

Development of a Comprehensive Web-based Prehabilitation Program for Gastrointestinal Cancer Survivors

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BACKGROUND

- Individuals with frailty about to undergo major abdominal surgery are at risk of¹:
 - Post-surgical complications
 - Higher rate of readmission
 - More likely to have a loss of independence
 - Over 4 times the risk of mortality
- Providing resources to patients may support the reduction of mortality and complications post-surgery.
- The purpose of this program was to create an all-encompassing approach to prehabilitation prior to gastrointestinal oncological surgeries.

METHODS

- Three iterations of a Delphi Survey were performed by expert oncologic physical therapists. Results provided an expert consensus of exercise within the prehabilitation program.
- University of New England DPT students worked with Maine Medical Center Surgical Oncology to create a pilot prehabilitation program for major abdominal surgery candidates.
- The Thinkific online platform was used for exercise handouts and videos. This allows for independence preoperatively, and empowers the patient to increase their physical activity.

RESULTS

- Key stakeholders included:
 - Surgical oncologists
 - Pre-operative staff
 - Surgical oncology nursing staff
 - Surgical oncology navigators
 - Physical therapists
 - Education specialist with Thinkific platform
 - Cancer survivors
- Curriculum for the prehab program included:
 - Exercise instructions
 - Education on nutrition optimization
 - Tobacco cessation resources
 - Stress management & relaxation techniques

CONCLUSIONS

- This process improvement project proved to be appropriate for this application.
- Future directions include program implementation for gastrointestinal cancer survivors with the intention for outcome data collection.
- Further implementation is planned for cancer survivors with different diagnoses facing surgery.

Acknowledgements & References

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References

1. Panayi AC, Orkaby AR, Sakthivel D, et al. Impact of frailty on outcomes in surgical patients: A systematic review and meta-analysis. *The American Journal of Surgery*. 2019;218(2):393-400. Doi: <http://dx.doi.org/une.idm.oclc.org/10.1016/j.amjsurg.2018.11.020>.

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TIMELINE

Delphi Method
Fall, 2020

UNE & MMC
Collaboration
Spring, 2021

Creation of
Education
Materials
Summer, 2021

Design of
Thinkific
platform
Fall, 2021

