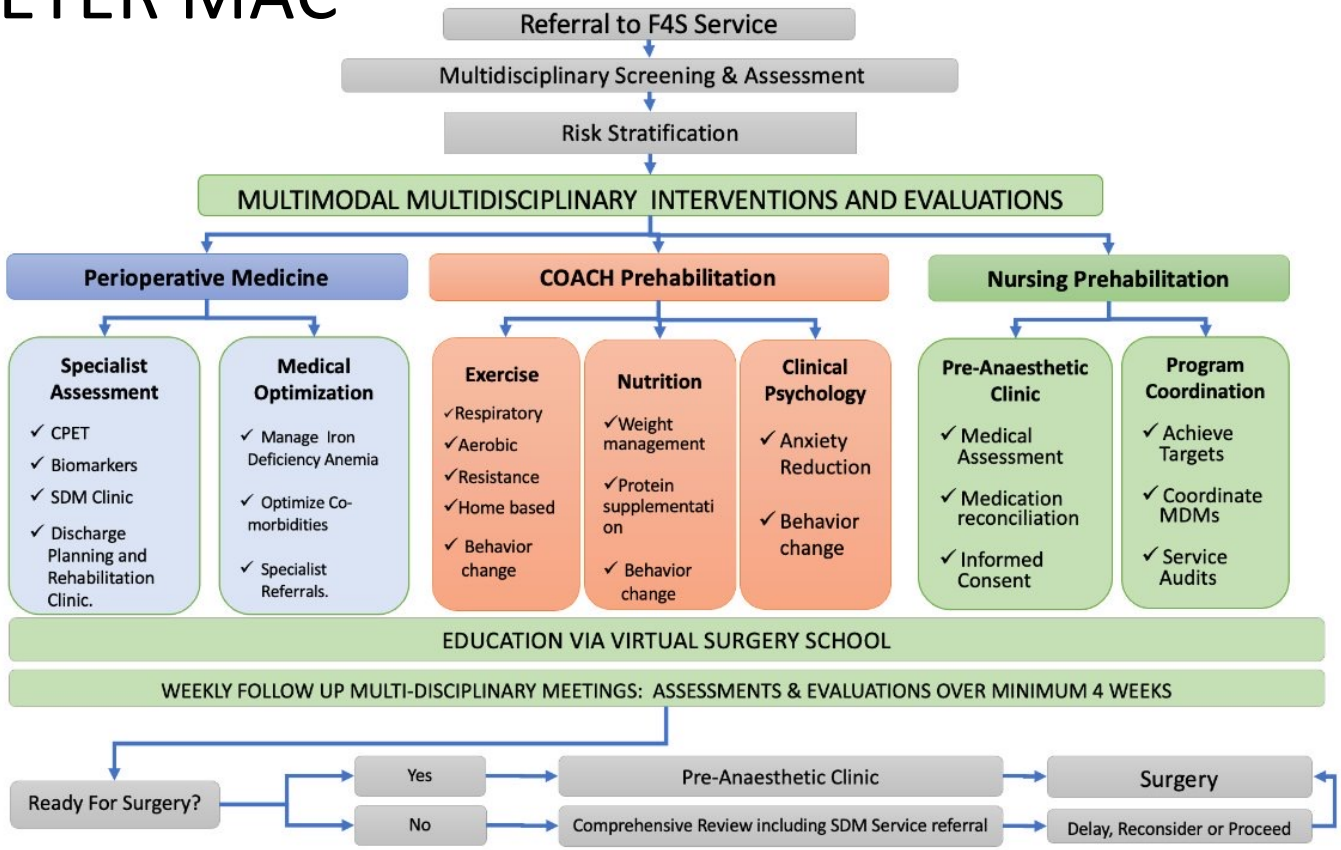


Principles and guidance for prehabilitation within the management and support of people with cancer

PREHABILITATION AT PETER MAC

<u>Team Members:</u>
Consultant anaesthetists –
SDM/CPET/PAC
Nutrition & Dietetics
Physiotherapy
Clinical Psychologist
Pharmacist
(Clinical Nurse Consultant)

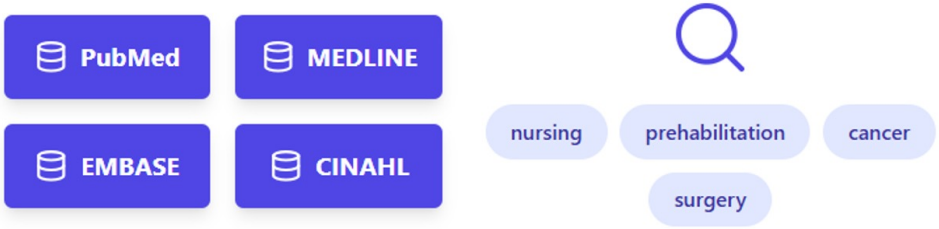
<u>Surgical Cohorts:</u>
CRS – TPE, APR, CRS/HIPEC, anterior resection
Sarcoma – RPS
UGI/HPB – Oesophagectomy, *gastrectomy, Whipples*

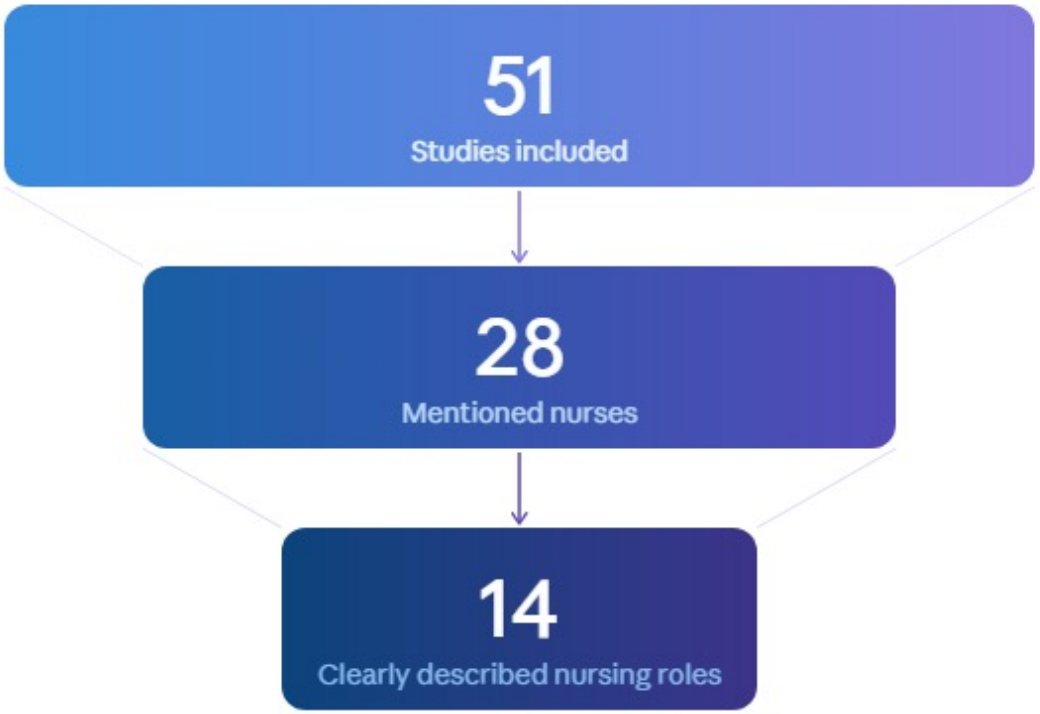


Where Does Nursing Fit?

Prehabilitation optimizes patients' outcomes before surgery, yet nursing contributions remain poorly defined despite their central role in multidisciplinary care delivery.

Literature Review





What Did We Find?

- Care coordination & navigation
- Patient education & health literacy
- Psychosocial support & motivation
- Behaviour change facilitation
- Screening & risk stratification

Key Findings:

Nursing role = under-defined + underreported

This lack of definition makes it difficult to:

- ✗ Build consistent models
- ✗ Scale programs equitably
- ✗ Measure impact
- ✗ Secure funding for nursing positions

What Does This Look Like in Practice?

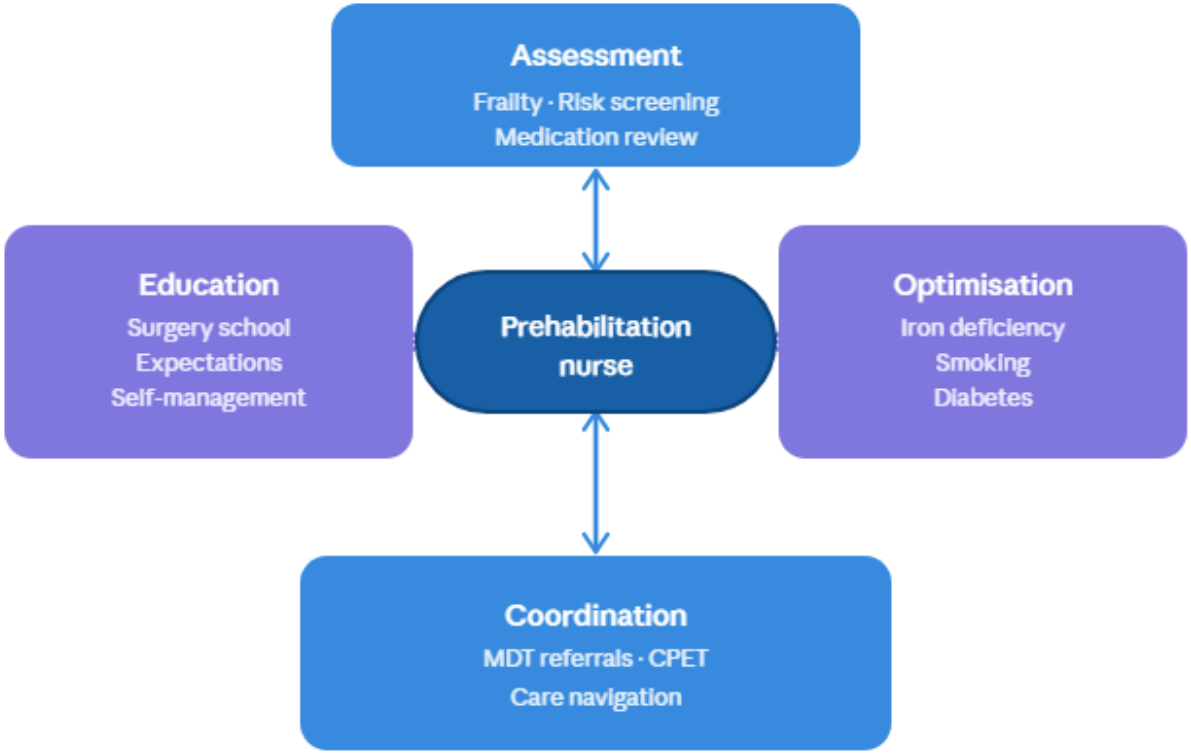
To better understand the nursing contribution, we explored the role of a dedicated Prehabilitation Nurse Consultant within a comprehensive cancer prehabilitation program.

Descriptive case study: 2024-25 financial year

- Clinical documentation
- Workflow records
- Care pathways
- Patient & staff feedback

Real-world examination of what the role actually delivered

Role of the Nurse:



Service impact

288
Referrals triaged

213
Nurse-led assessments

299
CPETs coordinated

54
Iron infusions arranged

+

16 respiratory referrals

11 endocrinology referrals

7 pharmacy referrals

35 rehab/community referrals

30 patients entered prehab ONLY because the nurse identified them

MDT coordination in practice

- Universal prehabilitation education delivered consistently
- Allied health focused on targeted interventions
- MDT meetings became structured & billable
- Communication between teams improved significantly
- Service expanded to new surgical cohorts

PATIENTS

"The one person who actually knows everything that's happening"

STAFF

"The glue that holds the MDT together"

Clinical outcomes

Improvements extended beyond original high-risk cohorts

- Reduced median length of stay (oesophagectomies & retroperitoneal sarcomas)
- Decreased ICU utilisation
- Lower rates of hospital-acquired complications

Earlier optimisation and tighter coordination = system-wide effects

Beyond clinical care

$60,000
Annual savings from task reallocation

$280,000
Generated through VINAH-billable MDT meetings

Formal cost-benefit analysis yet to be undertaken

Conclusions

Integrating a dedicated nurse into the prehabilitation MDT enhanced safety, efficiency, communication, and continuity of care

- Improved patient outcomes & experience
- Expanded service capacity
- Delivered meaningful economic benefit
- Supports formal recognition & funding of dedicated prehabilitation nursing roles

Resources

Tara Dehm – Prehabilitation Clinical Nurse Consultant
Contact email: tara.dehm@petermac.org

Toolkit: prep4cancersurgery.org.au
Contact email: prehabtoolkit@petermac.org

Clinical & Implementation Guidelines:
https://www.macmillan.org.uk/dfsmedia/1a6f23537f7f4519bb0cf14c45b2a629/22869-10061/prehabilitation-for-people-with-cancer-clinical-and-implementation-guidelines