



A **QUALITY PROGRAM**
of the AMERICAN COLLEGE
OF SURGEONS

Optimizing Patients Prior to Surgery

Funding:

- Agency for Healthcare Research and Quality (AHRQ)
- Life Sciences Discovery Fund
- Nestle HealthCare Nutrition
- UW Patient Safety Innovation Program
- UW Department of Surgery

facs.org/strongforsurgery



AMERICAN COLLEGE OF SURGEONS

*Inspiring Quality:
Highest Standards, Better Outcomes*

100+years

Objectives of Strong for Surgery



Offer resources to hospitals and clinics to help them optimize patient health

- Presurgery checklists for surgical patients in four target areas
- Implementation support to standardize best practices in clinical practice

Drive improvements to make surgery safer by getting research results back into health care practice to facilitate system change

Focus on Four Modified Areas

Nutrition

- Screening for malnutrition
- Testing albumin levels for risk stratification
- Evaluating for immunonutrition



Blood Sugar

- Screening for risk of diabetes
- Screening for blood sugar
- Monitoring perioperative glucose management



Smoking

- Screening to identify smoking habits and history
- Advising patient on how to establish a quit plan



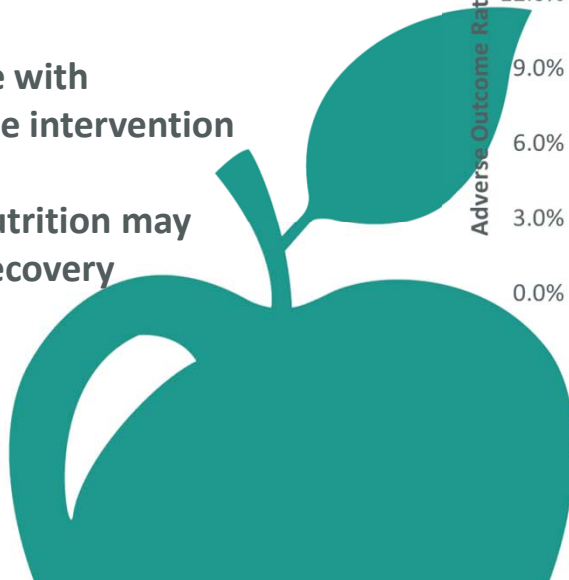
Medications

- Identification of drugs that could cause bleeding and cardiac risks
- Reconciling herbal medications

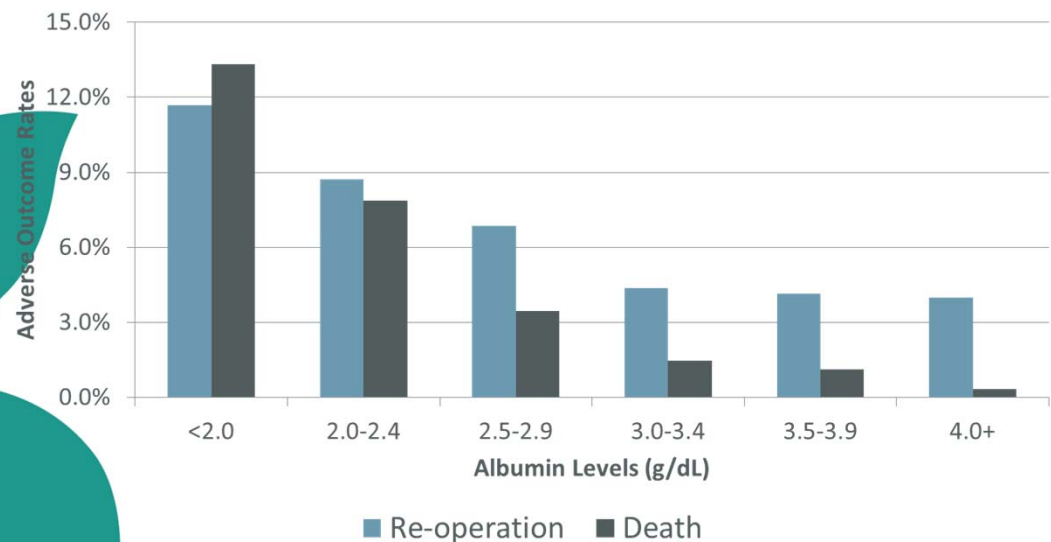


Why Nutrition?

- Malnutrition prevalent in surgical patients
- Best determinant of surgical outcome
- Modifiable with appropriate intervention
- Immunonutrition may improve recovery

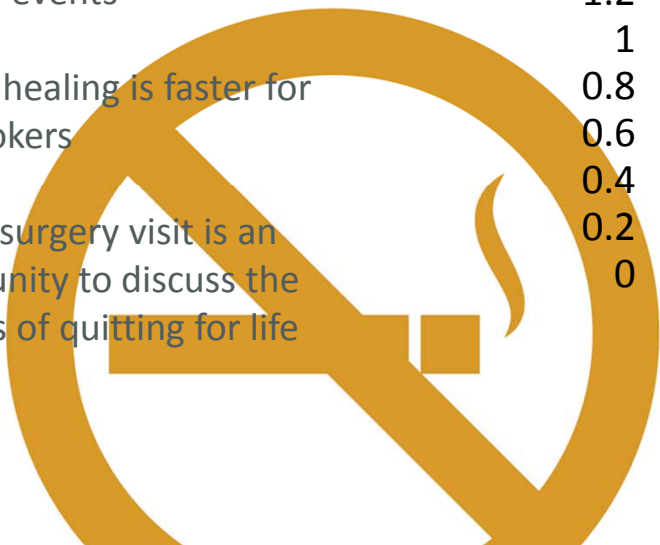


SCOAP: Albumin and Complications
Elective Colon/Rectal Procedures 2011

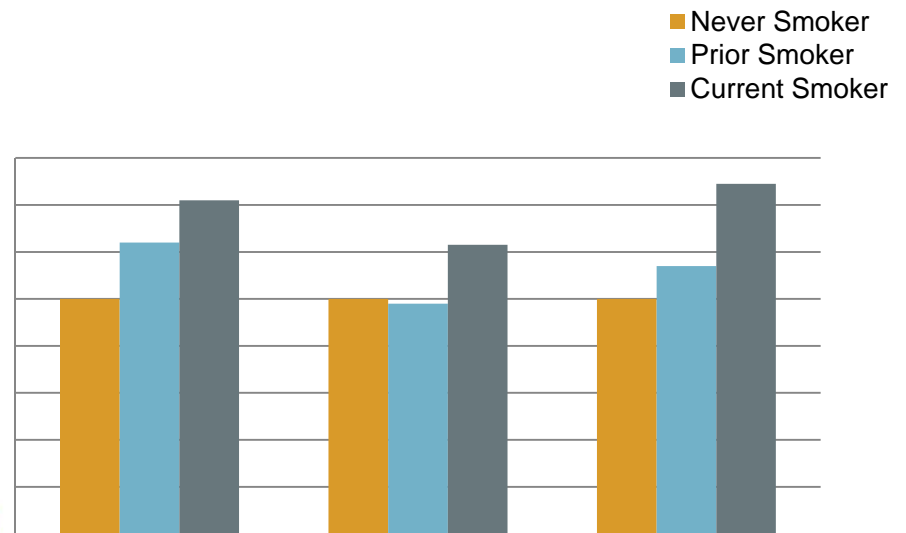


Why Smoking?

- Surgical site infections are more prevalent for smokers
- Quitting smoking before surgery decreases risk of adverse events
- Wound healing is faster for nonsmokers
- The presurgery visit is an opportunity to discuss the benefits of quitting for life



1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0



All Patients Neurosurgery Orthopedic

Why Blood Sugar?

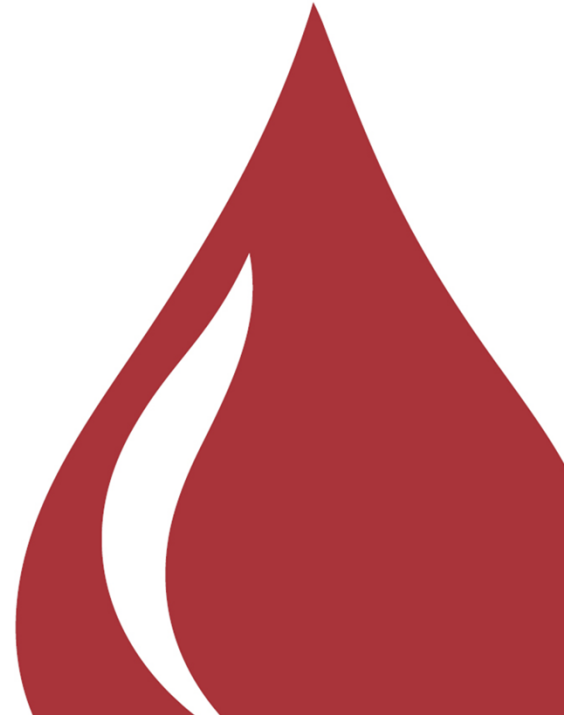


Hyperglycemia doubles the risk of SSI

- In some studies **47%** of hyperglycemic episodes were in nondiabet

Of the adult population over 65 years:

- 1 in 4 will have diabetes
- 2 in 4 are prediabetic
 - In a study of patients from 2005-2008 (U.S. adults over 20 years) **35%** had prediabetes



Why Medications?



Some medications and herbal remedies increase risk of bleeding

- Echinacea, Garlic, Ginkgo, Ginseng, Kava, Saw Palmetto, St. John's Wort, Valerian ↑ risk
- Aspirin can be safely continued

Beta-blocker continuation, however, is associated with fewer cardiac events and mortality



The Checklist

- Checklists help standardize presurgical evaluation and provide opportunities for appropriate interventions
- Screening questions are designed to compliment existing patient presurgical assessments and QI initiatives

The image displays five checklists from the STRONG for SURGERY program, arranged in a row. Each checklist is designed for presurgical evaluation and includes various screening questions and checkboxes.

- BLOOD SUGAR Control Checklist:** Focuses on diabetic patients, including questions about prior diagnoses, HbA1c levels, and insulin use.
- NUTRITION Screening Checklist:** Focuses on malnutrition screening, including questions about weight loss, appetite, and lab tests for risk stratification.
- MEDICATION Checklist:** Focuses on bleeding risks, beta-blocker use, aspirin use, and herbal medication use.
- MEDICATION Cessation Checklist:** Focuses on stopping certain medications (like NSAIDs) before surgery to reduce bleeding risk.
- SMOKING Cessation Checklist:** Focuses on smoking cessation, including questions about current status, quit dates, and referral to cessation programs.

Program Implementation



Hospital/Clinic Expectations:

- Change team formation and support champion
- Commitment through post-implementation
- Checklist adoption
- Data abstraction and sharing
- Stakeholder call attendance
- Feedback for improvement

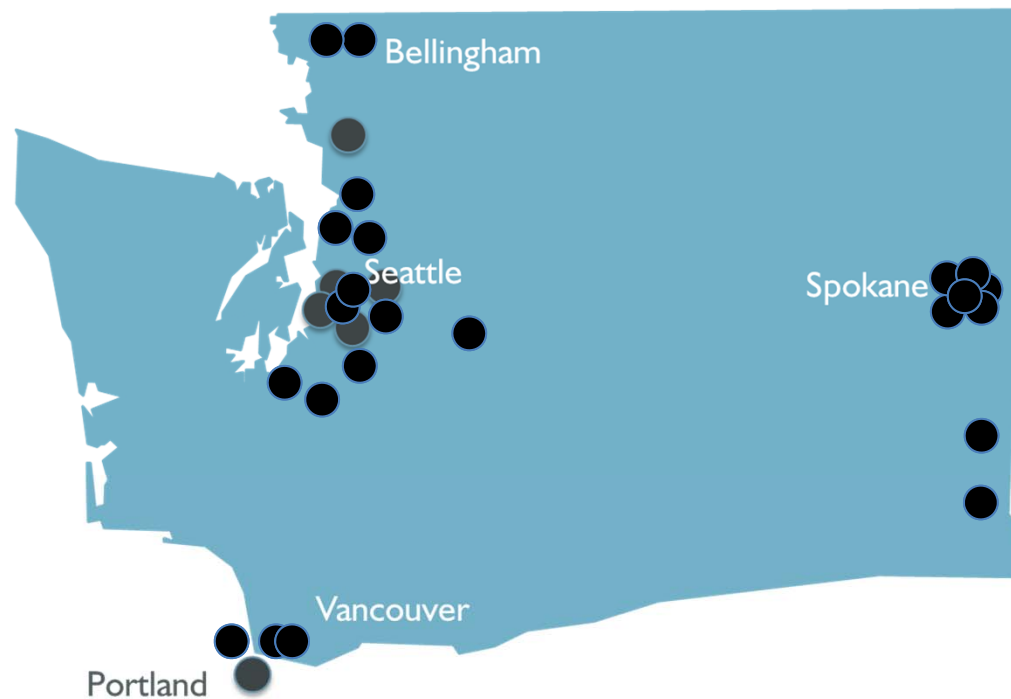
Strong for Surgery:

- Preassessment
- Workflow mapping
- Assessment of resource needs
- Feedback—clinicians and staff
- Post-assessment

Pilot Year – 2012



Current Impact



For more information



Visit the website: facs.org/strongforsurgery

- Read the evidence
- View our checklists

E-mail us: strongforsurgery@facs.org

Social media:  StrongforSurgery

 @Strong4Surgery