# Medway NHS Foundation Trust

## Establishing a prehabilitation service with minimal funding

### What was the need and what solutions were identified?

In 2017, a review of evidence from Macmillan Cancer Support concluded that prehabilitation should be integrated into routine cancer care to improve the outcomes of those patients undergoing surgery.

Our hospital is situated in a part of England that has above average rates of comorbidities such as obesity and diabetes – all of which can increase perioperative risks and post operative complications. Operations were cancelled or not recommended due to poorly controlled comorbidities which had negative implications for the patients and was also not the best use of resources for the hospital.

If patients understood the implications of such comorbidities with regards to surgical risk, and we were able to guide them and give them tools on how to control comorbidities such as diabetes and obesity, then they may reap benefits in terms of reduced peri and post operative complications. Even if patients did not have comorbidities, by introducing simple measures and exercises to simply increase their baseline functioning may mean they would be better able to withstand the stress of surgery and have an enhanced recovery.

In light of all of these findings, our aim was to set up a prehabilitation unit with the aim of managing comorbidities to optimise patient outcomes during surgery; increasing physiological reserve so that patients are better able to recover after surgery; and to reduce post operative complications and readmissions.

The prehab team at Medway NHS Trust sought to establish a multi-modal prehabilitation programme for our colorectal and urology cancer resection patients. The programme consisted of supervised exercise, nutritional advice, anxiety management strategies and optimisation of patients' medications and comorbidities such as anaemia.

The purpose of this service was to improve patients' physiological reserve with the outlook of better withstanding the stress of surgery and to reduce the rate of post-operative complications and hospital re-admissions.

### What barriers did you encounter?

As we had no dedicated, ring fenced funding, it wasn't until October 2018 where we were able to set up a dedicated unit.

To combat this, we applied successfully to charities in order to purchase specialist equipment including exercise bikes. Patient donations and expertise helped procure weights and format patient literature. Clinical internships with Greenwich university helped with supervised exercise delivery. The team intended to deliver this programme

as best possible for patients and winning the Chief Executives Scholarships enabled the team to visit the prehabilitation unit at McGill University, Montreal to learn from best practice and implement these into our own unit.

With the use of consultant job planned sessions, the service was set up with no funding or administrative support. Planning and networking in our own time won support and engagement with clinicians, managers and local groups without any local data regarding patient and financial benefit. Patient advocates, multidisciplinary staff and clinicians all gave their time to collaborate and make the service a successful reality.

Presenting our story at regional cancer and GP CME meetings regularly helped us raise awareness of our service.

Despite the many barriers to implementing a new service with a small literature base and initially a lack of senior managerial support, we were able to set up a designated prehabilitation unit, gain invaluable staff that helped deliver the prehabilitation programme, and recruit patients to go through the prehab pathway, all with minimal funding.

## Were the solutions supportive of multi-disciplinary working?

Our solutions were not only supportive of multidisciplinary team, our solutions pivoted and revolved around an essential team of doctors, specialist cancer nurses, psychologists, counsellors, physiologists, students and most importantly, the patients themselves.

Doctors and specialist nurses were involved in consultations regarding further management of a patient's condition with regards to surgical intervention. Doctors were involved with designing a prehabilitation pathway for eligible patients and recruiting them to the prehab service. Doctors were responsible for recruiting physiologists and nurses to help deliver the programme.

Specialist nurses were a crucial part of providing support and being a point of contact for patients. They were vital in providing information about important support groups, organisations, and useful contacts to patients.

Public Health Medway offered 'hot" smoking cessation and alcohol moderation clinics along with support at patient education meetings.

Physiologists, counsellors, psychologists and students were critical in delivering the prehabilitation programme and being a source of support to patients.

## What evidence demonstrates the impact of the programme?

Quantitively, our data shows there has been a 15-20% improvement in functional capacity following prehabilitation, a reduction in HbA1c in 16 patients that were diabetic. We have demonstrated a length of stay reduction in colorectal resections.

Qualitatively, anecdotal patient experiences have been instrumental in gaining support for the service and are regularly fed back to the stakeholders. The nutritional leaflet co

designed with our patients has been featured in the Royal College of Anaesthetists' Bulletin.

As our project progresses, we hope to gain further data to assess to full impact of the programme.

We hope to collect further data on patient reported outcome measures, feedback about the prehab service itself to improve the quality our delivery, and further data about length of hospital stays, 30-day hospital re-admissions and complications.

## Were patients engaged and consulted?

The patients' co-designed leaflets aimed at giving patients information about the prehabilitation programme. They were given verbal information about the programme and its potential benefits. Patients were given a choice to attend prehab. The prehab sessions are designed with the patient themselves – it involved an assessment of their current baseline and building the foundations to improve upon that. Peer support is a crucial element of all patient supervised sessions.

Patients were offered other support such as counselling, smoking cessation and diet advice all which was tailored according to their needs.

## How does the solution relate to or support wider NHS/government policy in practice?

"Prevention is better than cure". As a society that is moving more towards preventative medicine, prehabilitation may offer a solution to post operative hospital re-admissions and complications.

The multidisciplinary team that helps deliver the prehabilitation programme is an example of bringing different professionals and organisations together to coordinate and yield better care for patients.

The programme will help tackle major healthcare issues such as diabetes, obesity, smoking and mental health.

We are providing this service with minimal funding and pure commitment from the professionals involved with the service. All of these are principles that are echoed in the Long Term Plan for England. We are already seeing promising data, and further data collection will help demonstrate the virtues of prehabilitation. With this we may be able to expand our services by means of establishing community satellite units and mentoring other sites to initiate their own prehabilitation units with limited resources.

## What learning was developed?

Establishing the prehabilitation programme was a learning process in itself. The visit to McGill University's prehabilitation unit in Montreal was crucial in creating a benchmark and learning from best practice to enable us to implement these lessons into our own unit.

## Case Studies: Before Surgery

We have partnered with Greenwich University to provide a team who were trained to provide exercise programmes to the patients.

We have, networked and liaised with local groups and shared our lessons and data with clinicians, managers, patient advocates and other members of the multidisciplinary team. This helped promulgate and illustrate the benefits for our programme.

We won the best presentation award at the Enhanced Recovery after Surgery UK society meeting in November 2019 and presenting colorectal data at St Peters Hospital meeting at the Royal Society of Medicine.

We have presented at the regional cancer and GP CME meetings regularly to raise awareness of our service. We have also submitted and displayed abstracts at the World Prehabilitation Conference.