MACMILLAN CANCER SUPPORT

HSC Health and Social Care

m·e·l research

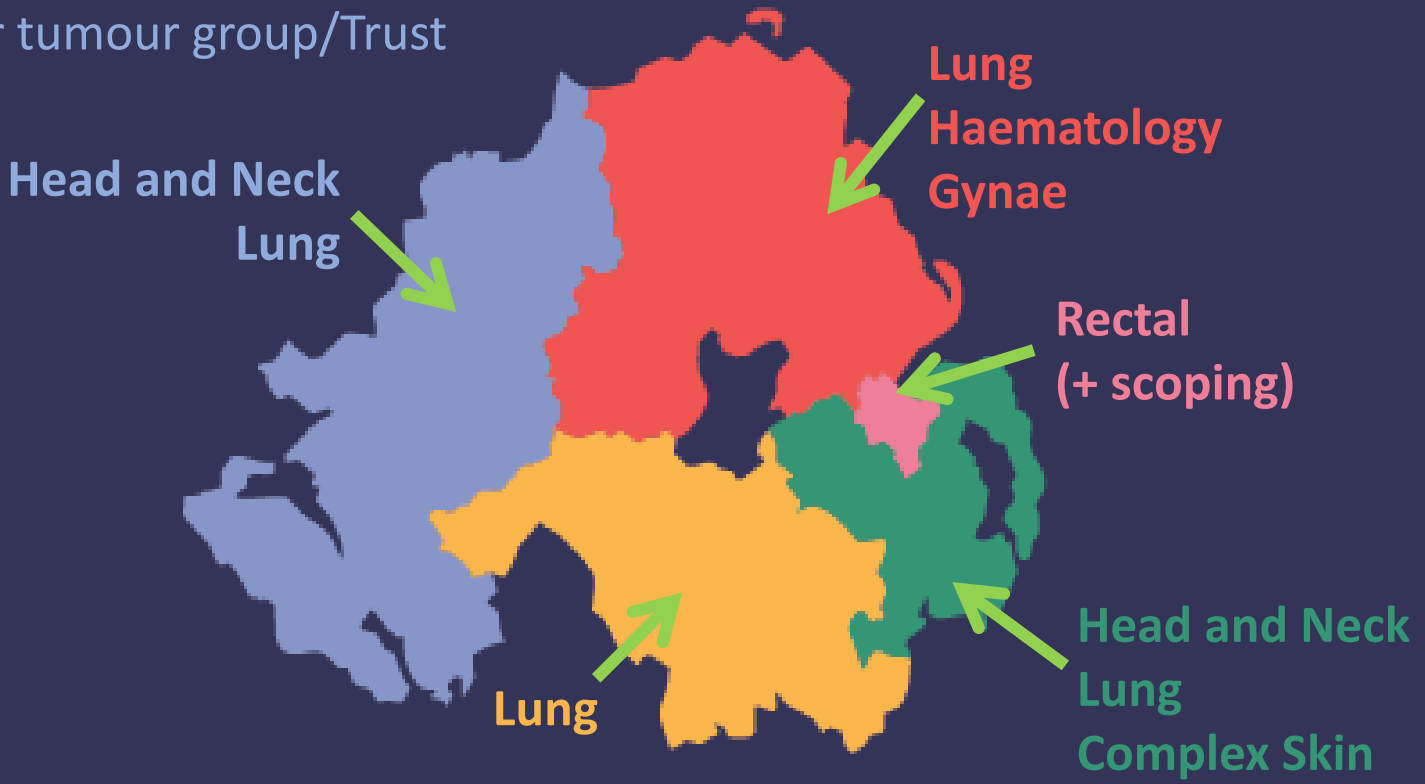
IN PARTNERSHIP WITH THE 11 COUNCILS IN NORTHERN IRELAND

Embedding a Model of Cancer Prehabilitation in Northern Ireland

Paula Kealey - Macmillan Prehab Project Manager SEHSCT
Kelly Carolan - NICaN/Macmillan Regional Pathway Integration Lead

Macmillan NI Prehabilitation Project

- In 2021, the Department of Health launched the Charities Support Fund to boost public health initiatives in response to COVID-19.
- 5 Macmillan Prehab Project Managers (0.6 WTE)
- 11 Move More Coordinators (0.5 WTE)
- Initial tumour group: colorectal cancer, with implementation in at least 1 other tumour group/Trust

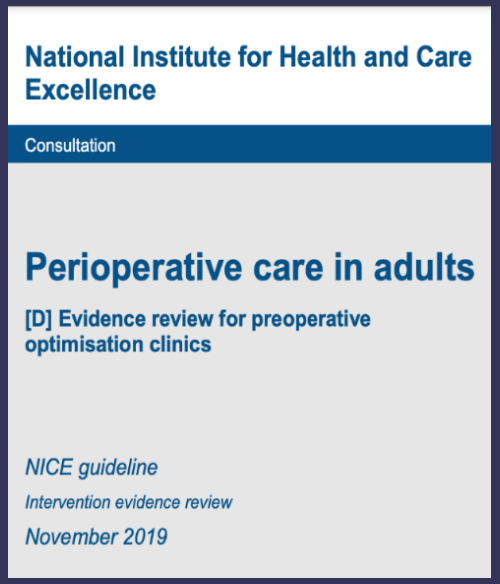


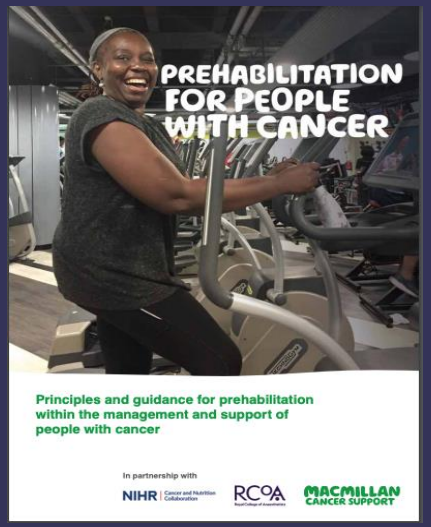
Project aim

To embed personalised, early-intervention support into an integrated pathway for adults diagnosed with cancer in Northern Ireland, establishing prehabilitation as a cornerstone of the cancer pathway for the first time in NI.

To include multimodal cancer prehabilitation as a standard of care within the cancer pathway

Strategy, policy and guidance:





Action 42: Timely and appropriate access to therapeutic and practical support services for people affected by cancer targeting emotional, physical, spiritual and social needs.

Who?

Consultants/ Medical team

SACT Teams

Radiotherapists

Patient representatives

Move More/ Exercise Specialists (Local Councils)

Clinical Nurse Specialists

Clinical Project Manager

Allied Health Professionals

Health Improvement

Smoking Cessation

Primary Care

Anaesthetists

Macmillan Health and Wellbeing/ Information Service

Cancer Management

Cancer Charities

Volunteers

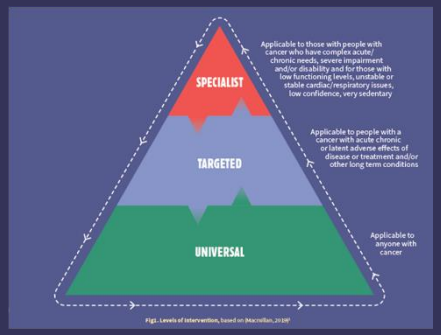
Counsellor/ Psychologist

Substance Misuse

Prehab process

Identification
At diagnosis (MDM, CNS, AHP, prehab team) pre-diagnosis investigations e.g. endoscopy.

Patient declines prehab



Screening
(CNS or prehab team)
F2F or Telephone

Screening tools: HNA, ECOG, Rockwood, PGSGA/MUST, Distress Thermometer, Smoking, Audit C

Patient consents to prehab.
CNS **refers** to appropriate services & provides written information.

Other services e.g. Smoking Cessation, Substance Misuse

Universal

PHYSICAL ACTIVITY – RFS 0-3
Council Exercise Professional

NUTRITION – PGSGA 0-1/MUST 0
Macmillan HWB Service / written info

EMOTIONAL – DT 0-3
Macmillan HWB Service

Targeted

PHYSICAL ACTIVITY – RFS - 4
Council Exercise Professional / (prehab) Physio
NUTRITION – PGSGA 2-3/MUST 1
(prehab) Dietetic Service

EMOTIONAL – DT 4-10
Macmillan HWB Service/Counselling

Specialist

PHYSICAL ACTIVITY – RFS 5+
Specialist Physio

NUTRITION – PGSGA 4-36/MUST 2+
(prehab) Specialist Dietitian

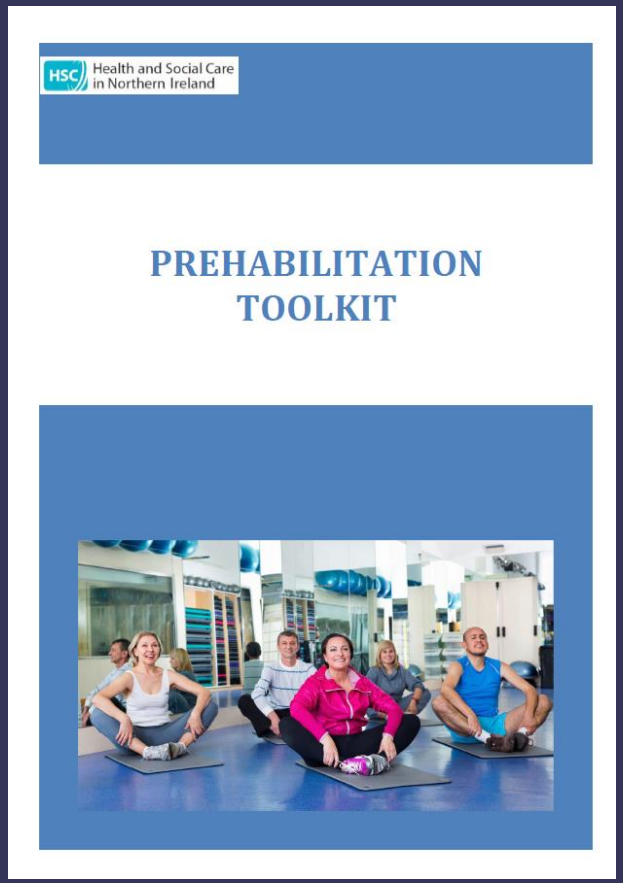
EMOTIONAL –Pre-morbid or highly complex needs refer to Clinical Psychology and/or Mental Health Serivces

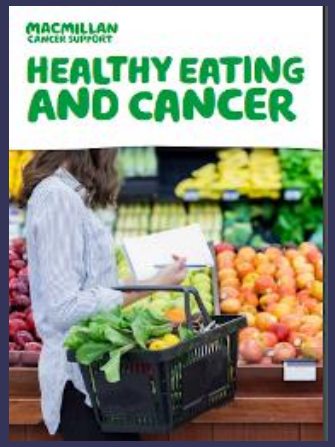
COM-B Model

- The COM-B model explains behaviour change through three components:
- - Capability: Physical and psychological ability to engage in the behaviour
- - Opportunity: External factors that make the behaviour possible
- - Motivation: Internal processes that influence decision-making
- The Macmillan NI Prehabilitation Programme addressed each component as follows:

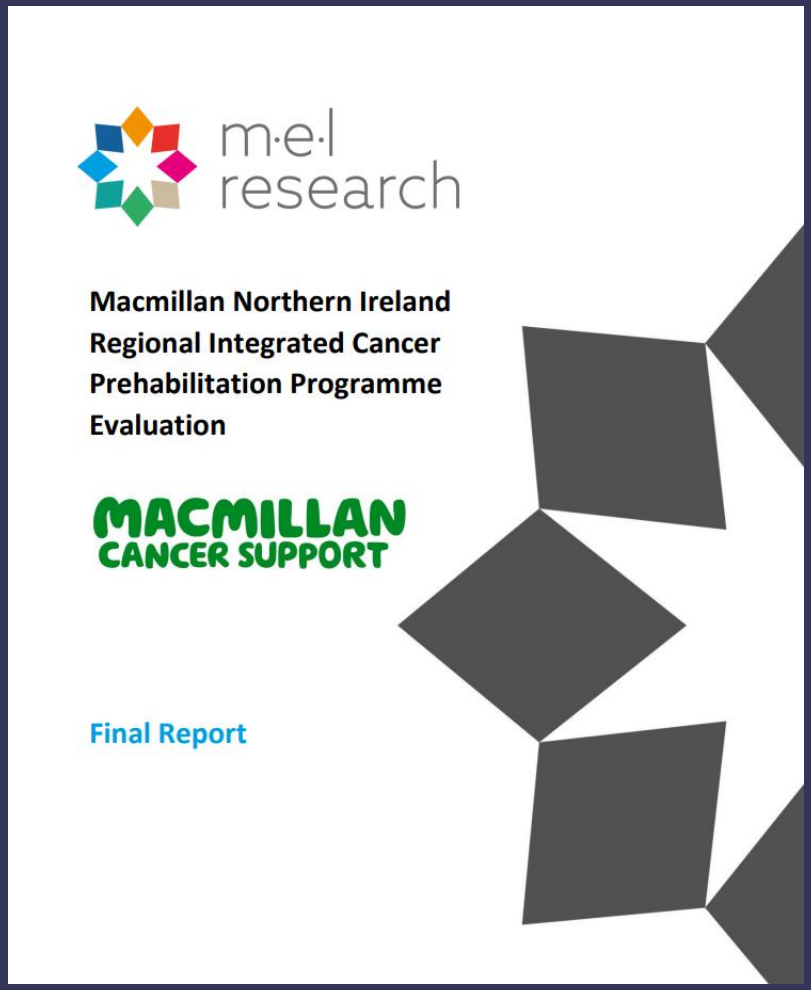
COM-B Component	Programme Example
Capability	Screening tools (e.g. Rockwood Frailty Scale, PG-SGA) used to assess and tailor interventions.
Opportunity	Integration with Macmillan Move More, local councils, and MDTs to provide accessible support.
Motivation	Personalised care plans, peer facilitators, and emotional wellbeing support to boost engagement.

Patient Resources





Macmillan NI Prehabilitation Programme Evaluation



- Findings from the patient survey (n=138), patient interviews (n=26), online community (n=2)
- Qualitative feedback from Trusts and local councils
- Response rate of 19% was achieved from the 735 patients invited to participate in the survey.

Levels of Intervention

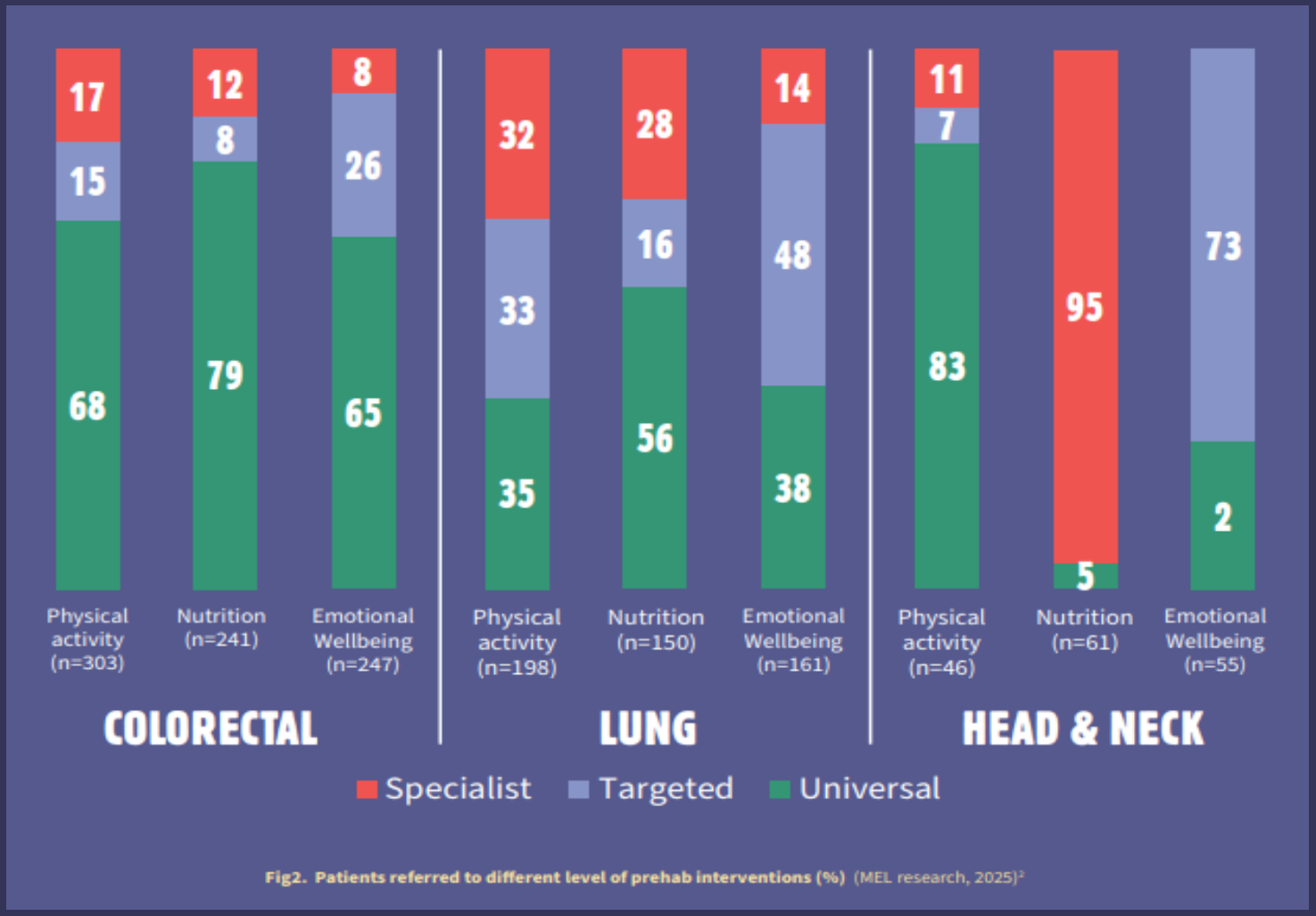


Fig2. Patients referred to different level of prehab interventions (%) (MEL research, 2025)[2]

Physiological Outcome Measures

UNIVERSAL TARGETED

COLORECTAL, LUNG, HEAD & NECK PATIENTS

PHYSIOLOGICAL OUTCOMES

MEASURE	BASELINE	PRE-TREATMENT	VARIANCE	P VALUES	OCM IMPROVED/MAINTAINED
6MWT (n=26)	356.92	396	39.08 ↑	0.00 (S)	**93% (81%/12%)**
Grip Strength (n-50)	27.88	29.48	1.6 ↑	0.02	**74% (50%/24%)**
30 Sec STS (n=48)	8.35	10.25	1.9 ↑	0.00 (S)	**90% (77%/13%)**

Fig 3. Physiological Outcome Measures from Baseline to Pre-Treatment (MEL research, 2025)

>90% IMPROVED
OR MAINTAINED PERFORMANCE

Baseline to pre-treatment. 95% confidence level.

BENEFITS SUSTAINED
AT 4 MONTH FOLLOW UP

Longer term positive impact of prehab.

EXCEEDED SERVICE AV.
QUITTING SMOKING

High quit rates at 4 and 52 weeks.

Physiological Outcome Measures

UNIVERSAL TARGETED SPECIALIST

COLORECTAL PATIENTS

PHYSICAL ACTIVITY OUTCOMES

55% INCREASE IN ADHERANCE TO PA GUIDELINES[3]

From 12% baseline to 67% pre-treatment.

MEASURE	BASELINE	PRE-TREATMENT (n=36)	
Not active	54%	3%	- No exercise
Under active	34%	30.5%	- Some structured exercise but <PA guidelines
Minimally active	7%	41.5%	- Attaining PA guidelines
Highly active	5%	25%	- Exercising >PA guidelines

Fig 5. Behaviour Change in Physical Activity Engagement from Baseline to Pre-Treatment for Specialist Colorectal Patients (MEL research, 2025)

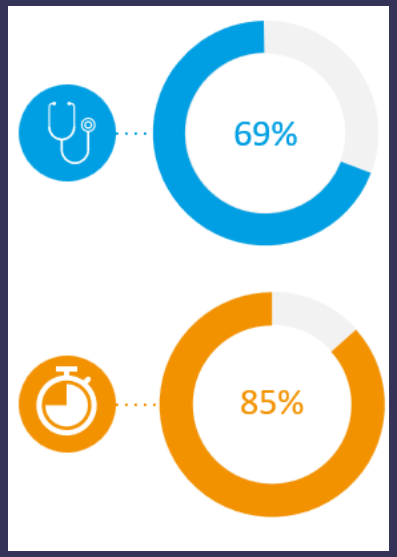
NUTRITIONAL OUTCOMES

% OUTCOME IMPROVED/MAINTAINED

FROM BASELINE TO PRE-TREATMENT

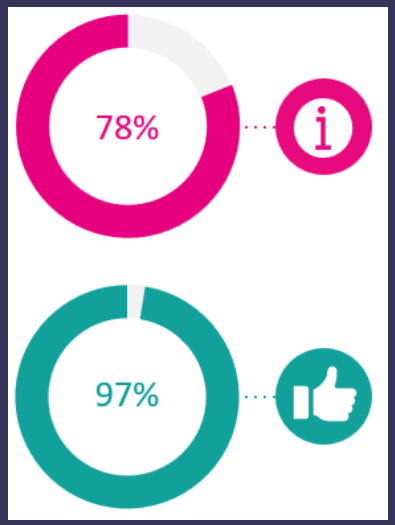
Fig 6. Percentages of Lung and Colorectal Patients Maintaining or Improving their Outcomes Pre-Treatment (MEL research, 2025)

Patient Experience



When was Prehab offered?
Around the time of diagnosis or just a few days after: **69%**
A few weeks after diagnosis: **23%**
Can't remember: **9%**

Was prehab offered at the right time?
Just right: **85%**
Too early: **6%**
Too late: **10%**



Provided with written and verbal information?
Both info: **78%**
Written info only: **8%**
Verbal info only: **13%**
None provided: **5%**

Information easy to understand?
Very or fairly easy: **97%**
Not easy at all: **3%**

Patient Experience

Really excellent sessions with the physio - encouraging but pushed me to achieve my potential. Gave me confidence to do more. Useful to have specific exercises to do at home. Very good at follow up - a great service. – lung patient
(source: NHSCT internal patient feedback survey)

87%
FELT BETTER PREPARED FOR TREATMENT
n=96

76%
AGREED PREHAB IMPROVED RECOVERY TIME
n=86

75%
HAVE DONE, OR INTEND TO DO, THE SAME OR MORE LEVEL OF PHYSICAL ACTIVITY
n=96



Patient Experience

Big impact, great confidence in the programme and the services delivered, this also gave my family confidence in my treatment and any questions they knew who to contact.
- male, aged 55-64, Head and Neck patient

I received brilliant support e.g. stopping smoking, and pre-op gym membership & instruction & fitness. And I knew that other supports were easily available if I wished.
– male, aged 55-64, Colorectal patient

For those who participated in the Macmillan Move More exercise classes, the **relaxed environment** and **peer support** were particularly appreciated.

I have kept in touch with the Move More walking group. It was nice to have the company and have the choice to become involved with others or not. I felt supported emotionally, socially and psychologically while having a wee bit of exercise.
- female, 55-64, Colorectal

Patient Experience

Overall, patients reported **positive experiences**, highlighting the **excellent support** received from healthcare professionals and Macmillan Move More Coordinators. They appreciated the:

- advice,
- motivation,
- tailored information provided

which contributed to their quick recovery and improved fitness before treatment..

Staff Outcomes

- It was unanimously felt that cancer prehabilitation is the **right thing to do** and should be **continued** with involvement from both the Trusts and councils

- Delivery staff have found it a **satisfying** and **rewarding** experience to provide prehabilitation support

System outcomes

1.1 DAY AV. REDUCTION
IN LENGTH OF STAY
FOR SURGICAL LUNG PATIENTS

IMPROVED COLLABORATION ACROSS TRUSTS & LOCAL COUNCILS

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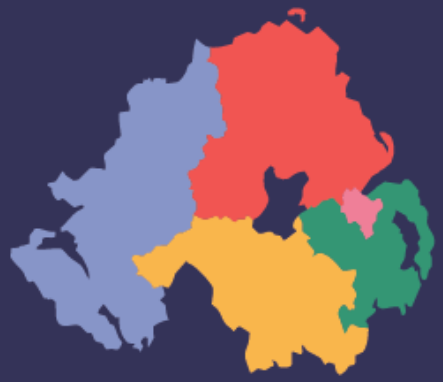


Health Equity

Community based models:

- Improves access to preventative care especially in underserved or rural areas
- Reduces transportation, financial and systemic barriers that often prevent early intervention
- Tailors interventions to local needs and empowers individuals and communities in planning and delivery
- Community based models promote inclusion and participation and offers opportunity to integrate health with education, employment and services etc

Strategic Value and Quality Impact

- The programme represents a transformative shift in cancer care by embedding a proactive, person-centred approach at the earliest stage of the treatment pathway.

- Its strategic value is demonstrated through its alignment with the Quintuple Aim framework of improving patient experience and population health, reducing healthcare costs, improving staff well-being and satisfaction and advancing health equity.

Challenges

- Staffing and resources
- Sustainability
- Patient uptake and adherence
- Timeframe from diagnosis to surgery (1st definitive treatment) can be less than 2 weeks
- Data collection
- Capacity for programme roll out
- Regional consistency
- Encompass

Summary

- The Macmillan NI Prehabilitation Programme delivered personalised physical, nutritional, and emotional support to cancer patients across Northern Ireland. It improved **treatment readiness, recovery, and wellbeing**, while fostering **long-term healthy behaviours**.
- It offers strong potential for replication across other regions and health systems. Its integrated, multidisciplinary model—combining physical, nutritional, and emotional support—can be adapted to various tumour groups and care settings.
- The programme demonstrated strong potential for scalable, integrated cancer care through community collaboration and multidisciplinary healthcare delivery.

Recommendations

Sustainable funding and resource allocation

Integration into routine care, learning from existing best practices

Workforce development and knowledge sharing

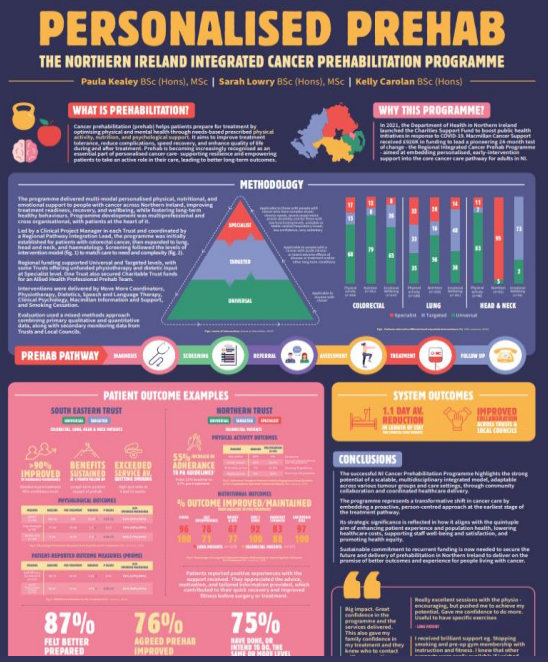
Early intervention and innovation

Community engagement and local partnerships

Performance monitoring and evaluation

Ongoing Developments and Improvements

- Operational and Strategic Prehab Groups
- Encompass Prehab Screening and Referral Processes
- Regional Prehab Toolkit
- Staff Training
- Engagement with partners
- AHP Research and Innovation Conference
- Macmillan Conference
- AHA Awards



Questions?

Paula.Kealey@setrust.hscni.net
Kelly.Carolan@hscni.net