

The Bree Collaborative
Draft Surgical Patient Optimization Charter and Roster

Problem Statement

Modifiable attributes of patient health status such as anemia or blood sugar control can have negative consequences for recovery after surgery. Preoperatively anemic individuals have higher costs generally due to increased length of stay¹ and even mild preoperative anemia is associated with an increase in 30-day morbidity² lower quality of recovery and higher adjusted risk of death and disability.³ Some studies suggest poor A1c control preoperatively increases morbidity and mortality,⁴ but perioperative glucose is a stronger predictor of 30-day mortality.⁵ Enhanced Recovery After Surgery (ERAS[®])⁶ protocols improve length of stay and reduce total cost of care, complications, and readmissions.⁷ However, Washington State has variation for A1c optimization before surgery, perioperative glycemic control protocols, and perioperative anemia control. Black patients are three to four times more likely to experience anemia perioperatively; Black, Hispanic, American Indian/Alaska Native patients more likely to experience uncontrolled diabetes/serum glucose, leading to inequitable outcomes.

Aim

To reduce surgical complications and cost by improving patient optimization before, during, and after surgery in Washington state.

Purpose

To propose evidence-informed guidelines to the full Bree Collaborative on practical and evidence-informed methods for improved surgical patient optimization for elective procedures, including:

- Identify best practices for anemia and glycemic status optimization around surgery, including innovative/emerging strategies (e.g., CGM monitoring)
- Identify and promote evidence-based enhanced recovery after surgery protocols
- Recommend strategies to integrate optimization of anemia and glycemic status (patients with and **without** diabetes) into perioperative protocols
- Recommend strategies to standardize and increase use of enhanced recovery after surgery protocols in Washington state
- Recommend reimbursement structures and employer strategies to incent improved optimization of anemia, glycemic control and use of enhanced recovery after surgery protocols
- Improved collaborative management of surgical patients between primary care and surgical care
- Identify best practices for systems with varying size/resource availability
- Other areas, as indicated

Out of Scope

- <18 years of age
- Emergent procedures
- Best practices for other indicators for surgical optimization (e.g., blood pressure, EtOH, nicotine, opioids)
- Transitions of care (e.g., hospital discharge)
- Intraoperative best practices for specific procedures

Duties & Functions

The workgroup will:

- Research evidence-informed and expert-opinion informed guidelines and best practices (emerging and established).
- Identify current barriers and future opportunities for implementing interventions.
- Consult relevant professional associations and other stakeholder organizations and subject matter experts for feedback, as appropriate.
- Meet for approximately nine months, as needed.
- Provide updates at Bree Collaborative meetings.
- Post draft report(s) on the Bree Collaborative website for public comment prior to sending report to the Bree Collaborative for approval and adoption.
- Present findings and guidelines in a report.
- Recommend data-driven and practical implementation strategies including metrics or a process for measurement. *(can be part of evaluation framework)*
- Create and oversee subsequent subgroups to help carry out the work, as needed.
- Revise this charter as necessary based on scope of work.

Meetings

The workgroup will hold meetings as necessary. Less than the full workgroup may convene to: gather and discuss information; conduct research; analyze relevant issues and facts; or draft recommendations for the deliberation of the full workgroup. A quorum shall be a simple majority and shall be required to accept and approve recommendations to send to the Bree Collaborative.

Bree Collaborative staff will conduct meetings, arrange for the recording of each meeting, and distribute meeting agendas and other materials prior to each meeting. Additional workgroup members may be added at the discretion of the Bree Collaborative director.

Name	Title	Organization
Carl Olden, MD (chair)	UW Residency Program Manager, Family Medicine Physician	Central Washington Family Medicine
Nicholas J. Kassebaum, MD	Medical Director	SCOAP/Spine COAP
Vickie Kolios-Morris, MSHSA, CPHQ,	Senior Program Director	Surgical COAP and Spine COAP, Foundation for Health Care Quality
Cristina Stafie, MD	Medical Director Perioperative and Procedural Services	Kaiser Permanente
Dayna Weatherly-Wilson	Manager, Value Based Care	Proliance
Eduardo Smith Singares, MD FACS, FCCM	Medical Director for Trauma & Emergency Surgical Services	Kadlec Medical Center
Rosemary Grant, BSN, RN, CHPQ, CPPS	Director, Clinical Excellence	WSHA
Timothy Barnwell, MD	Anesthesiologist	Confluence
Nawar Alkhamesi, PhD, MBA	Colorectal Surgeon	Kadlec Medical Center
Thien Nguyen, MD	OMC Surgery Section Chair, Director of OC Surgical Subspecialties	Overlake Medical Center
Andrea Allen, RN, MHA	Nurse Consultant, Program Manager, WA Apple Health, Fee For Service	Washington HCA
Irl Hirsch, MD	Medical Director	UW Diabetes Institute

E. Patchen Dellinger, MD	Professor Emeritus	University of Washington, Department of Surgery
Ty Jones, MD, CPPS, CHPW, CAQSM	Medical Director, Patient Safety and Healthcare Quality Leader	Regence
Robert Rush, MD	Chief Medical Officer Surgical Services	PeaceHealth Saint Joseph
Joe Frankhouse, MD, FACS	Colorectal Surgeon	Legacy Health
Scott Helton, MD, FACS	Director of Liver, Biliary, Pancreas Surgery Center of Excellence	Virginia Mason Medical Center
Venu Nemani, MD	Orthopedic Spine Surgeon	Virginia Mason Franciscan Health
Michael Bota, MD	Medical Director Population Health Clinical Value	MultiCare Connected Care
Janice Tufte	Patient Partner	Muslim Resource Center
Sharon Eloranta, MD	Medical Director	Washington Health Alliance (WHA)
Edie Shen, MD	Perioperative Internist	Harborview Medical Center

¹ Schatz C, Plötz W, Beckmann J, Bredow K, Leidl R, Buschner P. Associations of preoperative anemia and postoperative hemoglobin values with hospital costs in total knee arthroplasty (TKA). *Arch Orthop Trauma Surg.* 2023 Nov;143(11):6741-6751.

² Musallam KM, et al. . Preoperative anaemia and postoperative outcomes in non-cardiac surgery: a retrospective cohort study. *Lancet.* 2011 Oct 15;378(9800):1396-407.

³ Myles, P. S., Richards, T., Klein, A., Wood, E. M., Wallace, S., Shulman, M. A., Martin, C., Bellomo, R., Corcoran, T. B., Peyton, P. J., Story, D. A., Leslie, K., Forbes, A., & RELIEF Trial Investigators (2022).

Postoperative anaemia and patient-centred outcomes after major abdominal surgery: a retrospective cohort study. *British journal of anaesthesia*, 129(3), 346–354. <https://doi.org/10.1016/j.bja.2022.06.014>

⁴ Hart, A., Goffredo, P., Carroll, R., Lehmann, R., Nau, P., Smith, J., Ahad, S., Bao, W., & Hassan, I. (2021). Optimizing Bariatric Surgery outcomes: the impact of preoperative elevated hemoglobin A1c levels on composite perioperative outcome measures. *Surgical endoscopy*, 35(8), 4618–4623.

⁵ van den Boom, W., Schroeder, R. A., Manning, M. W., Setji, T. L., Fiestan, G. O., & Dunson, D. B. (2018). Effect of A1C and Glucose on Postoperative Mortality in Noncardiac and Cardiac Surgeries. *Diabetes care*, 41(4), 782–788.

⁶ ERAS® Society. (n.d.). Terms & conditions. Retrieved from <https://erasociety.org/about/terms-conditions/#:~:text=The%20ERAS%C2%AE%20Society%20holds%20the%20exclusive%20trademark,and%20development%20of%20computer%20hardware%20and%20software.>

⁷ Mazni Y, Syaiful RA, Ibrahim F, Jeo WS, Putranto AS, Sihardo L, Marbun V, Lalisang AN, Putranto R, Natadisastra RM, Sumariyono S, Nugroho AM, Manikam NRM, Karimah N, Hastuty V, Sutisna EN, Widiati E, Mutiara R, Wardhani RK, Liastuti LD, Lalisang TJM. The enhanced recovery after surgery (ERAS) protocol implementation in a national tertiary-level hospital: a prospective cohort study. *Ann Med Surg (Lond)*. 2023 Dec 8;86(1):85-91.