Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

Please use the headings above to navigate through the different sections of the poster

Rationale

The number of older adults who undergo major surgery is expected to double from 7 million to 14 million by 2030. [1] Frailty, an age-related decline in physiologic reserve, is present in least half of older adults who undergo elective surgery. [2-4] There is strong evidence that components of frailty—functional and cognitive impairment, malnutrition, depression, and social vulnerability–put patients at risk for complications, mortality, prolonged length of stay, discharge to an institution and not home, functional decline, and poor quality of life. [3-10] Mounting evidence indicates that multimodal interventions aimed at optimizing vulnerabilities associated with frailty before surgery result in decreased complications, enhanced functional recovery, increased discharge to home, reduced length of stay, and decreased hospital cost. [11-14] Recently published best practices guidelines for the optimal care of the geriatric surgical patient released by the American Geriatrics Society and the American College of Surgeons state that these vulnerabilities should be identified and optimized preoperatively. [15] In current surgical practice, however, routine screening for or attempt to address these vulnerabilities before surgery is not performed. Screening tools are perceived to be cumbersome and primary surgical providers are not equipped to directly address the uncovered vulnerabilities. The goal of the proposed study is to evaluate the implementation of an efficient tool in surgical practices that can detect and optimize the components of frailty before surgery.

REFERENCES

1. *Klopfenstein CE, Herrmann FR, Michel JP, et al: The influence of an aging surgical population on the anesthesia workload: a ten-year survey. Anesth Analg 86:1165-70, 1998.*
2. *Afilalo J, Eisenberg MJ, Morin JF, et al: Gait speed as an incremental predictor of mortality and major morbidity in elderly patients undergoing cardiac surgery. J Am Coll Cardiol 56:1668-76, 2010.*
3. *Makary MA, Segev DL, Pronovost PJ, et al: Frailty as a predictor of surgical outcomes in older patients. J Am Coll Surg 210:901-8, 2010.*
4. *Sundermann S, Dademasch A, Rastan A, et al: One-year follow-up of patients undergoing elective cardiac surgery assessed with the Comprehensive Assessment of Frailty test and its simplified form. Interact Cardiovasc Thorac Surg 13:119-23; discussion 123, 2011.*
5. *Badgwell B, Stanley J, Chang GJ, et al: Comprehensive geriatric assessment of risk factors associated with adverse outcomes and resource utilization in cancer patients undergoing abdominal surgery. J Surg Oncol 108:182-6, 2013.*
6. *Dasgupta M, Rolfson DB, Stolee P, et al: Frailty is associated with postoperative complications in older adults with medical problems. Arch Gerontol Geriatr 48:78-83, 2009.*
7. *Kristjansson SR, Nesbakken A, Jordhoy MS, et al: Comprehensive geriatric assessment can predict complications in elderly patients after elective surgery for colorectal cancer: a prospective observational cohort study. Crit Rev Oncol Hematol 76:208-17, 2010.*
8. *Neuman HB, Weiss JM, Leverson G, et al: Predictors of short-term postoperative survival after elective colectomy in colon cancer patients >/= 80 years of age. Ann Surg Oncol 20:1427-35, 2013.*
9. *Pace_Participants, Audisio RA, Pope D, et al: Shall we operate? Preoperative assessment in elderly cancer patients (PACE) can help. A SIOG surgical task force prospective study. Crit Rev Oncol Hematol 65:156-63, 2008.*
10. *Tan KY, Kawamura YJ, Tokomitsu A, et al: Assessment for frailty is useful for predicting morbidity in elderly patients undergoing colorectal cancer resection whose comorbidities are already optimized. Am J Surg 204:139-43, 2012.*
11. *Ellis G, Spiers M, Coutts S, et al: Preoperative assessment in the elderly: evaluation of a new clinical service. Scott Med J 57:212-6, 2012.*
12. *Harari D, Hopper A, Dhesi J, et al: Proactive care of older people undergoing surgery ('POPS'): designing, embedding, evaluating and funding a comprehensive geriatric assessment service for older elective surgical patients. Age Ageing 36:190-6, 2007.*
13. *Li C, Carli F, Lee L, et al: Impact of a trimodal prehabilitation program on functional recovery after colorectal cancer surgery: a pilot study. Surg Endosc 27:1072-82, 2013.*
14. *Valkenet K, van de Port IG, Dronkers JJ, et al: The effects of preoperative exercise therapy on postoperative outcome: a systematic review. Clin Rehabil 25:99-111, 2011.*
15. *Chow WB, Rosenthal RA, Merkow RP, et al: Optimal preoperative assessment of the geriatric surgical a best practices guideline from the American College of Surgeons National Surgical Quality Improvement Program and the American Geriatrics Society. J Am Coll Surg 215:453-66, 2012. patient:*

Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

Please use the headings above to navigate through the different sections of the poster

Objective

Primary

- To compare 8- week postoperative function among elderly patients between sites randomized to implement the OPTI-Surg toolkit with or without a coach versus sites randomized to usual care.

Secondary

- To compare postoperative morbidity between sites randomized to implement the OPTI-Surg toolkit with or without a coach versus sites randomized to usual care.
- To compare the penetration of the OPTI-Surg toolkit between sites randomized to implement the OPTI-Surg toolkit with a coach versus sites randomized to implement the OPTI-Surg toolkit without a coach.

Exploratory

- To compare postoperative mortality, hospital length of stay, discharge to a facility, and hospital readmission between sites randomized to implement the OPTI-Surg toolkit with or without a coach versus sites randomized to usual care.
- To assess subsequent initiation and follow through of appropriate referral for the indicated optimization intervention and assess practice-level structural factors associated with uptake of the OPTI-Surg package.
- To document and assess barriers and facilitators to implementation and dissemination through mixed-methods research.

Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

ALLIANCE FOR CLINICAL TRIALS IN ONCOLOGY

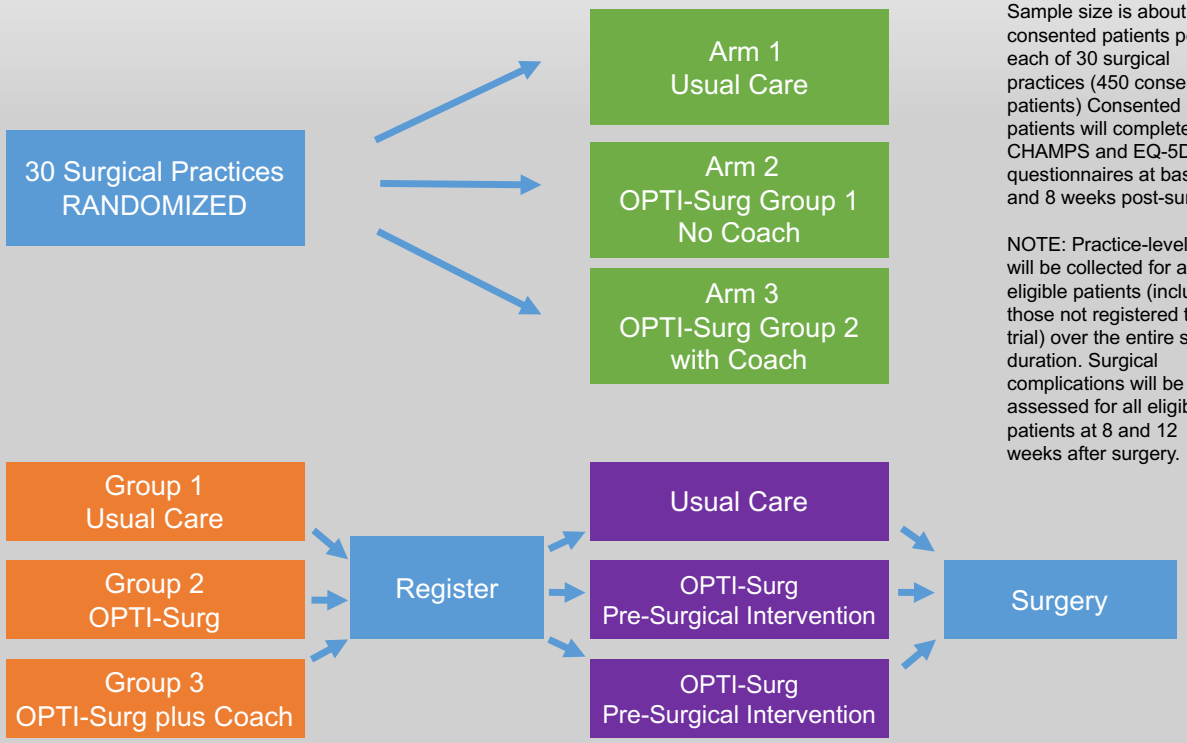
NCI Community Oncology Research Program

A program of the National Cancer Institute of the National Institutes of Health

Please use the headings above to navigate through the different sections of the poster

Study Schema

Institutional Randomization



Sample size is about 15 consented patients per each of 30 surgical practices (450 consented patients) Consented patients will complete the CHAMPS and EQ-5D questionnaires at baseline and 8 weeks post-surgery.

NOTE: Practice-level data will be collected for all eligible patients (including those not registered to the trial) over the entire study duration. Surgical complications will be assessed for all eligible patients at 8 and 12 weeks after surgery.

Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

Please use the headings above to navigate through the different sections of the poster

Intervention

Healthcare providers/institutions are randomized to 1 of 3 arms. Patients/participants receive the intervention based on which arm their healthcare provider is in.

Arm I
Healthcare providers/institutions perform usual care.

Arm II
Healthcare providers/institutions receive OPTI-Surg training and informational materials.

Arm II (web-based breast cancer surgery decision aid)
Healthcare providers/institutions receive OPTI-Surg training and informational materials and meet with a coach.

After conclusion of study, participants are followed up at 8 and 12 weeks post surgery, and healthcare providers/institutions are followed up 6-9 months after the last patient is registered.

Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

Please use the headings above to navigate through the different sections of the poster

Eligibility Criteria

Patient Eligibility

- Patients must have known or suspected cancer diagnosis and have one of the following cancer-directed operations planned: gastrectomy; colectomy; proctectomy; esophagectomy; pancreatectomy; hepatectomy; totalcystectomy; total nephrectomy; lung lobectomy/pneumonectomy
- Age ≥ 70 years
- Patients with known metastatic disease with a plan for curative intent resection are eligible.
- Patients with double primaries undergoing planned curative operation for both are eligible.
- Patients undergoing emergent surgery are not eligible.
- Patients with second primary, or metachronous malignancy are not eligible.
- Patients with known metastatic disease who are undergoing palliative resection are not eligible.
- Patients with psychiatric illness or other mental impairment that would preclude their ability to give informed consent or to participate in the prehabilitation program are not eligible.
- Patients must be able to speak and complete questionnaires in English.

Alliance A231601CD: Improving Surgical Care and Outcomes in Older Cancer Patients Through Implementation of an Efficient Pre-Surgical Toolkit (OPTI-Surg)

George J. Chang, MD, MS

The University of Texas MD Anderson Cancer Center

TAP TO RETURN TO KIOSK MENU

Please use the headings above to navigate through the different sections of the poster

Funding Support

Alliance A231601CD is funded by the National Institutes of Health through National Cancer Institute grant awards.

NCI Community Oncology Research Program
A program of the National Cancer Institute of the National Institutes of Health

Contact Us

Study Chair: George J. Chang, MD, MS
University of Texas MD Anderson Cancer Center
E-mail: gchang@mdanderson.org
Phone: 713-563-1875

Statistician: Amylou Dueck, PhD
E-mail: dueck.amylou@mayo.edu
Phone: 480-301-6159

Data Manager: Cristina Zabel
E-mail: zabel.cristina@mayo.edu
Phone: 507-284-4565

Protocol Coordinator: Rachel E. Wills
E-mail: rwills@uchicago.edu