

INNOVATION FOR A HEALTHIER PLANET

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## BACKGROUND

- Individuals with frailty about to undergo major abdominal surgery are at risk of<sup>1</sup>:
- 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.



Delphi Method Fall, 2020

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

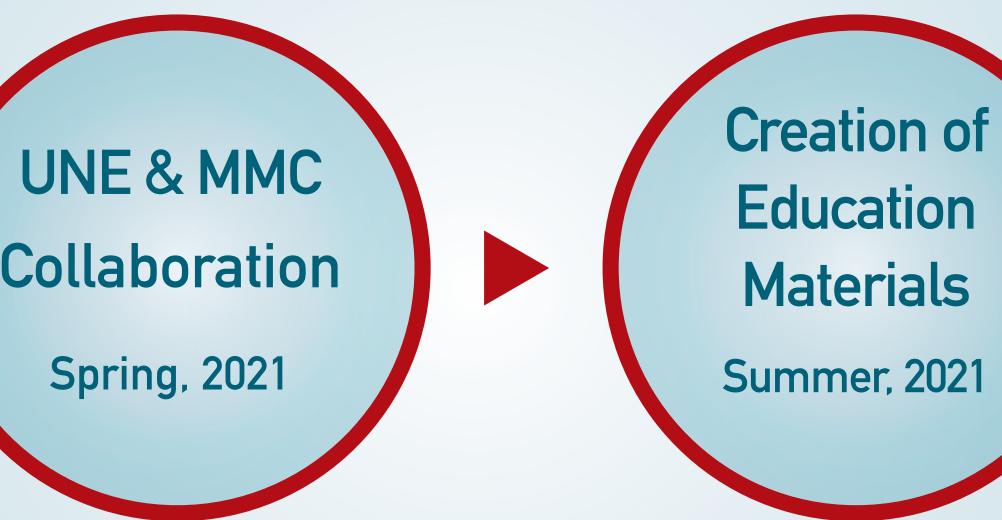
## METHODS

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.

## Lower body exercises (hip, thigh, calf) Ending position Starting position Exercise and target muscle group Knee extensions: thigh/quadriceps . Sit up straight in a chair with back support. . If using a cuff weight, wrap it around your ankle. 3. Lift your foot to straighten your knee. **4.** Slowly lower your foot to the floor. **5.** Repeat with the other leg.

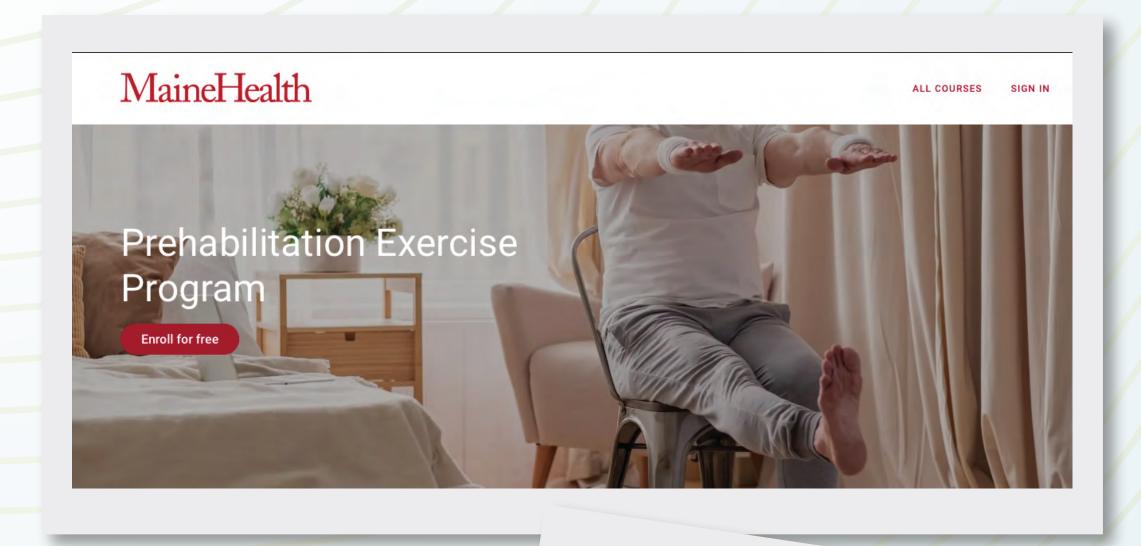


## RESULTS

- 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

### Acknowledgements

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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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