

Making the most of what we have: Prehabilitation

George Ramsay PhD FRCS

Senior Clinical Lecturer

Consultant Colorectal Surgeon

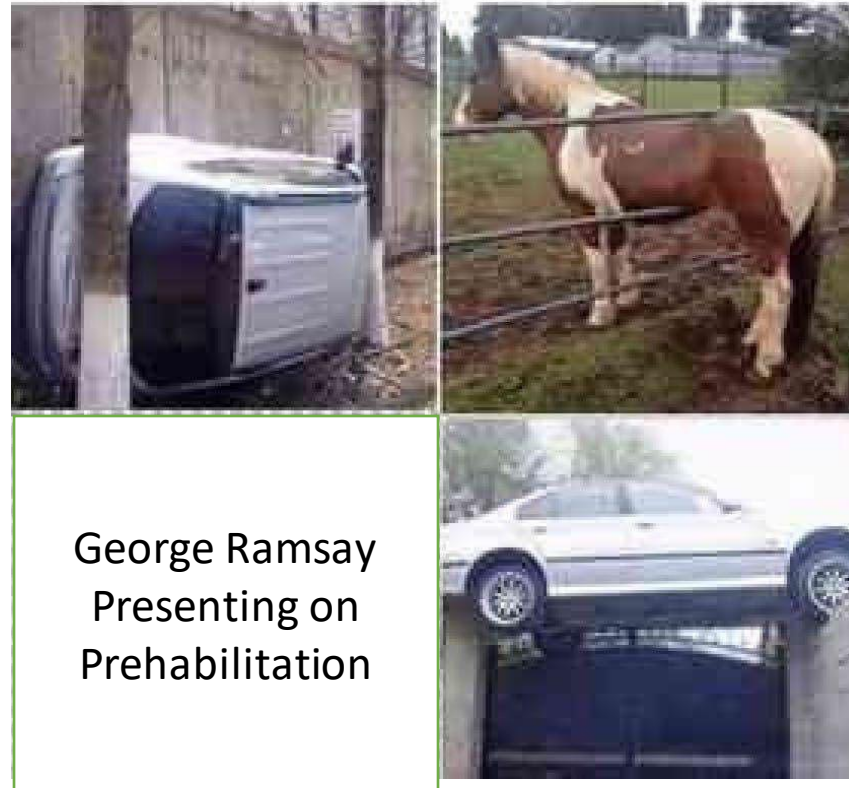
Prehabilitation

**Do you ever look at stuff and wonder
how it got there?**



Prehabilitation

**Do you ever look at stuff and wonder
how it got there?**




George Ramsay
Presenting on
Prehabilitation

Prehabilitation from a surgical perspective

- Relatively common sense from a first principle perspective
- Operation = 10km run
- Those that compete as a runner train for it!
- Why don't we encourage patients to train for an operation?
- Discussion with patients about lifestyle modifications, dietary changes and exercise

- Using the wait from diagnosis to treatment effectively

BMJ Open Pre-admission interventions (prehabilitation) to improve outcome after major elective surgery: a systematic review and meta-analysis

Rachel Perry ,¹ Georgia Herbert,¹ Charlotte Atkinson,¹ Clare England,^{1,2} Kate Northstone,³ Sarah Baos,⁴ Tim Brush,⁴ Amanda Chong,¹ Andy Ness,^{1,5} Jessica Harris,⁴ Anne Haase,⁶ Sanjoy Shah,⁷ Maria Pufulete⁴

To cite: Perry R, Herbert G, Atkinson C, *et al*. Pre-admission interventions (prehabilitation) to improve outcome after major elective surgery: a systematic review and meta-analysis. *BMJ Open* 2021;**11**:e050806. doi:10.1136/bmjopen-2021-050806

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal website

ABSTRACT

Objective To determine the benefits and harms of pre-admission interventions (prehabilitation) on postoperative outcomes in patients undergoing major elective surgery.

Design Systematic review and meta-analysis of randomised controlled trials (RCTs) (published or unpublished). We searched Medline, Embase, CENTRAL, DARE, HTA and NHS EED, The Cochrane Library, CINAHL, PsychINFO and ISI Web of Science (June 2020).

Setting Secondary care.

Participants Patients (≥ 18 years) undergoing major elective surgery (curative or palliative).

Interventions Any intervention administered in

Strengths and limitations of this study

- Unlike previous systematic reviews that focused on single interventions in single surgical populations, this review provides a summary of all types of prehabilitation interventions across *all* surgical populations.
- Comprehensive methods, with inclusion of published literature in all languages, alongside grey literature searching, to avoid publication bias.
- The large number of meta-analyses performed for related outcomes with data from the same individu-

Prehabilitation reduces time in hospital

- 178 RCTs
- Reduction in hospital stay
- Mean difference vs usual care:
- Inspiratory muscle training (IMT) -1.81 days, 95%CI -2.31 to -1.31
- Immuno-nutrition -2.11 days, 95%CI -3.07 to -1.15
- Multimodal interventions -1.67 days, 95%CI -2.31 to -1.03

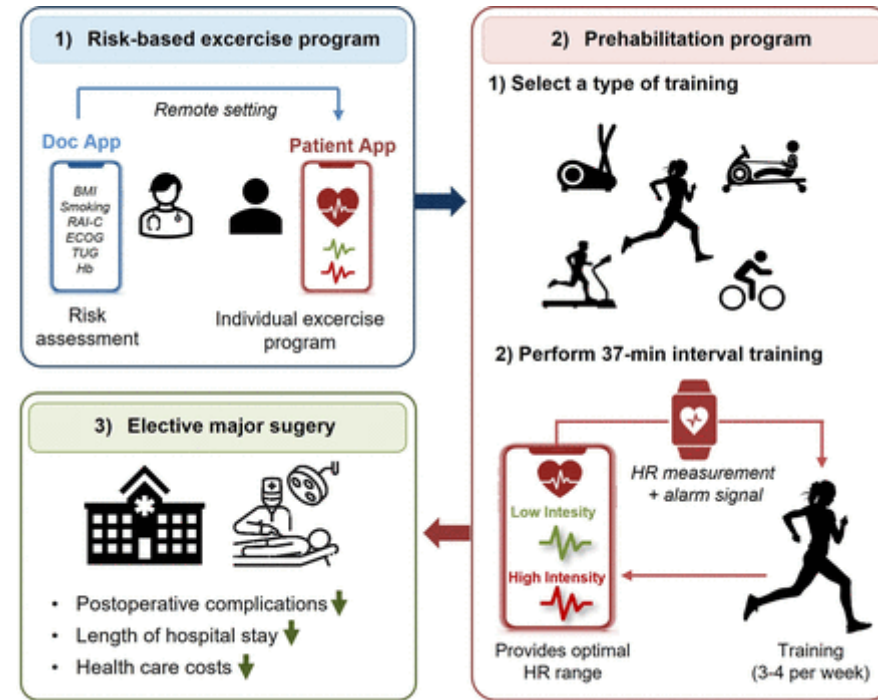
Prehabilitation reduces post operative complications

- Immuno-nutrition reduced infective complications (risk ratio (RR) 0.64 95%CI 0.40 to 1.01)
- IMT and exercise reduced postoperative pulmonary complications (RR 0.55, 95%CI 0.38 to 0.80, and RR 0.54, 95%CI 0.39 to 0.75, respectively)
- Smoking cessation interventions reduced wound infections (RR 0.28, 95%CI 0.12 to 0.64).

Prehabilitation teams

- Consultant Anaesthetists
- Doctors
- Nurses
- Dieticians
- Physiotherapists
- Psychologists

- Multiple specialties
- Challenging to set up



NHS Grampian Prehabilitation

- Could we establish a prehabilitation programme in Aberdeen Royal Infirmary?
- No- not within the stressed system we had, especially during COVID
- Resources
- Bureaucracy
- Challenges with funding
-
- Can we get help from third sector organisations?

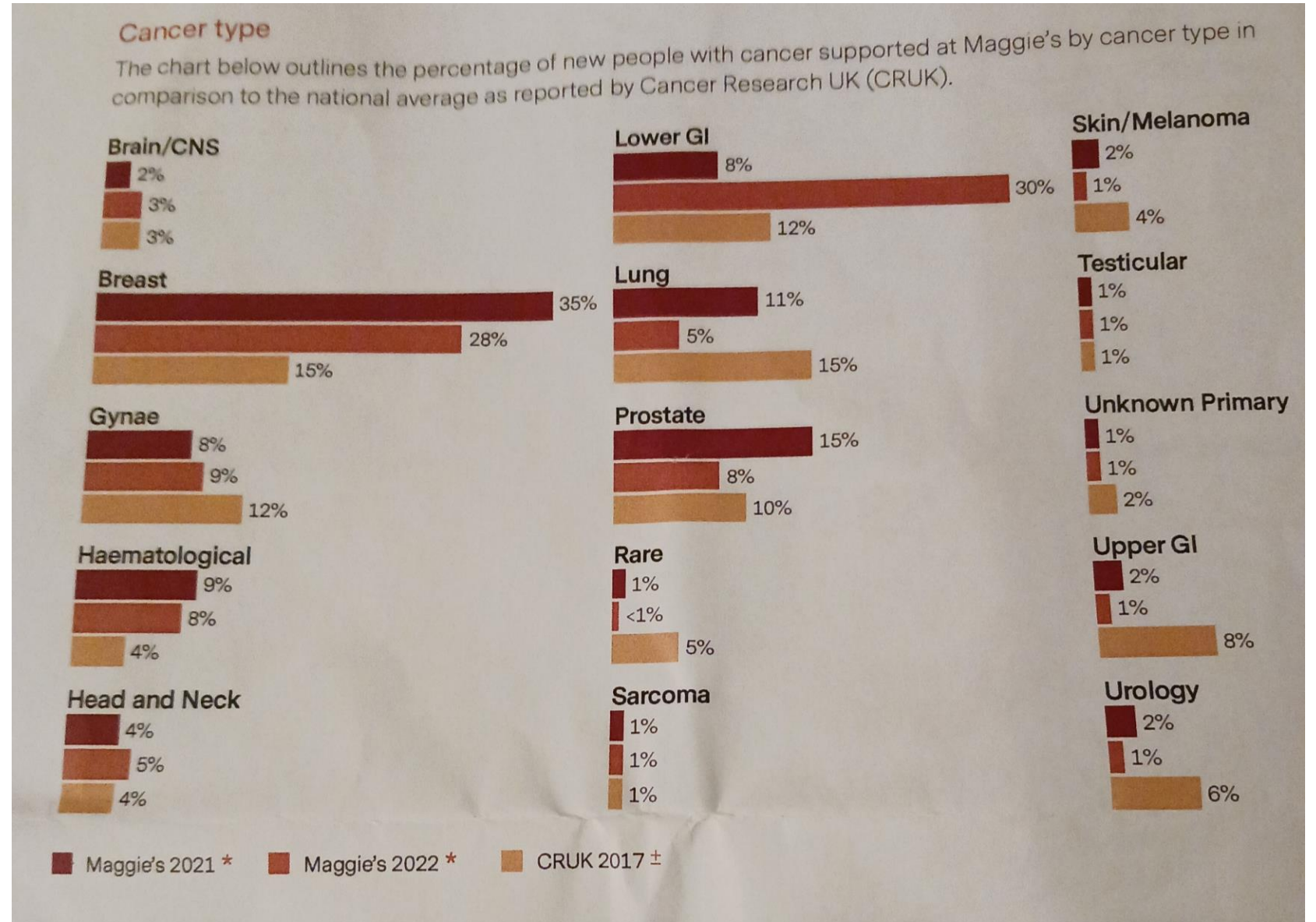
We are lucky in the North of Scotland



What do we do?

- Put our patients in touch with CLAN and Maggie's and highlight the resources and support that can be offered in these organisations
- Ask permission from patients for their details to be passed to these services
- As a result, both Maggie's and CLAN have seen an increase in footfall of Colorectal cancer patients (from a very low baseline)
- Hopefully patients will gain much more from the other support that is available in these organisation than just Prehab

Maggie's



CLAN

understanding colorectal cancer



across the North-East of Scotland & Northern Isles

Since April 2023, we have received 42 referrals of clients with a colorectal cancer diagnosis...



69% of referrals are from NHS professionals



52% of all referrals are female



Referrals range from age 31-80 years

59.5%

of referrals are from Aberdeenshire

36% of referrals are from Aberdeen
2.2% of referrals are from Shetland
2.3% of referrals are from Moray

When do referrals access Clan's support?

9%

are at pre diagnosis stage

12%

are newly diagnosed and pre treatment

43%

are accessing support during treatment

36%

are accessing support post treatment

CLAN

colorectal cancer support

Since April 2023, we have received 42 referrals of clients with a colorectal cancer diagnosis...

"I contacted Clan hoping to find some support **following complications from my cancer treatment**. I had been unwell with blood clots, had gained weight and struggled to exercise due to fatigue. After about 6 weeks there was a **marked improvement in both my weight and mobility** but most importantly for me the **fatigue had improved dramatically**. I received a **huge amount of support** when I needed it the most, and I genuinely believe I would not be where I am now without this support."

"The class is **helping me recover my fitness after treatment** (which is vital to me) but is also **very beneficial to my mental health**. I can **gauge fitness against others who are in a similar situation**, and **the social aspect** of meeting others in a similar predicament is very supportive and settling. **The fact that the class is held at Clan is important to me as I feel protected and supported when I feel so vulnerable.**"

To find out more about our support services, please scan the QR code



clancancersupport.org

Thank you

- Maggie's Vera Schroeter
- CLAN- Kay Johnstone