

Washington State Health Care Authority

Report to the Legislature

Dr. Robert Bree Collaborative Annual Report

Engrossed Substitute House Bill 1311
Section 3, Chapter 313, Laws of 2011

November 15, 2015

Washington State Health Care Authority
Office of the Chief Medical Officer
PO Box 45502
Olympia, WA. 98504-5502
(360) 725-1612
Fax: (360) 586-9551

Table of Contents

Executive Summary..... 1

Background..... 2

 Overview of ESHB 1311.....2

 Bree Collaborative Formation.....4

Summary of Recent Work..... 5

 Implementation 6

 Accountable Payment Models: Coronary Artery Bypass Surgery..... 8

 Prostate Cancer Screening..... 9

 Oncology Care..... 10

Summary of Work in the First Four Years 11

 Obstetric Care 12

 Cardiology 13

 Accountable Payment Models: Elective Total Knee and Total Hip Replacement 14

 Accountable Payment Models: Elective Lumbar Fusion..... 15

 Low Back Pain and Spine Surgery..... 16

 Potentially Avoidable Hospital Readmissions 18

 End-of-Life Care 19

 Addiction and Dependence Treatment..... 20

Looking to Forward to Year Five..... 21

References 22

Appendices:

- Appendix A: Bree Collaborative Background
- Appendix B: Bree Collaborative Members
- Appendix C: Steering Committee Members
- Appendix D: Workgroup Members

Executive Summary

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

This annual report is submitted by the Health Care Authority (HCA) on behalf of the Dr. Robert Bree Collaborative (Collaborative) to the Washington State Legislature as directed in Engrossed Substitute House Bill 1311 (ESHB 1311), Section 3, and enacted as chapter 313, Laws of 2011.

HCA is the sponsoring agency of the Collaborative, a public/private consortium created to give health care stakeholders the opportunity to improve health care quality, patient outcomes, and affordability in Washington State through recommendations regarding specific health care services. This is the fourth annual report submitted by the HCA on behalf of the Collaborative and describes the achievements of the Collaborative from November 2014 through October 2015.

ESHB 1311, Section 3 calls for the Collaborative to:

“report to the administrator of the authority regarding the health services areas it has chosen and strategies proposed. The administrator shall review the strategies recommended in the report, giving strong consideration to the direction provided in section 1, chapter 313, Laws of 2011 and this section. The administrator’s review shall describe the outcomes of the review and any decisions related to adoption of the recommended strategies by state purchased health care programs. Following the administrator’s review, the collaborative shall report to the legislature and the governor regarding chosen health services, proposed strategies, the results of the administrator’s review, and available information related to the impact of strategies adopted in the previous three years on the cost and quality of care provided in Washington state. The initial report must be submitted by November 15, 2011, with annual reports thereafter.”

Since its formation in August 2011, the Collaborative has successfully pursued its mission to provide a mechanism through which public and private health care stakeholders can work together to improve health care quality, patient outcomes, and affordability in Washington State.

Year four accomplishments included supporting **four active workgroups**, drafting and adopting **three sets of recommendations**, and receiving approval from the Health Care Authority on three sets of recommendations. Specific accomplishments include:

- Developing an evidence-based, community-supported bundled payment model and warranty for coronary artery bypass graft surgery.
- Developing recommendations to standardize and align prostate cancer screening with available evidence.
- Developing recommendations to decrease harms within oncology care and increase access to palliative care.
- Developing recommendations to increase screening, brief intervention, brief treatment, and referral to treatment for alcohol and substance abuse in primary care and inpatient settings.
- Launching a new blog to better communicate with interested stakeholders and members of the public.
- Working with the State of Washington and other stakeholders to encourage adoption of Bree Collaborative recommendations across our diverse communities.

Background

The American health care system continues to fall short on basic dimensions of quality, outcomes, cost, and equity. A substantial portion of health care expenditure is wasted, up to \$992 billion per year, and results in little improvement to patient health outcomes or quality of care.^{1,2} Excess cost in Medicare and Medicaid make up about one third of this amount.³ Substantial variation in practice patterns or high utilization trends of specific health care services can indicate poor quality and potential waste in the health care system.

Governor Inslee, the Legislature, and the people of Washington State expect and deserve a high-quality, affordable health care system. The Governor's Office and the Legislature have done extensive work over the past decade to achieve these goals, including the creation of the Washington State Quality Forum, the Health Technology Assessment program, the Prescription Drug Program, the State Advanced Imaging Management (AIM) project, and the Dr. Robert Bree Collaborative.

The Collaborative is structured after the work of the AIM project and named in memory of Dr. Robert Bree. Dr. Bree was a pioneer in the imaging field and a key member of the AIM project working to reduce inappropriate use of advanced imaging (e.g., CT, PET, MRI scans) in Washington State.

Our Collaborative's work is also a key part of the [Plan for a Healthier Washington](#), providing evidence-based standards of care and purchasing guidelines for high-variation, high-cost health care services. The four-year grant from the Center for Medicare and Medicaid Innovation will help spread the improvements and strategies developed by the Collaborative, increase health care transparency, and support the Collaborative's continued development of high-quality recommendations.

Overview of ESHB 1311

The Washington State Legislature established the Collaborative in 2011 to provide a mechanism for public health care purchasers for Washington State, private health care purchasers (employers and union trusts), health plans, physicians and other health care providers, hospitals, and quality improvement organizations to work together to identify and recommend evidence-based strategies to improve health care quality, outcomes, and affordability. ESHB 1311 amends RCW 70.250.010 (Advanced Diagnostic Imaging Workgroup definition) and 70.250.030 (Implementation of Evidence-based Practice Guidelines or Protocols); adds a new section to chapter 70.250 RCW; creates a new section; and repeals RCW 70.250.020.

All Bree Collaborative meetings are open to the public and follow the Open Public Meetings Act. Senate Bill 5144, Chapter 21, Laws of 2015, amended RCW 70.250.050 and clarified the original legislation to add "*All meetings of the collaborative, including those of a subcommittee, are subject to the open public meetings act.*"

The Collaborative is charged with annually identifying up to three areas of health care services for which substantial variation exists in practice patterns and/or increases in care utilization are not accompanied by better care outcomes. Both of these trends may be indicators of poor quality and potential waste in the health care system.

See **Appendix A** for more detail about the Collaborative's background.

The Collaborative consists of the following Governor-appointed expert stakeholders:

- Two representatives of health carriers or third party administrators
- One representative of a health maintenance organization
- One representative of a national health carrier
- Two physicians representing large multispecialty clinics with 50 or more physicians, one of which is a primary care provider
- Two physicians representing clinics with fewer than 50 physicians, one of which is a primary care provider
- One osteopathic physician
- Two physicians representing the largest hospital-based physician groups in the state
- Three representatives of hospital systems, at least one of whom is responsible for quality
- Three representatives of self-funded purchasers
- Two representatives of state-purchased health care programs
- One representative of the Washington Health Alliance (previously the Puget Sound Health Alliance)

See **Appendix B** for a current list of Bree Collaborative members.

Bree Collaborative Formation

The Collaborative has had great success working with many Washington State organizations to solicit nominations of experienced and engaged community leaders as Collaborative members. In August 2011, the Washington State Hospital Association (WSHA), the Washington State Medical Association (WSMA), the Association of Washington Healthcare Plans (AWHP), large employers, and other community stakeholders nominated health care experts who served as the Collaborative's first 23 members after appointment by the Governor.

Steve Hill served as the Collaborative's first Chair. Mr. Hill is the former director of the Washington State Department of Retirement Systems and former director of the Washington State Health Care Authority. In November 2014 Mr. Hill announced his retirement as Chair of the Collaborative and in March 2015 Governor Inslee appointed Dr. Hugh Straley as chair. Dr. Straley is board certified in both internal medicine and medical oncology and served in many leadership roles at Group Health Cooperative. He retired as medical director and president of Group Health Physicians in 2008 and served as chief medical officer for Soundpath Health and as interim medical director and consultant to Amerigroup Washington. Dr. Straley brings a depth of health care leadership experience and medical expertise to the position as well as skill in bringing diverse stakeholders to a consensus.

A steering committee was created and appointed by the Chair to provide strategic advice and guidance. See **Appendix C** for a current list of steering committee members.

The Collaborative has been housed in the Foundation for Health Care Quality since its inception, providing project management and hiring appropriate staff. Funding has been secured through June 2016 as part of the State's budget process.

The Collaborative has held twenty-four meetings since late 2011. Meetings are held on a bi-monthly basis with future meetings scheduled for November 18, 2015 and into 2016 on the third Wednesdays of the month: January 20th, March 16th, May 18th, July 20th, September 21st, and November 16th. Meeting agendas and materials for all Collaborative meetings are posted in advance on the Collaborative's website: www.breecollaborative.org. All Bree Collaborative meetings are open to the public and follow the Open Public Meetings Act.

At the November 2012 meeting, the Collaborative adopted bylaws to set policies and procedures governing the Collaborative beyond the mandates established by the legislation (ESHB 1311). Bylaws were revised at the September 2014 meeting.

Current bylaws are available here: www.breecollaborative.org/wp-content/uploads/bylaws-final.pdf

Summary of Recent Work

November 2014 to October 2015 has seen both dedication to developing of new evidence-based recommendations and great work toward implementation of existing recommendations, predominantly through the Health Care Authority contracting. The Addiction and Dependence Treatment workgroup completed their recommendations (profiled in the previous section), and workgroups were formed to develop recommendations around Accountable Payment Models: Coronary Artery Bypass Graft Surgery, Prostate Cancer Screening, and Oncology Care. Additionally, the Bree Collaborative approved the Agency Medical Directors Interagency Guideline on Prescribing Opioids for Pain.

The Collaborative:

- **Supported five active workgroups**
- **Adopted four sets of recommendations**
- **Received approval from the Health Care Authority for three recommendations.**

The Collaborative approved and sent **four** sets of recommendations to the Health Care Authority:

- **End-of-Life Care** (November 2014)
 - Available: www.breecollaborative.org/wp-content/uploads/EOL-Care-Final-Report.pdf
- **Addiction and Dependence Treatment** (January 2015)
 - Available: www.breecollaborative.org/wp-content/uploads/ADT-Final-Report.pdf
- **Agency Medical Directors Group Opioid Prescribing Guidelines** (July 2015)
 - Available: www.breecollaborative.org/wp-content/uploads/2015AMDGOpioidGuideline.pdf
- **Elective Coronary Artery Bypass Surgical Bundle and Warranty** (September 2015)
 - Available: www.breecollaborative.org/topic-areas/apm/

At the July meeting, Collaborative members selected fifteen new topics to investigate further as potential new topics for 2016. Topics were evaluated across 11 criteria and discussed at the September 2015 meeting. Members decided on psychotropic drug use in pediatric populations as a topic for the upcoming year and to further discuss two additional topics out of:

- Bariatric surgery bundled payment model
- Depression screening
- Diabetes care bundled payment model
- Health services coordination
- Hysterectomy
- Mental health integration

The Collaborative will continue to select new topic areas on an annual basis.

Implementation

Bree Collaborative recommendations have been championed by the Health Care Authority and supported and spread by Collaborative member organizations and other community organizations. As part of the Health Care Authority's Healthier Washington emphasis on moving health care payment from volume to value and to deliver more coordinated, whole-person care, two Accountable Care Networks, the Puget Sound High Value Network led by Virginia Mason Medical Center and the University of Washington Accountable Care Network have been established and will be offered to public employees starting November 2015 to begin offering services in January 2016. The Networks have been directed to develop quality improvement plans to implement Collaborative recommendations from obstetrics care to improvements in advance care planning.

Implementation of Collaborative recommendations has been a focus of the group since October 2013. The Collaborative formed an Implementation Team to help design and facilitate strategies encouraging adoption of the recommendations. Dr. Dan Lessler, HCA Chief Medical Officer, serves as Implementation Team chair. The Implementation Team's approach begins with presentation from a topic expert, development and convening of a sub-group if necessary, development of a comprehensive change strategy, and implementation of that change strategy. As a "first mover" of implementing Collaborative recommendations, the Health Care Authority has emphasized focus areas parallel to those of the Implementation Team:

- Provider payment redesign
- Care delivery organization
- Benefit design
- Patient engagement
- Transparency and performance indicators

Collaborative implementation activities have focused on education, consensus-building, outreach, and engagement.

- Education of stakeholders on content within the bundled payment models and methods of adopting the elective total knee and total hip bundled payment methodologies and warranties.
- Participation in multiple Healthier Washington meetings and workgroups (e.g., patient decision aid certification).
- Presenting at multiple conferences and stakeholder groups to educate about the Bree Collaborative and specific, relevant recommendations (e.g., State of Reform, Surgical Care and Outcomes Assessment Program annual meeting, Home Care Association of Washington).
- Increased Bree Collaborative visibility broadly through upkeep of the website, www.breecollaborative.org, maintenance of a blog highlighting relevant Bree Collaborative topics or implementation strategies, and using social media to engage the community.

Many dedicated community organizations have also contributed to the implementation of Collaborative recommendations:

- *Obstetrics*: Both the Obstetrics Clinical Outcomes Assessment Program (OB-COAP) and the Washington State Hospital Association's Safe Deliveries Roadmap have worked to align existing program expectations and data collection with Collaborative Recommendations for member hospitals.
- *Cardiology*: The Clinical Outcomes Assessment Program (COAP) continues to monitor insufficient information around percutaneous coronary intervention and has been a

keystone member in the development of a robust, community-based Bundle and Warranty for Elective Coronary Artery Bypass Graft Surgery.

- *Bundled Payments:* The clinical care pathways outlined in the Elective Total Knee and Total Hip Replacement and Elective Lumbar Fusion Bundle have been incorporated into the Accountable Care Networks and have generated much community interest. Organizations outside of the two Networks are developing capacity to offer bundled payment aligned with Collaborative recommendations for these two services.
- *Low Back Pain:* The Spokane-based Northwest Healthcare Purchasers Coalition has championed the Collaborative's low back pain recommendations, engaging stakeholders and developing a comprehensive measurement strategy.
- *Spine Care:* The Spine Surgical Care and Outcomes Assessment Program (SCOAP) has had six new member hospitals join and has made length of stay, radiologic verification of surgical level, and smoking use transparently available on their website as of August 2014.
- *Hospital Readmissions:* The Washington State Hospital Association (WSHA) continues to monitor the impact of the Collaborative's recommendations to gather data on whether patient discharge information was provided to the primary care provider and whether hospital staff documented a follow-up phone call after discharge. Along with Qualis Health, WSHA works with community organizations to form collaboratives focused on increasing care coordination to reduce hospital readmissions and other adverse outcomes.
- *End-of-Life Care:* WSHA and the Washington State Medical Association have developed a statewide strategy to spread advance care planning at a health system and community-level aligned with the Collaborative's recommendations. The two associations have created Honoring Choices®: Pacific Northwest to promote patient-centered end-of-life care conversations. Many other organizations have promoted advance care planning aligned with Collaborative recommendations, increasing quality of care in our State.
- *Addiction:* The Agency Medical Directors Group developed a comprehensive Interagency Guide for Prescribing Opioids for Pain that was subsequently adopted by Collaborative members. The Collaborative is continuing to meet with key stakeholders to develop an implementation strategy for these Guidelines and for the broader addiction screening guidelines.

Accountable Payment Models: Coronary Artery Bypass Surgery

Background

Coronary artery disease occurs due to plaque build-up on arterial walls and is the leading cause of death in the United States.⁴ This is often treated with coronary artery bypass graft surgery (CABG). CABG surgery has much variation in price, utilization, and in complication rates between providers and institutions.⁵ Bundled payments offer a mechanism to improve and standardize this care and have been shown to reduce cost along with improving patient outcomes.⁶

The current model of health care pays physicians and other providers for the number of services provided rather than quality of care. This can lead to poor patient outcomes and lack of necessary services such as care coordination and lack of information being shared between providers (e.g., surgical team and physical therapy).



Our Work

The Accountable Payment Models workgroup develops models to tie reimbursement for a surgery to an entire episode of care, including pre and post-operative care, with no additional payment for complications due to the original surgery. The workgroup reconvened from February 2015 to September 2015 to develop a bundled payment model and warranty for elective CABG using the previous two models on elective total knee and total hip replacement and elective lumbar fusion as a model. The intent of the CABG surgical bundle is to provide a community-based, evidence-informed standard for production, purchasing, and payment of health care based on quality.

The four-stage bundle extends beyond the surgical procedure itself and includes both comprehensive care prior to and rehabilitative care after the surgery. The first two stages focus on appropriateness of the surgery. The first stage documents the need for intervention and deploys non-surgical care, if appropriate. The second stage ensures that patients who do not improve with non-surgical care could safely undergo surgery, such as focusing on stopping smoking. The third stage describes elements of best-practice surgery and the fourth is aimed at the ultimate outcome, rapid return to function.

COAP, the Foundation for Health Care Quality program described in the Cardiology section previously, was instrumental in the development of a comprehensive set of quality measures to align with the four stages. All hospitals that perform CABG surgery in Washington State report data to COAP.

The CABG Bundle is available here: www.breecollaborative.org/wp-content/uploads/CABG-Bundle-Final-15-09.pdf

The CABG Warranty is available here: www.breecollaborative.org/wp-content/uploads/CABG-Warranty-Final-15-09.pdf

The supporting evidence table is available here: www.breecollaborative.org/wp-content/uploads/CABG-Evidence-Table-Final-15-09.pdf

The CABG Surgical Bundle and Warranty were adopted by the Collaborative in September 2015.

Prostate Cancer Screening

Background

Prostate cancer is the most common type of cancer diagnosed among men.⁷ Men have a lifetime risk of 14% with an average five year survival of 98.9%.⁸ The prostate specific antigen (PSA) test is commonly used to screen men for prostate cancer. However, evidence conflicts as to whether the PSA test when used for prostate cancer screening has been associated with reduction in prostate cancer mortality.^{9,10} The potential for overtreatment, treatment when no disease is present, is high.¹¹ The majority of harms from prostate cancer screening occur due to psychological consequences of a positive test, in those that do have a positive test, harms from biopsy, and in those that have a positive biopsy, harms from the treatment itself. Prostatectomy and radiation are common forms of treatment in the United States, resulting in serious complications (e.g., heart attack, stroke, impotence, urinary incontinence).¹²

Guidelines on using the PSA test for routine prostate cancer screening differ on whether health care providers should initiate a discussion about PSA testing with all men in an appropriate age range (e.g., 55- 69) and risk category or discuss screening only at the patient's request.^{13,14} Most guidelines recommend shared decision making prior to a PSA test. Despite these recommendations and those of others, use of a shared decision-making process is uncommon and variable and many men given the test are not informed of the potential harms, benefits, and scientific uncertainty.

Our Work

Variation in prostate cancer screening was identified by the Bree Collaborative as a priority area for improvement and the Collaborative elected to form a workgroup to address this issue. The workgroup has been meeting from March 2015 to present.

All men should be evaluated by their provider for family history and factors that may elevate the risk of prostate cancer (e.g., first or second degree relative with a prostate or breast cancer diagnosis, race). The Bree Collaborative recommends against routine screening with PSA testing for average risk men 70 years and older, under 55 years old, who have significant co-morbid conditions, or with a life expectancy less than 10 years. Primary care clinicians should review evidence regarding PSA testing for prostate cancer screening. The shared decision making process should be formalized and documented in the patient's medical record. Patient decision aids used in the shared decision-making process should be certified by Washington State when available.

For primary care clinicians, we recommend two possible pathways depending on the physician's interpretation of the evidence. Clinicians who believe there is overall benefit from screening with PSA testing should order this test for average risk men between 55-69 years old only after a formal and documented shared decision-making process. Clinicians who believe there is overall harm from screening with PSA testing may initiate testing of average-risk men aged 55-69 at the request of the patient after a formal and documented shared decision-making process. Only men who express a definite preference for screening after discussing the advantages, disadvantages, and scientific uncertainty should have screening with PSA testing.

The Prostate Cancer Screening Report and Recommendations was presented to the Bree Collaborative in September 2015 and approved for dissemination for public comment. Public comments will be accepted for approximately four weeks in September-October and the workgroup will reconvene to discuss comments and make necessary changes. The draft recommendations are available here: www.breecollaborative.org/wp-content/uploads/Prostate-Cancer-Recommendations-Draft-15-09.pdf

Oncology Care

Background

Cancer death rates have declined in the United States from 2002-2011, due in part to great advances in cancer prevention and treatment.¹⁵ However, cost of care has increased significantly, resulting in financial burden on patients and families. National surveys show significant financial impact on patients and families due to cancer treatment where of those surveyed 25% used up most or all of their savings.¹⁶ This rises to 46% among those who were not always insured. Approximately 3% of respondents declared bankruptcy and this rises to 6% among those who were not always insured. Cost and quality can also vary, indicating need for greater standardization and reduction in procedures that do not result in greater patient health.^{17,18}

Significant variation in diagnosis, treatment, and supportive care for patients promotes poor outcomes and excessive cost for patients and the health care system.¹⁹ The American Society of Clinical Oncology (ASCO) acknowledged this issue and in 2007 established a task force dedicated to investigating the cost and guidelines for improving quality of cancer care.²⁰ The task force urged oncologists to integrate cost considerations into treatment decision making, but acknowledged that oncologists are often not comfortable discussing cost of care and the lack of robust cost effectiveness data. In 2012, the American Society of Clinical Oncology and the American Board of Internal Medicine partnered as part of Choosing Wisely to identify five tests or procedures “whose necessity is not supported by high-level evidence” and developed guidelines including around therapeutic effectiveness and palliative care and use of advanced imaging for staging of low risk breast and prostate cancer.²¹

Our Work

The Bree Collaborative Oncology Care workgroup choose to develop recommendations and implementation strategies around two of the ASCO Choosing Wisely guidelines: advanced imaging for staging of low-risk breast and prostate cancer and palliative care. For prostate cancer, as part of Choosing Wisely, ASCO recommends: Do not use PET [positron emission tomography], CT [computed tomography] and radionuclide bone scans in the staging of early prostate cancer at low risk of spreading. We define local-stage low risk as less than T1c/T2a or T2 not otherwise-specified prostate cancer with Gleason scores ≤ 6 or prostate-specific antigen scores ≤ 10 at diagnosis. For breast cancer as part of Choosing Wisely, ASCO recommends: Do not use PET, CT, and radionuclide bone scans in the staging of early breast cancer that is at low risk of spreading. We define early stage low-risk as American Joint Committee on Cancer stage 0, I, II.

The workgroup wishes to align the Oncology Care recommendations with previous end-of-life care recommendations. As with other types of care, we believe that oncology care should be aligned with a patient’s individual goals and values. Patients should be appraised of the harms, benefits, evidence, and potential impact of chemotherapy and radiation at all stages in their illness trajectory. We encourage clinicians and care teams to regularly ask patients, their family members, and friends to discuss their goals of care and work with the care team to tailor care to patient goals. The workgroup is developing indicators of when to initiate palliative care alongside active anti-cancer therapy.

For both of these areas the workgroup is researching and developing barriers and methods of overcoming those barriers. The workgroup anticipates finalizing recommendations for presentation at the January 2016 meeting.

Summary of Work in the First Four Years

The engagement and dedication from our workgroup members has led to multiple high-quality and well-received sets of recommendations. We have developed recommendations to improve obstetric care, cardiology, bundled payment models for elective total knee and total hip replacement and elective lumbar fusion, spine surgery, low back pain management, potentially avoidable hospital readmissions, end-of-life care, and addiction and dependence screening. Topics are discussed in this order.

See **Appendix D** for a complete list of Collaborative workgroup members.

- Obstetric Care..... 12
- Cardiology..... 13
- Accountable Payment Models: Elective Total Knee and Total Hip Replacement..... 14
- Accountable Payment Models: Elective Lumbar Fusion 15
- Low Back Pain and Spine Surgery..... 16
- Potentially Avoidable Hospital Readmissions 18
- End-of-Life Care..... 19
- Addiction and Dependence Treatment 20

Obstetric Care

Background

When initially looking at health services needing comprehensive recommendations, the Collaborative found substantial variation in obstetric care practice patterns and services across providers and facilities in Washington State despite local and national quality improvement efforts. In 2012, the percent of deliveries performed between 37 and 39 weeks that were not medically necessary varied significantly across Washington hospitals, from zero to 18.5%.²²

Our Work

The Obstetrics Care workgroup met from December 2011 to July 2012. Workgroup members represented multiple groups including clinicians with expertise in obstetrics and gynecology and those representing various delivery systems in Washington State. The report identified three focus areas and goals for obstetric care improvement:

- **Elective deliveries.** Eliminate all non-medically necessary deliveries before the 39th week (those deliveries for which there is no appropriate documentation of medical necessity).
- **Elective inductions of labor.** Decrease elective inductions of labor between 39 and up to 41 weeks.
- **Primary Cesarean-sections.** Decrease unsupported variation among Washington hospitals in C-section rate of women who have never had a C-section.

The Collaborative adopted the Obstetrics Care Report and Recommendations in August 2012 with approval by the HCA director following in October 2012.

The Obstetrics Care Report and Recommendations is available here:

www.breecollaborative.org/wp-content/uploads/bree_ob_report_final_080212.pdf

Implementation work has focused on aligning incentives, education, and coordination across existing programs. Most notably, the HCA has implemented a non-payment policy for early elective deliveries. This advancement will build off of previous work to educate clinicians and health care stakeholders statewide and presentations given to Medicaid health plans and allow for lasting improvements in maternal and infant health. The Collaborative has also worked to align existing program expectations and data collection including with the Obstetrics Clinical Outcomes Assessment Program (OB-COAP) and the Washington State Hospital Association's Safe Deliveries Roadmap.

From quarter three of 2010 to quarter four of 2014 there has been a 93.4% reduction in early elective deliveries between 37 to 39 weeks, preventing 3,194 early deliveries and saving approximately \$9.5 million.²³ Additionally, from January to November 2014 our state has seen a 64% reduction in elective inductions with an unfavorable cervix in 39 to 41 weeks of pregnancy.

Hospitals that are participating in OB COAP are able to demonstrate a reduction in a women's first cesarean section for single babies (as compared to twins) from 21.4% in 2012 to 18.4% in 2014. Additionally, the number of women who have not had a cesarean section who are allowed to labor yet ended up having a caesarian section, the women to which the Bree labor management guidelines apply, has decreased from 14.9% in 2012 to 12.9% in 2014.

Cardiology

Background

Percutaneous coronary intervention (PCI), also known as angioplasty, is a non-surgical procedure used to treat excess plaque in the arteries. While the majority of these procedures are done appropriately and successfully as needed for emergency cardiovascular conditions, a significant number are done electively and may not benefit patients in the same way. Data from the Clinical Outcomes Assessment Program (COAP), a program also housed within the Foundation for Health Care Quality, shows wide variation in the appropriateness of PCI procedures as defined by national guidelines. However, availability and transparency of appropriateness data had been a major issue across Washington State hospitals.

Our Work

In February 2012, the Collaborative asked the COAP management committee to publicly post hospitals' insufficient information reports and appropriateness of PCI results rather than supplying this data only to individual hospitals. The Cardiology Report and Recommendations, developed in partnership with the COAP management committee, recommended a four-step process that provided time for hospitals to improve practices before data became publicly available:

- **Step 1:** Appropriate use insufficient information report with 2012 data by hospital posted on the COAP members-only section of the COAP website.
 - *Completed August 2012.*
- **Step 2:** COAP provides feedback and tools to hospitals to reduce insufficient information in data.
 - *Completed August to December 2012.*
- **Step 3:** Updated appropriate use insufficient information report based on 4th Quarter 2012 data only, by hospital, given to Bree Collaborative and hospitals to review. Hospitals will have the option not to be identified.
 - *Completed May 2013.*
- **Step 4:** After hospitals employed methods for improvement, an updated report based on 4th Quarter 2012 data only was posted on the public section of the COAP website. The Collaborative also asked the Washington State Alliance to post COAP data on its Community Checkup website, which compares data on health care services across the State. Hospitals had the option to not be identified.
 - *Completed June 2013.*

The Cardiology Report and Recommendations was adopted by the Collaborative in January 2013 and approved by the HCA Director in January 2014.

The Cardiology Report and Recommendations is available here:

www.breecollaborative.org/wp-content/uploads/bree_bc_cardiology_final.pdf

COAP continues to monitor rates of insufficient information and PCI appropriateness to assess the impact of public disclosure and has partnered with the Collaborative in other areas as well.

The average rate of *insufficient information to determine appropriate use of non-acute PCI* has reduced steadily from 29% in 2011 to 22% in 2014.

Accountable Payment Models: Elective Total Knee and Total Hip Replacement

Background

Total knee and total hip replacements are frequent surgical procedures, but also have high facility-to-facility variability in how surgery is performed. This variability can lead to variation in readmission rates, quality, cost, and patient health.

Hospital readmission rates for total knee and total hip replacements are posted on the Bree Collaborative's website here: www.breecollaborative.org/wp-content/uploads/bree_summary_CHARS_Analysis.pdf

Our Work

The Accountable Payment Models workgroup develops models to tie reimbursement for a surgery to an entire episode of care, including pre and post-operative care, with no additional payment for complications due to the original surgery. The workgroup developed both a warranty and a bundled payment model for elective total knee and total hip replacement. The warranty defines complications and timeframes after surgery in which complications can be attributed to the original surgery. The purpose is to track clinical and financial accountability for additional care needed to diagnose, manage, and resolve complications.

The surgical bundle defines expected components of pre-operative, intra-operative, and post-operative care needed for successful total knee and total hip surgery. Quality standards are included that correspond to the surgical components and are required to be reported to the purchaser and health plans. The bundle is presented in four stages as follows:

- Disability due to osteoarthritis despite a trial of conservative therapy
- Making sure the patient is fit for surgery and would benefit from the surgical procedure (e.g., stopping smoking)
- Repair of the osteoarthritic joint
- Post-operative care and return to function

The TKR/THR Warranty Model is available here: www.breecollaborative.org/wp-content/uploads/bree_warranty_tkr_thr.pdf

The TKR/THR Surgical Bundle is available here: www.breecollaborative.org/wp-content/uploads/tkrthr_bundle.pdf

The supporting evidence table is available here: www.breecollaborative.org/wp-content/uploads/tkr_thr_evidence.xls

The warranty was formally adopted by the Bree Collaborative at the July 2013 meeting and the bundle adopted at the November 2013 meeting. Both documents were approved by the Health Care Authority Director in April 2014.

The elective total knee and total hip replacement bundle and warranty has been incorporated into the Health Care Authority's Accountable Care Program contracts.

Accountable Payment Models: Elective Lumbar Fusion

Background

While there is clinical agreement that lumbar fusion can be appropriate in cases of spinal instability from major trauma or congenital abnormalities, the surgery has the highest regional variation of any major surgery in the United States, with a 20-fold difference between geographic regions.²⁴ Lumbar fusion also has the highest inpatient cost for public employees with Uniform Medical Plan at an average cost of \$80,000-\$120,000. Additionally, lumbar fusion is associated with high rates of complications, high cost to patients, and some studies show the surgery may not result in better health than non-surgical alternatives.^{25,26}

Our Work

The Accountable Payment Models workgroup re-formed with new membership and met from January 2014 to August 2014 to develop surgical standards and payment methodologies for elective lumbar fusion. The workgroup adapted the previously developed elective total knee and total hip replacement model. As in the previous case, to improve safety for patients, performance for providers, and affordability for purchasers, the workgroup proposed a four-stage model requiring:

- Documentation of disability despite explicit non-surgical care
- Meeting fitness requirements for patients prior to surgery
- Adherence to standards for best practice surgery
- Implementation of a structured plan to rapidly return patients to function

The primary intent of the warranty is to set a high priority on patient safety while balancing financial gain with accountability for providers and institutions performing lumbar fusion surgery.

The Lumbar Fusion Bundle is available here: www.breecollaborative.org/wp-content/uploads/Lumbar-Fusion-Bundle-Final.pdf

The Lumbar Fusion Warranty is available here: www.breecollaborative.org/wp-content/uploads/Lumbar-Fusion-Warranty-Final.pdf

The supporting evidence table is available here: www.breecollaborative.org/wp-content/uploads/Lumbar-Fusion-Evidence-Table-Final.pdf

The Lumbar Fusion Surgical Bundle and Warranty were adopted by the Collaborative in September 2014 meeting and approved by the Health Care Authority Director in October 2014.

These models are an attempt to align purchasing and payment with best practices to lead to safer care, better outcomes, and lower costs. The final products will serve as a guide for quality- and value-based purchasing for both public and private sectors. The Bree Collaborative looks forward to monitoring adoption of these two models across the state and has seen increased interest in using these models to improve surgical care and the appropriateness of care.

The elective lumbar fusion surgical bundle and warranty has been incorporated into the Health Care Authority's Accountable Care Program contracts.

Low Back Pain and Spine Surgery

Background

Low back pain is a common and costly condition with significant variation in diagnosis and treatment. Frequent use of costly treatments has not been shown to improve patient symptoms and effective management can be difficult as the majority of patients have no identifiable anatomic or physiologic cause.^{27,28,29} For most patients with acute low back pain, symptoms improve with conservative treatment such as physical activity but some patients are at higher risk of developing chronic pain. If patients do develop chronic pain, more intense treatment options become necessary such as lumbar fusion surgery, described on the previous page.

Our Work

The Collaborative chose a two-pronged strategy to address both acute and chronic low back pain:

- Form a workgroup to develop recommendations for preventing the transition of acute pain to chronic pain.
- Recommend that all hospitals participate in Spine SCOAP, a clinician-led quality improvement collaborative for hospitals in Washington State and a program of the Foundation for Health Care Quality, to improve surgical outcomes for spine surgery.

In March 2013, the Collaborative submitted recommendations to the Health Care Authority *“strongly recommend[ing] participation in Spine SCOAP as a community standard, starting with hospitals performing spine surgery with the following conditions:*

- *Results are unblinded.*
- *Results are available by group.*
- *Establish a clear and aggressive timeline.*
- *Recognize that more information is needed about options for tying payment to participation.”*

Spine SCOAP has seen six new hospitals join. Starting in August 2014 length of stay, radiologic verification of surgical level, and smoking use have been made transparently available on the Spine SCOAP website.

The Low Back Pain workgroup met from November 2012 to October 2013. The Collaborative adopted the recommendations in November 2013 and the Health Care Authority approved the recommendations in January 2014. Focus areas include:

- Increase appropriate evaluation and management of patients with new onset and persistent acute low back pain and/or nonspecific low back pain not associated with major trauma (no red flags) in primary care
- Increase early identification and management of patients that present with low back pain not associated with major trauma (no red flags) but have psychosocial factors (yellow flags) that place them at a high risk for developing chronic low back pain
- Increase awareness of low back pain management among individual patients and the general public

The Low Back Pain Report and Recommendations is available here:

www.breecollaborative.org/wp-content/uploads/spine_lbp.pdf

The Bree Collaborative has been involved in the Spokane-area efforts of the Northwest Healthcare Purchasers Coalition, a group that has championed the low back pain recommendations. The Coalition's goals draw from our recommendations: to *“reduce the burden of back pain and the costs for its care at a community level; find common ground between competing healthcare delivery systems and promote consistency in care; and get employers (including the small employers) engaged in community health initiatives to increase the likelihood of success.”* The Coalition is developing a robust measurement process of practice-level report cards produced by the Washington Health Alliance and population-level financial metrics. The new billing opportunity aligned with our recommendations to use evidence-based back pain assessment tools will be promoted through a provider training program.

Potentially Avoidable Hospital Readmissions

Background

Avoidable hospital readmissions are common and costly events, negatively impacting patient health and wellbeing. The estimated national cost for unplanned Medicare hospital readmissions was \$17.4 billion in 2004.³⁰ While not all hospital readmissions are preventable, reducing readmission rates through greater community collaboration among diverse stakeholders, implementation of standard processes within the hospital, and better communication represents a great opportunity to improve health care quality, patient outcomes, and the affordability of health care in Washington State.

Our Work

The Potentially Avoidable Readmissions workgroup met from May to September 2012 and made available 30-day, all-cause readmission rates by hospital.

The 30-day, all-cause rehospitalization rates at Washington State hospitals from 2011 CHARS data is available here: www.breecollaborative.org/wp-content/uploads/combined-chars-report-13-1114.pdf

The workgroup re-formed from April to June 2014 to develop recommendations. The Potentially Avoidable Hospital Readmissions Report and Recommendations was adopted by the Bree Collaborative in July 2014 and approved by the Health Care Authority Director in August 2014.

- I. **Forming Collaboratives:** Hospital readmissions collaboratives recognized by:
 - a. Formally writing a charter including participating organizations, shared expectations for best practices, and measures of success.
 - b. Demonstrating evidence of participation in recurring meetings.
 - c. Recognition by WSHA or Qualis Health as an active member. WSHA or Qualis Health will recognize collaboratives for a period of one year after which time the organizations will reevaluate their roles.
- II. **Toolkit:** Support for the tools and techniques to reduce readmissions in Washington State, especially the WSHA's *Care Transitions Toolkit, second edition*, the work done by Qualis Health, and the work done by the Washington Health Alliance. The Bree Collaborative recognizes the consensus work based on best available evidence that went into the *Care Transitions Toolkit* and recommends that hospitals adopt the *Toolkit* in its entirety. It is understood that some variation may be appropriate based on clinically compelling reasons.
- III. **Measurement:** Two hospital-specific measures aligned with the Medical Quality Incentive Program measured by WSHA. Percent of inpatients with diagnosis of acute myocardial infarction, heart failure, community acquired pneumonia, chronic obstructive pulmonary disease, and stroke (consistent with the CMS definition) with:
 - a. A patient discharge information summary provided to the primary care provider (PCP) or aftercare provider within three business days from the day of discharge.
 - b. A documented follow-up phone call with the patient and/or family within three business days from the day of discharge.

The Potentially Avoidable Hospital Readmissions Report and Recommendations is available here: www.breecollaborative.org/wp-content/uploads/Readmissions-Report-FINAL-14-0730.pdf

Data and impact continued to be monitored by the Washington State Hospital Association. Collaboratives continue to be formed and are managed by the Washington State Hospital Association and Qualis Health.

End-of-Life Care

Background

End-of-life care in the United States and within Washington State is strikingly variable and often misaligned with patient preference.^{31,32} Although the majority of patients report wanting to spend the last part of their lives at home, in reality much of this time is spent in a hospital or nursing home.³³ Family members of patients at the end of their life also report care not aligning with patient wishes, in many cases due to unwanted aggressive treatment, and significant financial impact of in-hospital deaths.^{34,35} Additionally, surviving family members have been shown to have symptoms of post-traumatic stress disorder after the death of a loved one in an intensive care unit.³⁶ Care that is at odds with patient and family wishes negatively impacts quality of patients' life, increases cost to families, and seriously overburdens patients and their families. Appropriately timed advance care planning conversations between providers and patients and between patients and their families and/or caregivers and expressing end-of-life wishes in writing with advance directives and Physician Orders for Life Sustaining Treatment (POLST) if appropriate, can increase patient confidence, sense of dignity, and the probability that patient wishes are honored at the time of death.^{37,38}

Our Work

The Bree Collaborative's goal is that all Washingtonians are informed about their end-of-life care options, communicate their preferences in actionable terms, and receive end-of-life care that is aligned with their and their family members' goals and values. The workgroup met from January 2014 to November 2014 and developed the following five focus areas corresponding to how an individual would ideally experience advance care planning for the end of life. The Report and Recommendations was adopted by the Collaborative at the November 2014 meeting.

- Increase awareness of advance care planning, advance directives, and POLST in Washington State
- Increase the number of people who participate in advance care planning in the clinical and community settings
- Increase the number of people who record their wishes and goals for end-of-life care using documents that: accurately represent their values; are easily understandable by all readers including family members, friends, and health care providers; and can be acted upon in the health care setting
- Increase the accessibility of completed advance directives and POLST for health systems and providers
- Increase the likelihood that a patient's end-of-life care choices are honored

The final End-of-Life Care Report and Recommendations is available here:

www.breecollaborative.org/wp-content/uploads/EOL-Care-Final-Report.pdf

The Bree Collaborative has been a key part of the efforts of the Washington State Hospital Association and Washington State Medical Association to develop a statewide strategy to spread advance care planning. The organizations have partnered with the nationally-recognized Respecting Choices® program to create Honoring Choices®: Pacific Northwest, developing a website to “*promote conversations with family, loved ones, and physicians about what is important at the end of life*” and an advance care planning program to “*prepare health care organizations and communities to discuss, record, and honor individual's choices about end of life care.*”³⁹ Recommendations for advance care planning in primary and hospital care have also been incorporated into the Health Care Authority's Accountable Care Program contracting.

Addiction and Dependence Treatment

Background

Alcohol and drug abuse disorders lead to many debilitating health, economic, interpersonal, and social consequences with potentially long-lasting effects if left untreated. Excessive use of alcohol is the fourth leading cause of preventable death in the United States and is strongly associated with higher risk of: multiple types of cancers; hypertension; liver cirrhosis; chronic pancreatitis; injuries; and violence.^{40,41} In Washington State, alcohol use leads to 11.1% of deaths of working age adults, higher than the national average.⁴² Medicaid beneficiaries with a substance use disorder had significantly higher physical health expenditures and hospital admissions.⁴³ Nationally, the economic cost of illicit drug use is more than \$193 billion including the impact on crime (e.g., criminal justice system, crime victims), health (e.g., hospital and emergency room costs), and productivity (e.g., labor participation, premature mortality).⁴⁴ High variation and lack of standardized screening protocols for alcohol and drug use within Washington State show opportunities for improvement.

Our Work

The workgroup met from April 2014 to January 2015 and developed five focus areas to increase appropriate screening, brief intervention, brief treatment, and facilitated referral to treatment in primary care clinics and emergency room settings to address the underutilization of drug and alcohol screening and treatment within Washington State. Each focus area is supported by multi-stakeholder recommendations. The Addiction and Dependence Treatment Report and Recommendations was adopted by the Bree Collaborative in January 2015 and approved by the Health Care Authority Director in February 2015.

- Reduce stigma associated with alcohol and other drug screening, intervention, and treatment
- Increase appropriate alcohol and other drug use screening in primary care and emergency room settings
- Increase capacity to provide brief intervention and/or brief treatment for alcohol and other drug misuse
- Decrease barriers for facilitating referrals to appropriate treatment facilities
- Address the opioid addiction epidemic

The draft Addiction and Dependence Treatment Report and Recommendations is available here: www.breecollaborative.org/wp-content/uploads/Final-ADT-Draft.pdf

In July 2015, Bree Collaborative members adopted the Agency Medical Director's Interagency Guide for Prescribing Opioids for Pain. This work builds off of the previous addiction recommendations and specifically addresses the opioid addiction epidemic from the prevention standpoint. Recommendations for screening, brief intervention, and referral to treatment have also been incorporated into the Health Care Authority's Accountable Care Program contracting.

Looking to Forward to Year Five

The Prostate Cancer Screening workgroup will meet to discuss public comments and make changes to the documents based on those comments in November 2015. The workgroup will present the Report and Recommendations to the Bree Collaborative for final adoption in November 2015. The Oncology Care workgroup anticipates finalizing recommendations for presentation at the January 2016 meeting.

Bree Collaborative staff will continue to work with Healthier Washington and the Bree Implementation Team to facilitate adoption of the recommendations across the State. Bree Collaborative staff looks forward to monitoring implementation of the recommendations as part of the Health Care Authority's Accountable Care Program contracts starting January 2016 and working with additional interested stakeholders to further adoption of our recommendations.

The Collaborative will work to form a workgroup for psychotropic drug use in pediatric and adolescent populations and will select up to two additional new topics at the November 2015 meeting.

References

- ¹ Institute of Medicine. 2012. Best care at lower cost: The path to continuously learning health care in America. Washington, DC: The National Academies Press.
- ² Berwick DM, Hackbarth AD. Eliminating Waste in US Health Care. *JAMA*. 2012 Apr 11;307(14):1513-6.
- ³ Health Policy Brief: Reducing Waste in Health Care. *Health Affairs*. December 13, 2012.
- ⁴ Centers for Disease Control and Prevention. Prevalence of Coronary Heart Disease. October 14, 2011. Available: www.cdc.gov/mmwr/preview/mmwrhtml/mm6040a1.htm
- ⁵ Chan PS, Spertus JA, Tang F, Jones P, Ho PM, Bradley SM, Tsai TT, Bhatt DL, Peterson PN. Variations in coronary artery disease secondary prevention prescriptions among outpatient cardiology practices: insights from the NCDR (National Cardiovascular Data Registry). *J Am Coll Cardiol*. 2014 Feb 18;63(6):539-46.
- ⁶ Delbanco S. The Payment Reform Landscape: Bundled Payment. Health Affairs Blog. July 2, 2014. Available: <http://healthaffairs.org/blog/2014/07/02/the-payment-reform-landscape-bundled-payment/>
- ⁷ Siegel R, Ma J, Zou Z, Jemal A. Cancer statistics, 2014. *CA Cancer J Clin*. 2014;64:9-29.
- ⁸ Surveillance, Epidemiology, and End Results Program. SEER Stat Fact Sheets: Prostate Cancer. Available: <http://seer.cancer.gov/statfacts/html/prost.html>. Accessed: June 2015.
- ⁹ Schröder FH, Hugosson J, Roobol MJ, Tammela TL, Zappa M, Nelen V, et al. Screening and prostate cancer mortality: results of the European Randomised Study of Screening for Prostate Cancer (ERSPC) at 13 years of follow-up. *Lancet*. 2014 Dec 6;384(9959):2027-35.
- ¹⁰ Andriole GL, Crawford ED, Grubb RL 3rd, Buys SS, Chia D, Church TR, et al. Prostate cancer screening in the randomized Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial: mortality results after 13 years of follow-up. *J Natl Cancer Inst*. 2012 Jan 18;104(2):125-32.
- ¹¹ Gulati R, Inoue LY, Gore JL, Katcher J, Etzioni R. Individualized estimates of overdiagnosis in screen-detected prostate cancer. *J Natl Cancer Inst*. 2014 Feb;106(2):djt367
- ¹² Potosky AL, Legler J, Albertsen PC, Stanford JL, Gilliland FD, Hamilton AS, Eley JW, Stephenson RA, Harlan LC. Health outcomes after prostatectomy or radiotherapy for prostate cancer: results from the Prostate Cancer Outcomes Study. *J Natl Cancer Inst*. 2000 Oct 4;92(19):1582-92.
- ¹³ Moyer VA; U.S. Preventive Services Task Force. Screening for prostate cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2012 Jul 17;157(2):120-34
- ¹⁴ Cancer Society. American Cancer Society recommendations for prostate cancer early detection. Medical Review October 17, 2014. Available: www.cancer.org/cancer/prostatecancer/moreinformation/prostatecancerearlydetection/prostate-cancer-early-detection-acs-recommendations.
- ¹⁵ Kohler BA, Sherman RL, Howlader N, Jemal A, Ryerson AB, Henry KA, Boscoe FP, Cronin KA, Lake A, Noone AM, Henley SJ, Ehemann CR, Anderson RN, Penberthy L. Annual Report to the Nation on the Status of Cancer, 1975-2011, Featuring Incidence of Breast Cancer Subtypes by Race/Ethnicity, Poverty, and State. *J Natl Cancer Inst*. 2015 Mar 30;107(6):djv048.
- ¹⁶ Kaiser Family Foundation, Harvard School of Public Health. National Survey of Households Affected by Cancer. November 2006. Accessed: July 2015. Available: <https://kaiserfamilyfoundation.files.wordpress.com/2013/01/7591.pdf>.
- ¹⁷ Kolodziej M, Hoverman JR, Garey JS, Espirito J, Sheth S, Ginsburg A, et al. Benchmarks for Value in Cancer Care: An Analysis of a Large Commercial Population. *JOP*. 2011 Sep;7(5):301-306.
- ¹⁸ Schroeck FR, Kaufman SR, Jacobs BL, Skolarus TA, Hollingsworth JM, Shahinian VB, Hollenbeck BK. Regional variation in quality of prostate cancer care. *J Urol*. 2014 Apr;191(4):957-62.
- ¹⁹ Soneji S, Yang J. New analysis reexamines the value of cancer care in the United States compared to Western Europe. *Health Aff (Millwood)*. 2015 Mar 1;34(3):390-7.
- ²⁰ Meropol NJ, Schrag D, Smith TJ, Mulvey TM, Langdon RM Jr, Blum D, Ubel PA, Schnipper LE; American Society of Clinical Oncology. American Society of Clinical Oncology guidance statement: the cost of cancer care. *J Clin Oncol*. 2009 Aug 10;27(23):3868-74.
- ²¹ Schnipper LE, Smith TJ, Raghavan D, Blayney DW, Ganz PA, Mulvey TM, Wollins DS. American Society of Clinical Oncology identifies five key opportunities to improve care and reduce costs: the top five list for oncology. *J Clin Oncol*. 2012 May 10;30(14):1715-24.
- ²² Elective Deliveries between 37 and up to 39 weeks not medically necessary (Q1 through Q4 2012), Washington State Hospital Quality Indicators, Washington State Hospital Association. Available:

www.wahospitalquality.org

²³ Rowles R, Zabari M. Safe Deliveries Roadmap: Bree Collaborative Meeting. July 22, 2015. Washington State Hospital Association. Seattle, Wa. Available: www.breecollaborative.org/wp-content/uploads/Slides-15-0722.pdf.

²⁴ Weinstein JN, Lurie JD, Olson PR, Bronner KK, Fisher ES. United States' trends and regional variations in lumbar spine surgery: 1992-2003. *Spine (Phila Pa 1976)*. 2006 Nov 1;31(23):2707-14.

²⁵ Brox JI, Sørensen R, Friis A, Nygaard Ø, Indahl A, Keller A, Ingebrigtsen T, Eriksen HR, Holm I, Koller AK, Riise R, Reikerås O. Randomized clinical trial of lumbar instrumented fusion and cognitive intervention and exercises in patients with chronic low back pain and disc degeneration. *Spine (Phila Pa 1976)*. 2003 Sep;28(17):1913-21.

²⁶ Centers for Medicare and Medicaid Services. Medicare provider utilization and payment data. Viewed on: 22 April 2014 (page last modified 04/11/2014 10:57am). <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Physician-and-Other-Supplier.html>

²⁷ Mafi JN, McCarthy EP, Davis RB, Landon BE. Worsening trends in the management and treatment of back pain. *JAMA Intern Med*. 2013 Sep 23;173(17):1573-81.

²⁸ Deyo RA, Mirza SK, Terner JA, Martin BI. Over treating chronic pain: time to back off? *J Am Board Fam Med*. 2009;22:62-68.

²⁹ Walker BF, Williamson OD. Mechanical or inflammatory low back pain. What are the potential signs and symptoms? *Man Ther*. 2009;14(3):314-320.

³⁰ Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med*. 2009 Apr 2;360(14):1418-28.

³¹ Barnato AE, Herndon MB, Anthony DL, Gallagher PM, Skinner JS, Bynum JP, Fisher ES. Are regional variations in end of life care intensity explained by patient preferences?: A Study of the US Medicare Population. *Med Care*. 2007 May;45(5):386-93.

³² Goodman DC, Esty AR, Fisher ES, Chang CH. Trends and Variation in End of life Care for Medicare Beneficiaries with Severe Chronic Illness. The Dartmouth Atlas Project. April 12, 2011. Available: www.dartmouthatlas.org/downloads/reports/EOL_Trend_Report_0411.pdf

³³ Raphael C, Ahrens J, Fowler N. Financing end of life care in the USA. *J R Soc Med*. 2001 September; 94(9): 458–461.

³⁴ Lynn J, Teno JM, Phillips RS, Wu AW, Desbiens N, Harrold J, Claessens MT, Wenger N, Kreling B, Connors AF Jr. Perceptions by family members of the dying experience of older and seriously ill patients. SUPPORT Investigators. Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments. *Ann Intern Med*. 1997 Jan 15;126(2):97-106.

³⁵ Collins LG, Parks SM, Winter L. The state of advance care planning: one decade after SUPPORT. *Am J Hosp Palliat Care*. 2006 Oct-Nov;23(5):378-84.

³⁶ Azoulay E, Pochard F, Kentish-Barnes N, Chevret S, Aboab J, Adrie C, et al. Risk of post-traumatic stress symptoms in family members of intensive care unit patients. *Am J Respir Crit Care Med*. 2005 May 1;171(9):987-94.

³⁷ Hammes BJ, Rooney BL, Gundrum JD. A comparative, retrospective, observational study of the prevalence, availability, and utility of advance care planning in a county that implemented an advance care planning microsystem. *JAGS*. 2010;58:1249-1255.

³⁸ Brinkman-Stoppelenburg A, Rietjens JA, van der Heide A. The effects of advance care planning on end of life care: A systematic review. *Palliat Med*. 2014 Sep;28(8):1000-1025.

³⁹ Martinson J, Wagner C. Honoring Choices ®: Pacific Northwest. Presentation to the Bree Collaborative. July 22, 2015. Seattle, Wa. Available: www.breecollaborative.org/wp-content/uploads/Slides-15-0722.pdf.

⁴⁰ Bouchery EE, Harwood H, Sacks JJ, Simon CJ, Brewer RD. Economic costs of excessive alcohol consumption in the US, 2006. *Am J Prev Med*. 2011;41(5):516–24.

⁴¹ Corrao G, Bagnardi V, Zambon A, La Vecchia C. A meta-analysis of alcohol consumption and the risk of 15 diseases. *Prev Med*. 2004 May;38(5):613-9.

⁴² Stahre M, Roeber J, Kanny D, Brewer RD, Zhang X. Contribution of Excessive Alcohol Consumption to Deaths and Years of Potential Life Lost in the United States. *Prev Chronic Dis* 2014;11:130293.

⁴³ Clark RE, Samnaliev M, McGovern MP. Impact of substance disorders on medical expenditures for Medicaid beneficiaries with behavioral health disorders. *Psychiatr Serv*. 2009 Jan;60(1):35-42.

⁴⁴ National Drug Intelligence Center. The Economic Impact of Illicit Drug Use on American Society. May 2011. Available: www.justice.gov/archive/ndic/pubs44/44731/44731p.pdf. Accessed: September 2014.

Appendix A: Bree Collaborative Background

After the Collaborative identifies a focus area, it must identify and analyze evidence-based best practices to improve quality and reduce variation in practice patterns. The Collaborative must also identify sources and methods for data collection and reporting to establish baseline utilization rates and measure the impact of strategies reviewed by the Collaborative. To the extent possible, the Collaborative must minimize the cost and administrative burden of reporting and use existing data resources.

The Collaborative must also identify strategies to increase the use of evidence-based practices. Strategies may include:

- Goals for appropriate utilization rates
- Peer-to-peer consultation
- Provider feedback reports
- Use of patient decision aids
- Incentives for the appropriate use of health services
- Centers of Excellence or other provider qualification standards
- Quality improvement systems
- Service utilization or outcome reporting

The Governor must appoint the chair of the Collaborative, and the HCA must convene the Collaborative. The Collaborative must add members or establish clinical committees as needed to acquire clinical expertise in particular health care service areas under review. Each clinical committee shall include at least two members of the specialty or subspecialty society most experienced with the health service identified for review.

ESHB 1311, Section 3 calls for the Collaborative to *“report to the administrator of the authority regarding the health services areas it has chosen and strategies proposed. The administrator shall review the strategies recommended in the report, giving strong consideration to the direction provided in section 1, chapter 313, Laws of 2011 and this section. The administrator's review shall describe the outcomes of the review and any decisions related to adoption of the recommended strategies by state purchased health care programs. Following the administrator's review, the collaborative shall report to the legislature and the governor regarding chosen health services, proposed strategies, the results of the administrator's review, and available information related to the impact of strategies adopted in the previous three years on the cost and quality of care provided in Washington State.”*

Appendix B: Bree Collaborative Members

Member	Title	Organization
Susie Dade MS	Deputy Director	Washington Health Alliance
John Espinola MD, MPH	Executive Vice President, Health Care Services	Premera Blue Cross
Gary Franklin MD, MPH	Medical Director	Washington State Department of Labor and Industries
Stuart Freed MD	Chief Medical Officer	Confluence Health
Richard Goss MD	Medical Director	Harborview Medical Center – University of Washington
Christopher Kodama MD	President, MultiCare Connected Care	MultiCare Health System
Paula Lozano MD, MPH	Assistant Medical Director, Department of Preventive Care	Group Health Cooperative
MaryAnne Lindeblad RN, MPH	Director, Medicaid Program	Washington State Health Care Authority
Greg Marchand	Director, Benefits & Policy and Strategy	The Boeing Company
Robert Mecklenburg MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Kimberly Moore MD	Associate Chief Medical Officer	Franciscan Health System
Carl Olden MD	Family Physician	Pacific Crest Family Medicine, Yakima
Mary Kay O'Neill MD, MBA	Chief Medical Director	Coordinated Care
John Robinson MD, SM	Chief Medical Officer	First Choice Health
Terry Rogers MD (Vice Chair)	Chief Executive Officer	Foundation for Health Care Quality
Jeanne Rupert DO, PhD	Medical Director, Community Health Services	Public Health – Seattle and King County
Kerry Schaefer	Strategic Planner for Employee Health	King County
Bruce Smith MD	Medical Director	Regence Blue Shield
Lani Spencer RN, MHA	Vice President, Health Care Management Services	Amerigroup
Hugh Straley MD (Chair)	Retired	Medical Director, Group Health Cooperative; President, Group Health Physicians
Jay Tihinen	Assistant Vice President Benefits	Costco Wholesale
Carol Wagner RN, MBA	Senior Vice President for Patient Safety	The Washington State Hospital Association
Shawn West MD	Family Physician	Edmonds Family Medicine

Appendix C: Steering Committee Members

Member	Title	Organization
Stuart Freed* MD	Medical Director	Wenatchee Valley Medical Center
Greg Marchand*	Director, Benefits & Policy and Strategy	The Boeing Company
Jason McGill JD	Health Policy Advisor	Governor's Office
Robert Mecklenburg* MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Mary Kay O'Neill* MD, MBA	Executive Medical Director	Regence Blue Shield
Terry Rogers* MD	Chief Executive Officer	Foundation for Health Care Quality

Appendix D: Workgroup Members

Accountable Payment Models: Coronary Artery Bypass Surgery

Member	Title	Organization
Drew Baldwin MD, FACC	Cardiologist	Virginia Mason Medical Center
Glenn Barnhart MD	Cardiac Surgeon	Swedish Medical Center
Marissa Brooks	Director of Health Improvement Programs	SEUI Healthcare Northwest Benefits
Susie Dade MS	Deputy Director	Washington Health Alliance
Gregory Eberhart MD, FACC	Medical Director, Cardiology	CHI Franciscan Health
Theresa Helle	Manager of Health Care Quality and Efficiency Initiatives	The Boeing Company
Bob Herr MD	Physician	US HealthWorks
Jeff Hummel MD	Medical Director, Health Care Informatics	Qualis Health
Dan Kent MD	Medical Director, Quality & Medical Management	Premera Blue Cross
Robert Mecklenburg MD (Co-Chair)	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Vinay Malhotra MD	Cardiologist	Cardiac Study Center
Kerry Schaefer (Co-Chair)	Strategic Planner for Employee Health	King County
Gregg Shibata	Manager, Accountable Health Implementation	Regence Blue Shield
Shilpen Patel, MD, FACRO	Medical Director	Clinical Outcomes Assessment Program
Thomas Richards	Managing Director, Employee Benefits	Alaska Airlines

Accountable Payment Models: Lumbar Fusion

Member	Title	Organization
Susie Dade MS	Deputy Director	Washington Health Alliance
Gary Franklin MD, MPH	Medical Director	Washington State Department of Labor and Industries
April Gibson	Administrator	Puget Sound Orthopaedics
Dan Kent MD	Medical Director, Quality & Medical Management	Premera Blue Cross
Bob Manley MD	Surgeon	Regence Blue Shield
Gary McLaughlin	Vice President of Finance, Chief Financial Officer	Overlake Hospital
Robert Mecklenburg MD (Chair)	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Peter Nora MD	Chief of Neurological Surgery	Swedish Medical Center
Charissa Raynor	Executive Director	SEIU Healthcare NW Benefits
Kerry Schaefer	Strategic Planner for Employee Health	King County
Julie Sylvester	Vice President of Quality and Safety Initiatives	Qualis Health
Jay Tihinen	Assistant Vice President Benefits	Costco Wholesale

Accountable Payment Models: Total Knee and Total Hip Replacement

Member	Title	Organization
Susie Dade* MS	Deputy Director	Washington Health Alliance
Gary Franklin* MD, MPH	Medical Director	Washington State Department of Labor and Industries
April Gibson	Administrator	Puget Sound Orthopaedics
Dan Kent MD	Medical Director, Quality & Medical Management	Premera
Bob Manley MD	Surgeon	Regence
Gary McLaughlin	Vice President of Finance, Chief Financial Officer	Overlake Hospital
Robert Mecklenburg* MD (Chair)	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Peter Nora MD	Chief of Neurological Surgery	Swedish Medical Center
Marissa Brooks	Director of Health Improvement Programs	SEIU Healthcare NW Benefits
Kerry Schaefer*	Strategic Planner for Employee Health	King County
Julie Sylvester	Vice President of Quality and Safety Initiatives	Qualis Health
Jay Tihinen*	Assistant Vice President Benefits	Costco Wholesale

Addiction and Dependence Treatment

Member	Title	Organization
Charissa Fotinos MD	Deputy Chief Medical Officer	Health Care Authority
Tom Fritz* (Chair)	Chief Executive Officer	Inland Northwest Health Services
Linda Grant	Chief Executive Officer	Evergreen Manor
Tim Holmes	Vice President of Outreach Services and Behavioral Health Administration	MultiCare Health System
Ray Hsiao MD	Co-Director, Adolescent Substance Abuse Program	Seattle Children's Hospital
Scott Munson	Executive Director	Sundown M Ranch
Rick Ries MD	Associate Director	Addiction Psychiatry Residency Program, University of Washington
Terry Rogers* MD	Chief Executive Officer	Foundation for Health Care Quality
Ken Stark	Director	Snohomish County Human Services Department
Jim Walsh MD	Physician	Swedish Medical Center

Bree Implementation Team

Member	Title	Organization
Neil Chasan	Physical Therapist	Sports Reaction Center
Susie Dade* MS	Deputy Director	Washington Health Alliance
Cezanne Garcia	Program Manager, Community and School-Based Partnerships	Public Health Seattle – King County
Ellen Kauffman MD	OB-COAP Medical Director	Foundation for Health Care Quality
Dan Lessler MD (Chair)	Chief Medical Officer	Health Care Authority
Alice Lind RN	Manager, Grants and Program Development	Health Care Authority
Jason McGill JD	Health Policy Advisor	Governor's Office
Larry McNutt	Plan Administrator	Carpenters Trusts of Western Washington
Mary Kay O'Neill* MD, MBA	Executive Medical Director	Regence
Steven Overman MD	Director	Seattle Arthritis Clinic
Terry Rogers* MD	Chief Executive Officer	Foundation for Health Care Quality
Claudia Sanders	Senior Vice President, Policy Development	Washington State Hospital Association
Kerry Schaefer*	Strategic Planner for Employee Health	King County
Jeff Thompson MD	Senior Health Care Consultant	Mercer
Shawn West* MD	Medical Director	Coordinated Care
Karen Wren	Benefits Manager	Point B

End-of-Life Care

Member	Title	Organization
Anna Ahrens	Director of Patient and Family Support Services	MultiCare Health System
Tony Back MD	Medical Oncologist	Seattle Cancer Care Alliance
Trudy James	Chaplain	Heartwork
Bree Johnston MD	Medical Director, Palliative Care	PeaceHealth
Abbi Kaplan	Principal	Abbi Kaplan Company
Timothy Melhorn MD	Internist	Yakima Valley Memorial Hospital (YVMH) and the Memorial Foundation
Joanne Roberts MD	Chief Medical Officer, NMR Administration	Providence Everett Regional Medical Center
John Robinson* MD (Chair)	Chief Medical Officer	First Choice Health
Bruce Smith* MD (Vice Chair)	Associate Medical Director, Strategy Deployment	Group Health Physicians
Richard Stuart DSW	Clinical Professor Emeritus, Psychiatry	University of Washington

Obstetrics (Maternity) Care

Member	Title	Organization
Theresa Helle	Manager, Health Care Quality & Efficiency Initiatives	The Boeing Company
Ellen Kauffman MD	OB-COAP Medical Director	Foundation for Health Care Quality
Robert Mecklenburg* MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Carl Olden* MD	Family Physician	Pacific Crest Family Medicine, Yakima
Mary Kay O'Neill* MD, MBA	Executive Medical Director	Regence Blue Shield
Dale Reisner MD	Obstetrician/Gynecologist	Swedish Hospital Perinatologist
Terry Rogers* MD	Chief Executive Officer	Foundation for Health Care Quality
Roger Rowles MD	Obstetrician/Gynecologist	Yakima Memorial OB-GYN

Potentially Avoidable Hospital Readmissions

Member	Title	Organization
Sharon Eloranta MD	Medical Director, Quality and Safety Initiatives	Qualis Health
Stuart Freed* MD	Medical Director	Wenatchee Valley Medical Center
Rick Goss* MD, MPH	Medical Director	Harborview Medical Center – University of Washington
Leah Hole-Marshall JD	Medical Administrator	Washington State Department of Labor and Industries
Dan Lessler MD, MHA	Medical Director	Health Care Authority
Robert Mecklenburg* MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Amber Theel RN, MBA	Director, Patient Safety Practices	Washington State Hospital Association

Spine and Low Back Pain

Member	Title	Organization
Dan Brzusek DO	Physiatrist	Northwest Rehab Association
Neil Chasan	Physical Therapist	Sport Reaction Center
Andrew Friedman MD	Physiatrist	Virginia Mason
Leah Hole-Curry JD	Medical Administrator	WA State Labor & Industries
Heather Kroll MD	Rehab Physician	Rehab Institute of Washington
Chong Lee MD	Spine Surgeon	Group Health Cooperative
Mary Kay O'Neill* MD, MBA (Chair)	Executive Medical Director	Regence Blue Shield
John Robinson* MD, SM	Chief Medical Officer	First Choice Health
Michael Von Korff ScD	Psychologist & Researcher	Group Health Research Institute
Kelly Weaver MD	Physiatrist	The Everett Clinic

Oncology Care

Member	Title	Organization
Jennie Crews, MD	Medical Director	PeaceHealth St. Joseph Cancer Center
Bruce Cutter, MD	Oncologist	Medical Oncology Associates
Patricia Dawson, MD, PhD	Director	Swedish Cancer Institute
Keith Eaton, MD, PhD	Medical Director, Quality, Safety and Value	Seattle Cancer Care Alliance
Janet Freeman-Daily	Patient Advocate	
Christopher Kodama, MD, MBA (Chair)	President, MultiCare Connected Care	MultiCare Health System
Gary Lyman, MD, MPH	Co-Director	Hutchinson Institute for Cancer Outcomes Research
Rick McGee, MD	Oncologist	Washington State Medical Oncology Society
Hugh Straley, MD	Chair and Oncologist	Bree Collaborative
Richard Whitten, MD	Medical Director	Noridian

Prostate Cancer Screening

Member	Title	Organization
John Gore, MD, MS	Urologist, clinician, surgeon, researcher	University of Washington Medicine
Matt Handley, MD	Associate Medical Director, Quality and Informatics	Group Health Cooperative
Leah Hole-Marshall, JD	Medical Administrator	Department of Labor & Industries
Steve Lovell	Retired	Patient and Family Advisory Council
Rick Ludwig, MD (Chair)	Chief Medical Officer	Providence Accountable Care Organization
Bruce Montgomery, MD	Clinical Director of Genitourinary Medical Oncology	Seattle Cancer Care Alliance
Eric Wall, MD, MPH	Market Medical Director	UnitedHealthcare
Shawn West, MD	Family Physician	Edmonds Family Medicine
Jonathan Wright, MD, MS, FACS	Assistant professor of urology/affiliate researcher	University of Washington/Fred Hutchinson Cancer Research Center

*Bree Collaborative member