Working together to improve health care quality, outcomes, and affordability in Washington State.

Bariatric Surgical Bundle

November 2016
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Related Documents:  
Bariatric Surgical Evidence Table: www.breecollaborative.org/wp-content/uploads/Bariatric-Evidence-Table-Final-2016.pdf
Introduction

Background
The Washington State legislature created the Robert Bree Collaborative in 2011 to provide a forum in which public and private health care stakeholders can work together to improve quality, health outcomes, and cost-effectiveness of care. In 2012, the Bree Collaborative identified reducing avoidable hospital readmissions as a priority. To pursue this issue Bree created accountable payment models that include a warranty against avoidable readmissions. Additional elements were added to the model to facilitate value-based purchasing. These included bundled pricing, explicit community-based standards for quality supported by medical evidence published in the public domain, and market-relevant quality indicators reported directly to purchasers from providers. The Accountable Payment Models workgroup began by creating a bundled payment model and warranty for total knee and hip replacement (TKR/THR) surgery in November 2013, completed a similar model for lumbar fusion in September 2014, and added coronary artery bypass surgery in September 2015. Bariatric surgery was chosen as the fourth surgical procedure and the workgroup met from February 2016 through October 2016.

Definition and consequences of obesity
The National Institutes of Health (NIH) defines obesity as a BMI of equal to or greater than 30 kg/m². According to this NIH definition, over one third of adults are obese in the United States. Obesity is associated with increased likelihood of type 2 diabetes, high blood pressure, hyperlipidemia, cardiovascular disease, obstructive sleep apnea, osteoarthritis, gastroesophageal reflux (heartburn) and emotional disorders. The national annual cost of obesity and its consequences approaches $150 billion annually.

A complex, chronic condition requiring a multidisciplinary approach
Obesity and its consequences constitute a chronic, complex, relapsing multi-system condition with physical and emotional components. While there is no reliable long-term cure, even modest reductions in weight loss by any of a number of methods can convey benefit by controlling associated conditions such as diabetes, high blood pressure, and high cholesterol.

This bundle includes bariatric surgery as a treatment option for select individuals. It also requires a holistic approach in which surgery is but one possible component of care. As set forth in the recommendations by the Washington State Health Technology Assessment Program (HTAP) for financial coverage, bariatric surgery should be complemented with a “pre-operative psychological evaluation (and participation) in pre-and postoperative multidisciplinary care programs.” The bariatric surgical bundle is only for first-time bariatric surgery.

Process used to create bundle
The Bariatric Surgical Bundle provides a voluntary, community-based, evidence-informed standard for production, purchasing, and payment of health care based on quality. The bundle has been created by a multi-stakeholder workgroup, see Appendix A for workgroup members, selected by the Bree Collaborative
representing purchaser, provider, payer, and quality sectors. The workgroup reports to the full Bree Collaborative that in turn reports to the Washington State Health Care Authority. A public comment period is included in the design phase to enlist broad critique. Final documents are in the public domain for any individual or organization to use.

**Structure of the bundle**

The four-cycle bundle extends well beyond the surgical procedure itself. The first cycle is an appropriateness standard for bariatric surgery, outlining requirements for a trial of non-surgical care. The second cycle sets forth requirements for fitness for surgery. The third cycle specifies elements of best practice surgery and the fourth cycle lists components of care aimed at our ultimate outcome, rapid return to function.

Elements of the bundle are supported by an evidence table that includes over 90 appraised citations. Where medical evidence is absent or of marginal quality, we have declared standards based on consensus of stakeholders. Our approach draws heavily from the evidence-based approach contained in three documents, the Health Technology Assessment Program 2015 Final Evidence Report, the 2013 AHA/ACC/TOS guideline for the management of overweight and obesity in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and The Obesity Society, and the American College of Surgeons Standards manual: resources for optimal care of the metabolic and bariatric surgery patient 2016, each cited on the following page.

**Inclusion and exclusion criteria**

According to the standards set forth by the Health Technology Assessment Program for financial coverage for bariatric surgery, the following three requirements must be met:

1. The patient must be at least 18 years of age
2. The patient must have one of the following inclusion criteria:
   a. BMI 30 to <35 with type 2 diabetes,
   b. BMI 35 to <40 for patients with at least one obesity-related co-morbidity (diabetes, hypertension, hyperlipidemia, or obstructive sleep apnea)
   c. BMI 40 or greater. Note: patients of Asian descent may be susceptible to complications of diabetes at lower BMI ranges.

Exclusion criteria for the bundle are revision to a previous bariatric surgery, pregnancy, intent to become pregnant within a year of surgery; active drug and/or alcohol abuse; active life-limiting illness that would preclude benefit from weight loss; cognitive, motivational, or emotional conditions that would preclude understanding and participating in the care plan; or other factors as determined by the multidisciplinary team. The care team should evaluate and assist with managing socioeconomic barriers to a successful outcome such as constrained financial resources (e.g., that may prohibit patient access to necessary vitamins).

**Multidisciplinary care team**

Surgery must be performed at a center certified by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP). The Bariatric surgery center should have a

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3 In patients of Asian descent, obesity and its risk, seem to start at a lower BMI of 27 to 28. For bariatric surgery, IFSO APC 2011 recommends a BMI 35+, 30+ with T2DM or metabolic syndrome, and surgery as a non-primary alternative for BMI 27.5+ with T2DM or metabolic syndrome. Hence, medical and surgical treatment options could be considered at these lower ranges in patients of Asian descent.
comprehensive, multidisciplinary Metabolic and Bariatric Program (MBP). The director of the comprehensive care team should be a bariatric surgeon actively practicing metabolic and bariatric procedures in the center and have full privileges and credentials to perform metabolic and bariatric surgery. The specific composition of the multidisciplinary team may vary, but at a minimum should include:

- **Director**: A credentialed bariatric surgeon with experience in comprehensive, long-term medical management of obesity and related comorbidities responsible for execution of the bundle.
- **Coordinator**: A MBP coordinator who is a licensed health care professional, RN (preferably a certified bariatric nurse) or RD. This position will be responsible for coordinating the activities of the MBP team and serving as the clinical reviewer responsible for collecting and reporting outcome data for regular and formal review. The clinical reviewer should not be directly involved in patient care.
- **A mental health professional,** and
- **A registered dietitian.**

Prior to surgery, the MBP director will be accountable for documentation in the medical record for:

- Attestation of active participation of the patient in non-surgical therapy,
- The need for bariatric surgery based on persistent obesity and absence of psychosocial barriers that would reduce the benefit of surgery,
- Accord among consultants with regard to the recommendation for surgery, and
- Completion of the appropriateness and safety requirements of the bundle.

We believe this bariatric surgical bundle represents an incremental advance in helping to create a market for quality in health care. We will continue to refine and improve the bundle as new information becomes available. We encourage purchasers to contribute to the success of this bundle by reimbursing for essential services such as for a health coach or for care coordination.

**General References**

I. ELIGIBILITY DUE TO OBESITY DESPITE NON-SURGICAL THERAPY: Appropriateness

A) **Document obesity and assess for weight-related comorbidities and exclusions**

1) Measurement of height, weight. Calculation of Body Mass Index (BMI)

2) Screen for co-morbidities

   a) Screen for diabetes according to standard of the American Diabetes Association
   
   b) Screen for hypertension according to US Preventive Task Force
   
   c) Screen for hyperlipidemia according to US Preventive Task Force

3) Evaluate for obstructive sleep apnea with a low threshold to refer patients to sleep medicine specialist for evaluation

4) Include in the history screening questions for the following and pursue as indicated:

   a) Gastroesophageal reflux disease (GERD)
   
   b) Cardiovascular disease: coronary, carotid, peripheral
   
   c) Pulmonary disease, including asthma
   
   d) Arthritis in weight-bearing joints
   
   e) Liver disease
   
   f) Other physical limitations interfering with daily activity

3) Screen for emotional, cognitive, and motivational patient factors. The center or practitioner providing bariatric surgery must be accountable for a formal psychological evaluation of patients under consideration for bariatric surgery and an integrated, multidisciplinary pre- and postoperative care program.

   a) Consider patient’s motivation to engage in weight loss program with a validated tool
   
   b) Screen for depression using a validated tool
   
   c) Screen for dementia using a validated tool

4) Screen for additional exclusion criteria

   a) Female patients: screening for pregnancy, or intent to become pregnant within a year of surgery
   
   b) Active life-limiting illness that would preclude benefit from weight loss
   
   c) Screen for other factors as determined by the multidisciplinary care team

5) Document self-reported loss of function with Patient Reported Outcomes Measurement Information System-10® (PROMIS-10)

B) **Begin comprehensive program of non-surgical care lifestyle modification according to ACC/AHA/TOS guideline or and other evidence-based guidelines**

1) Patient must meet emotional, cognitive, and motivational standards as judged by a mental health professional.

2) Program includes the multidisciplinary care team as specified earlier in this document.

3) Program content should include:

   a) Patient education on the benefit of weight loss
   
   b) Instruction in beginning or maintaining a calorie-restricted diet prescribed by a nutritional professional
   
   c) Instruction and support in maintaining appropriate physical activity
   
   d) Behavioral therapy and management of behavioral disorders as needed
   
   e) Management of diabetes with a target A1C between 7-9% depending on risk/benefit
f) Management of hypertension according to the March 2015 guideline update from AHA/ACC/AHS

g) Management of hyperlipidemia according to 2013 ACC/AHA/AHS guidelines

h) Management of overuse of alcohol as needed

i) Management of sleep apnea if needed

j) Management of other obesity-associated complications as necessary

k) Screen for and manage tobacco use

l) Medications for weight loss may be prescribed in a manner consistent with their labeled indication. Medication options should be limited to FDA-approved agents. Medications are to be used in addition to comprehensive lifestyle modification program.

C) Assess patient response to intervention and patient safety

1) Director must document adherence to program requirements including:
   a) All elements of program activities
   b) Compliance with non-surgical activities – improved or stable medical markers (e.g., weight, hypertension control, glycemic control)

2) If the patient has failed the program for comprehensive non-surgical treatment, the Director must document this finding in the medical record
II. FITNESS FOR SURGERY: Appropriateness

A) **Document requirements related to patient safety**
   If compatible with patient safety, providers should assess the following minimum requirements prior to surgery to minimize the risk of complications.
   1. Hemoglobin A1c ideally less than 9% in patients with diabetes. If HbA1c is 9% or over, the decision to perform surgery should be discussed and agreed upon by the care team
   2. Adequate nutritional status to facilitate healing including review of need for vitamin supplements pre and post-surgery
   3. Sufficient liver function to facilitate healing
   4. Pre-operative plan for management of opioid dependency if patient has taken opioids for more than three months
   5. Avoidance of nicotine for at least four weeks pre-operatively
   6. Screen for alcohol overuse, with management plan if screen is positive
   7. Screen for depression with management plan if positive
   8. Screen for dementia and address patient’s ability to comply with therapeutic regimen
   9. Develop pre-operative plan for post-operative return to function
   10. Consider pre-operative physical therapy in selected patients

B) **Document patient engagement**
   1. Document that the patient has participated actively in shared decision-making with full knowledge of risks, benefits, alternatives, and preferences. This requirement is in addition to informed consent.
      a. Engage the patient in a discrete shared decision-making process with appropriate and trained staff
      b. Include use of a validated shared decision-making aid such as those certified by the Washington State Health Care Authority, if available
      c. Ensure that during this encounter, the patient and staff have addressed:
         i. Issues related to an active, life-limiting condition that would likely cause death before recovery from surgery
         ii. Disability from an unrelated condition that would severely limit the benefits of surgery
      d. Document patient’s preference for treatment as part of this encounter
   2. Document that the patient has designated a competent personal care partner. More than one care partner may be designated, providing good communication is established among care partners. A care partner is someone who joins the patient as a supportive lay partner who attends pre- and post-operative informational sessions with providers and provides general assistance to the patient until the patient is able to return to independent function. Instruction to the care partner should include the elements of discharge planning. The care partner must be intellectually, emotionally and physically qualified to assume this role. The care partner may also be supplied by the facility.
      a. Surgical consultation
      b. Pre-operative evaluation
      c. Pre-surgical class and/or required surgical and anesthesia educational programs
      d. In-hospital care
e. Assessment of home-based physical and psychosocial hazards that may interfere with recovery
3. Offer patient advance care planning compatible with the Bree Collaborative’s End-of-Life Care Recommendations, including completion of an advance directive, designation of durable power of attorney for health care, and participation in an option for organ donation

C) Document optimal preparation for surgery
1. Perform pre-operative history, physical, and screening lab tests based on review of systems:
   a. Evaluate for pulmonary fitness
   b. Obtain basic lab profile, plasma glucose, prothrombin time, complete blood count, urinalysis with culture, if indicated
   c. Culture nasal passages to identify staphylococcal carrier state and treat accordingly
   d. Screen for predictors of delirium
2. Obtain relevant consultations:
   a. Evaluate for good dental hygiene in high-risk patients
   b. Refer to anesthesia for pre-operative assessment including identification and management of conditions such as sleep apnea and pulmonary hypertension
   c. Request other consultations, as necessary
3. Review post-operative care plan, including long-term weight maintenance and nutritional plan
4. Collect patient-reported measures to confirm lack of significant response to non-surgical treatments using the general health questionnaire PROMIS-10
III. BARIATRIC SURGERY

A) General standards for a surgical team performing surgery

1. Facility standards:
   a. Facility and staff are accredited by MBSAQIP
   b. Facility meets volume standards of the 2016 MBSAQIP of 25 annual bariatric procedures if a low acuity center and 50 annual bariatric procedures if a comprehensive center
   c. Facilities and staff measure and record quality metrics according to MBSAQIP
   d. Members of the surgical team have documented credentials, training, and experience
   e. The surgical team has a consistent roster
   f. Facility is aligned with policies with the American College of Surgeons Statement on Health Care Industry Representatives in the Operating Room

2. Surgeon standards:
   a. Bariatric surgeons must be board certified by the American Board of Surgery or certified by a reciprocal and equivalent credentialing organization
   b. Bariatric surgeons shall have a lifetime volume of 200 primary bariatric cases minimum OR a 12-month minimum fellowship training in bariatric and metabolic surgery that includes stapled laparoscopic cases involving small intestine minimum per year, accredited by Fellowship Council or equivalent body and meeting the criteria as defined by American Society for Metabolic and Bariatric Surgery (ASMBS)
   c. Actively practicing in this specialty where, in the last 3 years, the surgeon documents a minimum of 100 primary laparoscopic stapled bariatric cases involving small intestine

B) Elements of optimal surgical process

1. Optimize pain management and anesthesia:
   a. Use multimodal anesthesia management to minimize sedation and encourage early extubation and recovery
   b. Minimize use of opioids and prescribe according to Washington State Agency Medical Director’s Group Opioid Prescribing Guidelines, 2015 Interagency Guidelines or more recent if available

2. Minimize risk of infection:
   a. Administer appropriate peri-operative course of antibiotics according to guidelines set forth in the Surgical Care Improvement Project (SCIP): SCIP-Inf-1b, 2b, 3b; CMS Measure 1, 2, 3
   b. Restrict use of urinary catheter to less than 48 hours per SCIP guidelines: SCIP-Inf-9
   c. Use appropriate method for hair removal; avoid shaving: SCIP-Inf-6
   d. Use appropriate skin prep by patient prior to surgery

3. Minimize risk of bleeding and low blood pressure:
   a. Administer standardized protocols using appropriate medications to limit blood loss
   b. Use institution-based standard IV fluid and inotrope protocols including those implemented by RNs post-operatively with appropriate supervision and monitoring

4. Minimize risk of deep venous thrombosis and embolism according to guidelines set forth in the SCIP VTE-2, CMS Measure 4
5. Minimize risk of hyperglycemia: Use standardized protocol to maintain optimal glucose control, SCIP-Inf-4

C) Participation in the following registries
1. Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program
2. Surgical Clinical Outcomes Assessment Program (SCOAP)

IV. POST-OPERATIVE CARE AND RETURN TO FUNCTION

A) Standard process for post-operative care
1. Utilize a rapid and durable recovery track to mobilize patients following surgery:
   a. Provide accelerated physical therapy and mobilization if regional pain control is acceptable
   b. Provide a patient-oriented visual cue to record progress on functional milestones required for discharge
   c. Instruct patients in home exercise, use of walking aids, and precautions
   d. Instruct “care partner” to assist with home exercise regimen
   e. If obstructive sleep apnea has been previously documented, encourage compliance with appropriate treatment
2. Ensure availability of hospitalists or appropriate medical consultants to assist with complex or unstable medical problems in the post-operative period
3. Consider use of goal-directed hemodynamic interventions in moderate to high risk patients

B) Use standardized hospital discharge process aligned with Washington State Hospital Association (WSHA) toolkit
1. Arrange follow up with care team according to WSHA toolkit
2. Evaluate social and resource barriers based on WSHA toolkit
3. Reconcile medications
4. Provide patient and family/caregiver education with plan of care:
   a. Signs or symptoms that warrant follow up with provider
   b. Guidelines for emergency care and alternatives to emergency care
   c. Contact information for bariatric surgeon and primary care provider
5. Ensure post-discharge phone call to patient by care team to check progress, with timing of call aligned with WSHA toolkit
6. Send post-discharge summary to primary care provider within two days of discharge

C) Arrange home health services
1. Provide the patient and care partner with information on details about home care, including activity aimed at returning to pre-surgical function
2. Arrange additional home health services as necessary

D) Schedule follow up appointments
1. Schedule return visits as appropriate.
2. Measure weight loss and patient-reported functional outcomes with standard instrument at 12, 24, and 36 months
3. Develop a formal plan for opioid management if opioid use exceeds six weeks
QUALITY METRICS

During the first year of the bundled contract, providers will be expected to install methods to measure appropriateness, evidence-based surgery, return to function, and the patient care experience according to the standards noted below. Reporting of results will be expected to begin the second year of the contract. The only exception to this reporting requirement is that the measures of patient safety and affordability noted in section 5 below will begin the first year of the contract.

See Appendix B for more detailed information on quality standard numerators and denominators.

1. Standards for appropriateness
These standards are intended to document patient engagement in medical decision-making and measurement of eligibility prior to surgery. Report:
   a. Proportion of bariatric surgical patients receiving formal shared decision-making decision aids pre-operatively
   b. Proportion of bariatric surgical patients with documented patient-reported measures of quality of life – PROMIS-10 Global Health tools may be used
   c. Results of measures from 1b, including responses to everyday physical activities (Question Global 6) on the PROMIS-10 survey

2. Standards for evidence-based surgery
These standards are intended to document adherence to evidence-based best practices related to the peri-operative process. Report the proportion of patients that have received all of the following in the peri-operative period and omission rates, if any:
   a. Treatment of pain using multimodal anesthesia
   b. Treatment to reduce risk of venous thromboembolism and pulmonary embolism
   c. Treatment to reduce blood loss
   d. Treatment to reduce infection such as administration of prophylactic antibiotics
   e. Treatment to maintain optimal blood sugar control

3. Standards for ensuring rapid and durable return to function
These standards are intended to optimize mobilization following surgery and measure patient recovery. Report:
   a. Proportion of patients with bariatric surgery for which there are documented patient-reported measures of disability and quality of life 12, 24, and 36 months following surgery – the same measures should be used as in standard 1b
   b. Results of measures from 2c, specifically including responses to the questions identified in standard 1c
   c. Proportion of patients with bariatric surgery for whom there are documented weight and BMI measures at baseline (pre-operative) 12, 24, and 36 months
   d. Population mean weight and BMI for those who have a measure at baseline 12, 24, and 36 months
4. **Standards for the patient care experience**
These standards are intended to measure patient-centered care. Report:
   a. Proportion of bariatric patients surveyed using HCAHPS
   b. Results of measures from 4a, specifically including responses to Q6 and Q22 of HCAHPS

5. **Standards for patient safety and affordability**
Report:
   a. 30-day all-cause readmission rate for bariatric surgical patients
   b. 30-day readmission rate for bariatric surgical patients with any of the complications including standards intended to measure success in avoiding complications and reducing readmissions under the terms of the warranty
   c. Mortality: Any death during hospitalization
## Appendix A: Bree Collaborative Members

<table>
<thead>
<tr>
<th>Member</th>
<th>Title</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Susie Dade MS</td>
<td>Deputy Director</td>
<td>Washington Health Alliance</td>
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<tr>
<td>John Espinola MD, MPH</td>
<td>Executive Vice President, Health Care Services</td>
<td>Premera Blue Cross</td>
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<tr>
<td>Gary Franklin MD, MPH</td>
<td>Medical Director</td>
<td>Washington State Department of Labor and Industries</td>
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<tr>
<td>Stuart Freed MD</td>
<td>Chief Medical Officer</td>
<td>Confluence Health</td>
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<tr>
<td>Richard Goss MD</td>
<td>Medical Director</td>
<td>Harborview Medical Center – University of Washington</td>
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<tr>
<td>Christopher Kodama MD</td>
<td>President, MultiCare Connected Care</td>
<td>MultiCare Health System</td>
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<tr>
<td>Daniel Lessler MD, MHA</td>
<td>Chief Medical Officer</td>
<td>Washington State Health Care Authority</td>
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<tr>
<td>Paula Lozano MD, MPH</td>
<td>Associate Medical Director, Research and Translation</td>
<td>Group Health Cooperative</td>
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<tr>
<td>Wm. Richard Ludwig MD</td>
<td>Chief Medical Officer, Accountable Care Organization</td>
<td>Providence Health and Services</td>
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<tr>
<td>Greg Marchand</td>
<td>Director, Benefits &amp; Policy and Strategy</td>
<td>The Boeing Company</td>
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<tr>
<td>Robert Mecklenburg MD</td>
<td>Medical Director, Center for Health Care Solutions</td>
<td>Virginia Mason Medical Center</td>
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<tr>
<td>Kimberly Moore MD</td>
<td>Associate Chief Medical Officer</td>
<td>Franciscan Health System</td>
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<tr>
<td>Carl Olden MD</td>
<td>Family Physician</td>
<td>Pacific Crest Family Medicine, Yakima</td>
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<tr>
<td>Mary Kay O’Neill MD, MBA</td>
<td>Partner</td>
<td>Mercer</td>
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<tr>
<td>John Robinson MD, SM</td>
<td>Chief Medical Officer</td>
<td>First Choice Health</td>
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<tr>
<td>Terry Rogers MD (Vice Chair)</td>
<td>Chief Executive Officer</td>
<td>Foundation for Health Care Quality</td>
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<tr>
<td>Jeanne Rupert DO, PhD</td>
<td>Medical Director, Community Health Services</td>
<td>Public Health – Seattle and King County</td>
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<tr>
<td>Kerry Schaefer</td>
<td>Strategic Planner for Employee Health</td>
<td>King County</td>
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<tr>
<td>Bruce Smith MD</td>
<td>Medical Director</td>
<td>Regence Blue Shield</td>
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<tr>
<td>Lani Spencer RN, MHA</td>
<td>Vice President, Health Care Management Services</td>
<td>Amerigroup</td>
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<tr>
<td>Hugh Straley MD (Chair)</td>
<td>Retired</td>
<td>Medical Director, Group Health Cooperative; President, Group Health Physicians</td>
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<tr>
<td>Carol Wagner RN, MBA</td>
<td>Senior Vice President for Patient Safety</td>
<td>The Washington State Hospital Association</td>
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<tr>
<td>Shawn West MD</td>
<td>Family Physician</td>
<td>Edmonds Family Medicine</td>
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Appendix B: Accountable Payment Models Bariatric Surgery Workgroup Members

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<tr>
<td>David Arterburn, MD, MPH</td>
<td>Physician, Internal Medicine</td>
<td>Group Health Cooperative</td>
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<td>Group Health Research</td>
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<td></td>
<td>Institute Senior Investigator</td>
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<tr>
<td>Sharon Eloranta, MD</td>
<td>Medical Director, Quality and Safety Initiatives</td>
<td>Qualis Health</td>
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<td>Kristin Helton, PhD</td>
<td>Consumer</td>
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<tr>
<td>Jeff Hooper, MD</td>
<td>Medical Director, Weight Loss Program</td>
<td>MultiCare Health System</td>
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<tr>
<td>Dan Kent, MD</td>
<td>Chief Medical Officer</td>
<td>United Health Care</td>
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<tr>
<td>Saurabh Khandelwal, MD</td>
<td>Bariatric Surgeon</td>
<td>University of Washington</td>
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<tr>
<td>Robert Mecklenburg, MD (Co-Chair)</td>
<td>Medical Director, Center for Health Care Solutions</td>
<td>Virginia Mason Medical Center</td>
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<tr>
<td>Robert Michaelson, MD, PhD, FACS, FASMBS</td>
<td>President</td>
<td>Washington State Chapter, American Society for Metabolic and Bariatric Surgery</td>
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<tr>
<td>Thien Nguyen, MD</td>
<td>Bariatric Program Medical Director</td>
<td>Overlake Medical Center</td>
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<td>Tom Richards</td>
<td>Consumer</td>
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<tr>
<td>Kerry Schaefer (Co-Chair)</td>
<td>Strategic Planner for Employee Health</td>
<td>King County</td>
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<tr>
<td>Jonathan Stoehr, MD / Jeff Hunter, MD</td>
<td>Endocrinologist/ Bariatric Surgeon</td>
<td>Virginia Mason Medical Center</td>
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<tr>
<td>Brian Sung, MD</td>
<td>Bariatric Surgery Director</td>
<td>Swedish Medical Center</td>
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<td>Tina Turner</td>
<td>Senior Internal Consultant</td>
<td>Premera Blue Cross</td>
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<tr>
<td>Richard Thirlby, MD</td>
<td>Medical Director</td>
<td>Surgical Care and Outcomes Assessment Program (SCOAP)</td>
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### Appendix C: Detailed Quality Standards

Please note that three of the quality measures refer to specific results or scores and therefore have no numerator or denominator.

<table>
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<th>Numerator</th>
<th>Denominator</th>
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<td><strong>1: Standards for appropriateness</strong></td>
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<td>making decision aids pre-operatively</td>
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<td>activities (Question Global 6) on the PROMIS-10 survey</td>
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<td><strong>2: Standards for evidence-based surgery</strong></td>
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<td>a Number of patients with bariatric surgery receiving multimodal</td>
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<td>anesthesia in the peri-operative period</td>
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<td>reduce risk of venous thromboembolism and pulmonary embolism in the</td>
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<tr>
<td>peri-operative period</td>
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<tr>
<td>c Number of patients with bariatric surgery receiving treatment to</td>
<td>Total number of patients with bariatric surgery</td>
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<tr>
<td>reduce blood loss in the peri-operative period</td>
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<tr>
<td>d Number of patients with bariatric surgery receiving treatment to</td>
<td>Total number of patients with bariatric surgery</td>
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<tr>
<td>reduce infection such as administration of prophylactic antibiotics in</td>
<td></td>
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<tr>
<td>the peri-operative period</td>
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<tr>
<td>e Number of patients with bariatric surgery receiving treatment to</td>
<td>Total number of patients with bariatric surgery</td>
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<tr>
<td>maintain optimal blood sugar control in the peri-operative period</td>
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<tr>
<td><strong>3: Standards for ensuring rapid and durable return to function</strong></td>
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<tr>
<td>a Number of patients with bariatric surgery for which there are</td>
<td>Total number of patients with bariatric surgery</td>
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<tr>
<td>documented patient-reported measures of disability and quality of life</td>
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<tr>
<td>12, 24, and 36 months following surgery (the same measures should be</td>
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<tr>
<td>used as in standard 1b)</td>
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<tr>
<td>b Results of measures from 2c, specifically including responses to the</td>
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<tr>
<td>questions identified in standard 1c</td>
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<tr>
<td>c Number of patients with bariatric surgery for which there are</td>
<td>Total number of patients with bariatric surgery</td>
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<tr>
<td>documented weight and BMI measures at baseline (pre-operative) 12, 24,</td>
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<tr>
<td>and 36 months</td>
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<tr>
<td>d Population mean weight and BMI for those who have a measure at</td>
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<tr>
<td>baseline 12, 24, and 36 months</td>
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</table>
### 4: Standards for the patient care experience

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a</td>
<td>Number of bariatric patients surveyed using HCAHPS</td>
<td>Total number of patients with bariatric surgery</td>
</tr>
<tr>
<td>b</td>
<td>Results of measures from 4a, specifically including responses to Q6 and Q22 of HCAHPS</td>
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</tbody>
</table>

### 5: Standards for patient safety and affordability

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a</td>
<td>Number of patients with bariatric surgery readmitted to the hospital within 30 days of discharge, all causes</td>
<td>Total number of patients with bariatric surgery</td>
</tr>
<tr>
<td>b</td>
<td>Number of patients with bariatric surgery readmitted to the hospital within 30 days of discharge for any of the nine complications and intervals included under the terms of the warranty</td>
<td>Total number of patients with bariatric surgery</td>
</tr>
<tr>
<td>c</td>
<td>Number of patients with bariatric surgery who died during hospital stay</td>
<td>Total number of patients with bariatric surgery</td>
</tr>
</tbody>
</table>