

# Public Employees Benefits Board Retreat



### **Public Employees Benefits Board Retreat**

January 30, 2014 12:15 p.m. – 3:30 p.m.

Health Care Authority Sue Crystal Rooms A & B 626 8<sup>th</sup> Avenue SE Olympia, Washington

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#### **AGENDA**

Public Employees Benefits Board Retreat January 30, 2014 12:15 p.m. – 3:30 p.m.

Health Care Authority Cherry Street Plaza Sue Crystal Rooms A & B 626 8<sup>th</sup> Avenue SE Olympia, WA 98501

12:15 p.m.	Welcome, Introductions		Dorothy Teeter, Chair
12:25 p.m.	Washington State as "First Mover"	Tab 6	Rachel Quinn, HCA Division of Policy, Planning, and Performance Dr. Dan Lessler, HCA CMO
1:20 p.m.	Affordable Care Act Coverage Update	Tab 7	Nathan Johnson, HCA Division of Policy Planning, and Performance
2:00 p.m.	PEBB Program Finance Update	Tab 8	Janice Baumgardt, HCA Finance
2:15 p.m.	2015 PEBB Wellness Program Enhancements	Tab 9	Michele Ritala, HCA PEB Division
2:45 p.m.	Affordable Care Act Benefit Impacts	Tab 10	Donna Sullivan, HCA Office of the CMO
3:05 p.m.	Dental-Only Benefit Offering for Retirees	Tab 11	Mary Fliss, HCA PEB Division Barb Scott, HCA PEB Division
3:30 p.m.	Adjourn		

The Public Employees Benefits Board will meet Thursday, January 30, 2014 at the Washington State Health Care Authority offices. The Board will consider all matters on the agenda plus any items that may normally come before them.

This notice is pursuant to the requirements of the Open Public Meeting Act, Chapter 42.30 RCW.

Direct e-mail to: board@hca.wa.gov.

Materials posted at: www.hca.wa.gov/pebb/Pages/board\_meeting\_schedule.aspx



#### **PEB Board Members**

Name Representing

Dorothy Teeter, Director Health Care Authority 626 8<sup>th</sup> Ave SE PO Box 42713 Olympia WA 98504-2713 V 360-725-1523 dorothy.teeter@hca.wa.gov Chair

Greg Devereux, Executive Director
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State Employees

Vacant\* K-12

Gwen Rench 3420 E Huron Seattle WA 98122 V 206-324-2786 gwenrench@covad.net State Retirees

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Name Representing

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<sup>\*</sup>non-voting members

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#### 2014 Public Employees Benefits Board Meeting Schedule

The PEB Board meetings will be held at the Health Care Authority, Sue Crystal Center, Rooms A & B, 626 8<sup>th</sup> Avenue SE, Olympia, WA 98501. The meetings begin at 1:30 p.m., unless otherwise noted below.

December 11, 2013 (Board Retreat) 9:00 a.m. - 3:00 p.m.

March 19, 2014

April 16, 2014

May 28, 2014

June 25, 2014

July 9, 2014

July 16, 2014

July 23, 2014

December 10, 2014 (Board Retreat) 9:00 a.m. – 3:00 p.m.

If you are a person with a disability and need a special accommodation, please contact Connie Bergener at 360-725-0856

OFFICE OF THE CODE REVISER STATE OF WASHINGTON FILED

DATE: July 18, 2013 TIME: 1:05 PM

WSR 13-15-090



### 2015 PEBB PROCUREMENT CALENDAR

March 19 Board Meeting

April 16 Board Meeting

May 28 Board Meeting: Budget, Open Enrollment Summary, & Procurement Brief

Request for Proposals Issued to Fully-insured Plans. Initial Proposal Brief

& Budget Update.

**Proposals Due** 

June 25 Board Meeting: Procurement Update, Eligibility Scope, & Policy Brief

July 9 Board Meeting: Recommended Resolutions

Plan Design

Employee Premiums

Medicare Explicit Subsidy

Eligibility Policy (if needed)

July 16 Board Meeting: Resolution Vote

July 23 Board Meeting if needed

Updated 8/23/13



#### PEB BOARD BY-LAWS

## ARTICLE I The Board and its Members

- 1. <u>Board Function</u>—The Public Employee Benefits Board (hereinafter "the PEBB" or "Board") is created pursuant to RCW 41.05.055 within the Health Care Authority; the PEBB's function is to design and approve insurance benefit plans for State employees and school district employees.
- 2. <u>Staff</u>—Health Care Authority staff shall serve as staff to the Board.
- 3. <u>Appointment</u>—The Members of the Board shall be appointed by the Governor in accordance with RCW 41.05.055. Board members shall serve two-year terms. A Member whose term has expired but whose successor has not been appointed by the Governor may continue to serve until replaced.
- 4. Non-Voting Members—Until there are no less than twelve thousand school district employee subscribers enrolled with the authority for health care coverage, there shall be two non-voting Members of the Board. One non-voting Member shall be the Member who is appointed to represent an association of school employees. The second non-voting Member shall be designated by the Chair from the four Members appointed because of experience in health benefit management and cost containment.
- 5. <u>Privileges of Non-Voting Members</u>—Non-voting Members shall enjoy all the privileges of Board membership, except voting, including the right to sit with the Board, participate in discussions, and make and second motions.
- 6. <u>Board Compensation</u>—Members of the Board shall be compensated in accordance with RCW <u>43.03.250</u> and shall be reimbursed for their travel expenses while on official business in accordance with RCW <u>43.03.050</u> and <u>43.03.060</u>.

## ARTICLE II Board Officers and Duties

- Chair of the Board—The Health Care Authority Administrator shall serve as Chair of the Board and shall preside at all meetings of the Board and shall have all powers and duties conferred by law and the Board's By-laws. If the Chair cannot attend a regular or special meeting, he or she shall designate a Chair Pro-Tem to preside during such meeting.
- 2. Other Officers—(reserved)

## ARTICLE III Board Committees

(RESERVED)

## ARTICLE IV Board Meetings

- Application of Open Public Meetings Act—Meetings of the Board shall be at the call of the Chair and shall be held at such time, place, and manner to efficiently carry out the Board's duties. All Board meetings, except executive sessions as permitted by law, shall be conducted in accordance with the Open Public Meetings Act, Chapter 42.30 RCW.
- 2. Regular and Special Board Meetings—The Chair shall propose an annual schedule of regular Board meetings for adoption by the Board. The schedule of regular Board meetings, and any changes to the schedule, shall be filed with the State Code Reviser's Office in accordance with RCW 42.30.075. The Chair may cancel a regular Board meeting at his or her discretion, including the lack of sufficient agenda items. The Chair may call a special meeting of the Board at any time and proper notice must be given of a special meeting as provided by the Open Public Meetings Act, RCW 42.30.
- 3. <u>No Conditions for Attendance</u>—A member of the public is not required to register his or her name or provide other information as a condition of attendance at a Board meeting.
- 4. <u>Public Access</u>—Board meetings shall be held in a location that provides reasonable access to the public including the use of accessible facilities.
- 5. Meeting Minutes and Agendas—The agenda for an upcoming meeting shall be made available to the Board and the interested members of the public at least 10 days prior to the meeting date or as otherwise required by the Open Public Meetings Act. Agendas may be sent by electronic mail and shall also be posted on the HCA website. Minutes summarizing the significant action of the Board shall be taken by a member of the HCA staff during the Board meeting, and an audio recording (or other generally-accepted) electronic recording shall also be made. The audio recording shall be reduced to a verbatim transcript within 30 days of the meeting and shall be made available to the public. The audio tapes shall be retained for six (6) months. After six (6) months, the written record shall become the permanent record. Summary minutes shall be provided to the Board for review and adoption at the next board meeting.
- Attendance—Board members shall inform the Chair with as much notice as possible if unable to attend a scheduled Board meeting. Board staff preparing the minutes shall record the attendance of Board Members at the meeting for the minutes.

## ARTICLE V Meeting Procedures

- Quorum— Five voting members of the Board shall constitute a quorum for the transaction of business. No final action may be taken in the absence of a quorum. The Chair may declare a meeting adjourned in the absence of a quorum necessary to transact business.
- 2. Order of Business—The order of business shall be determined by the agenda.
- 3. <u>Teleconference Permitted—</u> A Member may attend a meeting in person or, by special arrangement and advance notice to the Chair, A Member may attend a meeting by telephone conference call or video conference when in-person attendance is impracticable.
- 4. Public Testimony—The Board actively seeks input from the public at large, from enrollees served by the PEBB Program, and from other interested parties. Time is reserved for public testimony at each regular meeting, generally at the end of the agenda. At the direction of the Chair, public testimony at board meetings may also occur in conjunction with a public hearing or during the board's consideration of a specific agenda item. The Chair has authority to limit the time for public testimony, including the time allotted to each speaker, depending on the time available and the number of persons wishing to speak.
- 5. <u>Motions and Resolutions</u>—All actions of the Board shall be expressed by motion or resolution. No motion or resolution shall have effect unless passed by the affirmative votes of a majority of the Members present and eligible to vote, or in the case of a proposed amendment to the By-laws, a 2/3 majority of the Board.
- 6. Representing the Board's Position on an Issue—No Member of the Board may endorse or oppose an issue purporting to represent the Board or the opinion of the Board on the issue unless the majority of the Board approve of such position.
- 7. <u>Manner of Voting</u>—On motions, resolutions, or other matters a voice vote may be used. At the discretion of the chair, or upon request of a Board Member, a roll call vote may be conducted. Proxy votes are not permitted.
- 8. <u>Parliamentary Procedure</u>—All rules of order not provided for in these By-laws shall be determined in accordance with the most current edition of Robert's Rules of Order [RONR]. Board staff shall provide a copy of *Robert's Rules* at all Board meetings.
- 9. <u>Civility</u>—While engaged in Board duties, Board Members conduct shall demonstrate civility, respect and courtesy toward each other, HCA staff, and the public and shall be guided by fundamental tenets of integrity and fairness.
- 10. <u>State Ethics Law</u>—Board Members are subject to the requirements of the Ethics in Public Service Act, Chapter 42.52 RCW.

## ARTICLE VI Amendments to the By-Laws and Rules of Construction

- 1. <u>Two-thirds majority required to amend</u>—The PEBB By-laws may be amended upon a two-thirds (2/3) majority vote of the Board.
- 2. <u>Liberal construction</u>—All rules and procedures in these By-laws shall be liberally construed so that the public's health, safety and welfare shall be secured in accordance with the intents and purposes of applicable State laws and regulations.



## **Transforming Health Care Purchasing in Washington State**

Starting with Washington as First Mover

January 30, 2014

Rachel Quinn & Dan Lessler, MD, CMO

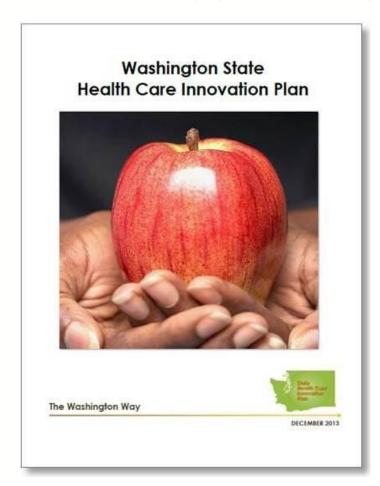
## **Overview**

- Our Broken Health Care System
- Washington Innovation Plan: Achieving the Triple Aim
- 3 Approaches to drive value, not volume, starting with WA leading by example
- Change Agent Spotlight: Bree Collaborative
- Planning/Timeline
- Questions/Answers

## Our current health care system

- Payment based on volume, not value
  - Overuse, underuse, misuse, and patient safety issues
  - Fragmented care
- Lack of accountability providers not held accountable for both cost and quality
- Lack of transparency quality and cost
- Oriented towards health care, not health

## **An Opportunity for Washington State**



A five-year plan for Washington State

**Transform** health care through:

- Pay for value and outcomes instead of volume of services
- Empower communities to improve health and better link with health delivery
- Integrate physical and behavioral health to address the needs of the whole person

## **Transformation Goal: Triple Aim**

Better health, best care, at the best value – with the patient at the center of all strategies

\* Value = Quality  $\div$  cost





## Infrastructure needed to drive innovation

### The Seven Building Blocks:

- Quality and price transparency
- Person and family engagement
- Regionalize transformation
- Create Accountable Communities of Health (ACHs)
- Leverage and align data
- Practice transformation support
- Workforce capacity and flexibility





## Driving paying for value, not volume – 3 Strategies

Washington
Leading by
Example
PEBB Program &

Medicaid

Requirements of Contractors of State-Purchased Health Care Programs

Multi-Stakeholder Market Convener

<u>Goal</u>: Move 80% of State-financed health care to value-based payment, and work with other employers, payers, providers to move at least 50% of commercial market, by 2019

Washington State Health Care Authority

## **Value-based Purchasing - Definition**

## **Value-based Purchasing**

- Align provider, payer, and consumer incentives to reward quality, effectiveness, and efficiency
- Focuses on managing the use of the health care system to reduce inappropriate care
- Help members get healthier, get more value

Washington as a purchaser already has VBP tools in place (e.g., eValue8)



## Washington Leading by Example: PEBB Program & Medicaid

- Create common framework, align guiding principles, timelines, and approaches for 2016 procurement cycle
- Design health benefits and incentives to encourage members to select high value services and providers and better manage their own health and health care
  - Reference pricing for colonoscopies and joint replacements
- Offer products that pay providers differentially based on performance, value, and quality, and that emphasize primary care and coordination of care
  - Accountable Care Organizations
  - Tiered networks



## Washington Leading by Example: Leveraging Purchasing Power

## Require all contractors providing State-financed health care benefits as a condition of receipt of State funds:

- Measure and report cost and quality measures
- Implement evidence-based purchasing and guidelines
  - Health Technology Assessment Program
  - Bree Collaborative
- Participate in clinical quality programs
- Use patient decision aids
- Implement robust employee wellness programs and other wellness strategies



## Washington: Market Convener & Organizer

- Convene the Community around common strategies
  - Delivery and payment redesign
  - Benefit design redesign
  - Consumer education
- Align public and private purchasing expectations with benefit design
  - Work with the Washington Health Alliance Purchaser Affinity Group to drive and align value-based purchasing strategies, system-wide

## **Necessary Infrastructure**

## **Build a Culture of Robust Transparency**

- Measure and report cost and quality to consumers
- Purchasers need cost and quality information for benefit design strategies; consumers need info to be better shoppers for their care
- Tools: Statewide measure set & All Payer Claims Database

## Activate and Engage Individuals and Families in Their Health and Health Care

- Evidence-based materials for employees
- Shared decision making
- Tools: Patient Decision Aids



## Change Agent: Dr. Robert Bree Collaborative

- Created by the Washington State Legislature in 2011
- Clinician-led, multi-stakeholder group working together to recommend best practices & community standards for Washington State, based on data and evidence
- Well-respected physicians and hospitals, Health plans, Public and Private Employers, Quality improvement organizations

## Dr. Robert Bree Collaborative - Mandate

- Annually, must select three health care services/topics with:
  - Unwarranted variation
  - High utilization and/or cost growth trends
  - A source of waste of inefficiency in care delivery
  - Patient safety issues
  - Inappropriate care

Recommend quality improvement strategies



## **Dr. Robert Bree Collaborative - Implementation**

- Per statute recommendations sent to HCA Director for review and consideration for state-purchased health care programs
  - PEBB Program, Medicaid, Labor & Industries, Corrections
- Bree Implementation Team (BIT) oversees implementation of topics using a collaborative process

## **Dr. Robert Bree Collaborative - Topics**

- Obstetrics Completed 8/2012
- Cardiology Completed 1/2013
- Readmissions In process
- Spine/Low Back Pain Completed 11/2013
- Accountable Payment Models
  - Total Knee and Total Hip Replacement Bundle and Warranty Completed 11/2013

## **Coming Attractions**

- End of Life/Advance Directives
- Addiction/Dependence Treatment



## Dr. Robert Bree Collaborative – Total Knee and Total Hip Replacement

#### Bundle

- States explicit and transparent quality specifications
- Appropriateness standards integrated into care pathway

### Warranty

- Includes signification complications attributable to procedures
- Imposes complication-specific financial accountability for readmissions

## **Purchasing Transformation Timeline**

From planning to implementation...



#### 2014

#### JANUARY

 Launch voluntary survey of all health plans on current levels of value-based payment

#### MARCH

 Public/Private Transformation Action Strategy implementation begins

#### APRIL

PEB ACO RFI

#### JULY

- Establish value-based purchasing baseline across market
- 60 percent of market signs commitment pledges

#### SEPTEMBER

 Determine State-financed health care joint procurement schedule

#### DECEMBER

 Goals and expectations of each stakeholder group defined, prioritization areas of alignment selected

#### 2015

#### JANUARY

 All contractors providing Statefinanced health care report to APCD, implement Bree and HTA, participate in FHCQ clinical QI programs

#### 2016

#### JANUARY

- Reference pricing in PEB for joint replacement/colonoscopies
- Common RFP elements implemented across purchasers
- ACO models in Medicaid and selfinsured

#### 2017

#### JANUARY

- More value based payment in state plans by 15 percentage points
- Entities with 60 percent market share agree on common strategies

#### 2019

- 80 percent of actions in Public/Private Transformation Action Strategy adopted across state
- 80 percent of state-financed health care value-based payment
- 50 percent of commercial market value-based payment



## Thank You!

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## **Executive Summary**

### Washington's Health Care Innovation Plan

ashington's State Innovation Models grant from the federal Center for Medicare and Medicaid Innovation (CMMI) has catalyzed a bold initiative. The CMMI planning grant enabled extensive and rapid cross-community and cross-sector engagement on broadly defined health and health care system change. The resulting Innovation Planning initiative created a framework for health system transformation that is significantly more far reaching than the testing grant application submitted by the state in 2012. The State Health Care Innovation Plan forms the basis of a future application for a multiple-year State Innovation Models testing grant. More importantly, it charts a bold course for transformative change in Washington state that links clinical and community factors that support health, spreads effective payment and care delivery models, and has the potential to generate more than \$730 million in return on investment.

Washington is home to some of the most innovative and transformational efforts in the nation to improve health and health care and lower costs, which have only been strengthened by an infusion of energy and resources upon passage of the Affordable Care Act. Washington's purchasers, labor organizations, providers, quality improvement organizations, local jurisdictions, and health plans are leaders in performance measurement, clinical practice transformation, and innovative payment and delivery methods, ensuring focus on value rather than volume. In his first year, Governor Jay Inslee has set ambitious health and health care goals for the state, including a vision for full integration of mental health, chemical dependency, and physical health care. Innovative local jurisdictions and communities throughout the state already have leveraged collaboration and engagement across sectors to work toward healthier people in their communities and are poised to do much more.

The State embraces and applauds its deserved reputation for innovation, but recognizes it must reach higher and transform faster to ensure Washingtonians are healthy and consistently receive high quality, affordable care. The Innovation Plan builds on Washington's unique blend of entrepreneurship and collaboration. It seeks to channel health plan and provider competition toward value without dictating lockstep adherence to specific payment or delivery system

<sup>&</sup>lt;sup>1</sup> Washington's 2012 State Innovation Models testing grant application proposed implementation and testing of a model for improving maternal/infant care and managing chronic conditions through a multi-payer approach. See <a href="https://www.statereforum.org/system/files/wa\_sim\_project\_narrative.pdf">https://www.statereforum.org/system/files/wa\_sim\_project\_narrative.pdf</a>> for the original project narrative.

models. In order to achieve results through competition, the State must focus on the fundamentals necessary to consistently define, demand and incentivize value, measure it consistently, and act on what is measured. For this reason, the Washington plan emphasizes greater purchaser leadership and the importance of transparency and deploying high-value measures, drawn as much as possible from nationally standardized measure sets.

#### **Transformed System**

Better Health Better Care Lower Cost

#### **Current System:**

- Inconsistent and weak linkages between clinical and community interventions.
- Lack of incentives and necessary support to coordinate multiple aspects of an individual's health and health care.
- Financing and administrative barriers to integrated, wholeperson care.
- Disjointed diversity of payment methods, priorities, and performance measures.
- Slow adoption of alternative, value-based payment.
- Relevant clinical and financial information often unavailable for provision of care and purchasing decisions.

- Health systems positioned to address prevention and social determinants of health as part of the broader community of health.
- Support at the state and local levels for practice transformation that emphasizes team-based care.
- An emphasis on regionally responsive payment and delivery systems, driven by integrated purchasing of physical and behavioral health care.
- State leadership in deploying innovative purchasing models and requirements that drive value over volume.
- Alignment between public and private purchasers around common measures of performance with value-based payment as the norm.
- A transparent system of accountability, allowing purchasers, consumers, providers, and plans to make informed choices.

The Innovation Plan also focuses on creating capacity and modest infrastructure to support enhanced cooperation where a competitive model will not suffice. Caring for the state's most vulnerable; engaging individuals in their own health; addressing the needs of rural and underserved communities; and preventing illness, injury, and disease often demands coordinated planning and response among multiple private actors, various governments, public health, not-for-profit service providers, and philanthropy. Maximizing the potential for collective impact does not demand a great deal of infrastructure nor does it call for top-down regulation. It does require that communities have support and a voice in defining mutual state and regional aims, greater local control, and more consistency and clarity from their State governmental partners. New thinking and financing tools to support health are required, particularly when investments by one party or sector yield return in others.

The collaborative and inclusive state Innovation Planning process recognized the importance of the contributions of and commitment from all state actors. As such, the Innovation Plan is intended to be viewed as a comprehensive *state* plan, and not just the State or Governor's plan. It will require action on multiple levels and strong public-private partnership, particularly as Washington bridges from planning to implementation.

The Innovation Plan is organized along two major axes: (1) three strategic focus areas, which include multiple targeted health system and payment reforms, and (2) seven foundational building blocks, which directly support the three strategies and also enhance overall system performance.

#### Strategies for Better Health, Better Care, and Lower Cost

The Innovation Plan is built to achieve three ultimate aims: better health, better care, and lower costs. Three broad strategies drive progress toward these interrelated aims.

### Strategy 1

## Drive value-based purchasing across the community, starting with the State as "first mover"

The Innovation Plan emphasizes leadership from Washington's public and private major purchasers to jointly catalyze payment and delivery system transformation. Washington will move away from a largely fee-for-service reimbursement system to an outcomes-based payment system that delivers better health and better care at lower costs. Specifically, within five years, Washington aims to move 80 percent of its State-financed health care to outcomes-based payment and work in tandem with other major purchasers to move at least 50 percent of the commercial market to outcomes-based payment. Key action steps include:

- Requiring all providers of State-financed health care to collect and report common measures, implement evidence-based guidelines, and enable use of patient-decision aids.
- Implementing accountable care organization models, reference pricing, and tiered/narrowed networks for State-financed health care.
- Aligning public and private purchasing expectations with flexible benefit design efforts.
- Generating actionable commitments in support of a well-defined strategy that will align payment and delivery system transformation across multiple payers, purchasers, and providers.

## Strategy 2

#### Improve health overall by building healthy communities and people through prevention and early mitigation of disease throughout the life course

Ensuring better health, better care, and lower costs requires Washington to close the gaps between prevention, primary care, physical and behavioral health care, public health, social and human services, early learning/education, and community development systems. It also requires better alignment at the state and community levels. To invest in the success of healthy communities, the State will leverage its leadership role to shape and align policies that provide the opportunity and space to develop healthy physical and social environments that foster resilient and connected communities. Key action steps include:

- Leveraging community-based, public-private collaboratives to bring together key stakeholders to link, align, and act on achieving health improvement goals, support local innovation, and enable cross-sector resource sharing, development, and investment.
- Amplifying a Health in All Policies approach across State agencies and within communities, with a focus on healthy behaviors, healthy starts for children, prevention and mitigation of adverse childhood experiences, clinical-community linkages, and social determinants of health.
- Using geographic information systems-mapping and hot-spotting resources to drive community decisions.
- Designing a toolkit for communities seeking to finance innovative regional projects.



#### Improve chronic illness care through better integration of care and social supports, particularly for individuals with physical and behavioral co-morbidities

Needlessly complex health care and benefit systems are major obstacles to prevention and effective management of chronic disease. These obstacles can be particularly challenging for people with both physical and behavioral health issues. Effectively integrating mental health, substance abuse, and primary health care services produces the best outcomes and proves the most effective approach to caring for people with multiple health care needs. Key action steps include:

- Spreading adoption of the Chronic Care Model.
- Supporting the integration of physical and behavioral health care at the delivery level through expanded data accessibility and resources, practice transformation support, increased workforce capabilities, and reduction of administrative and funding silos on a phased basis.
- Restructuring Medicaid procurement into regional service areas to support integrated physical and behavioral health care and linkages to community resources.

#### Foundational Building Blocks

These building blocks address fundamental capabilities and supports that must be in place to realize the Innovation Plan, and for health and health care transformation to succeed on a system-wide basis. The goal of these building blocks is to enable Washington to harness and channel competition, and accelerate change at the delivery system and community level.

#### **FOUNDATIONAL BUILDING BLOCK 1**

#### Build a culture of robust quality and price transparency

The State will actively lead in the development of broad price and quality transparency infrastructure to help individuals and providers make informed choices, enable providers and communities to benchmark their performance against that of others, and enable purchasers and payers to reward improvements in quality and efficiency.

#### **FOUNDATIONAL BUILDING BLOCK 2**

## Activate and engage individuals and families in their health and health care

Washington will implement and promote evidence-based wellness programs, flexible benefit design, and tools, and provide a suite of new resources and training to help individuals and providers in shared decision making.

#### **FOUNDATIONAL BUILDING BLOCK 3**

#### Regionalize transformation efforts

Recognizing that health and health care are influenced by local needs, the State and regional leaders (including counties) will work together to determine regional service areas that drive increased collaboration between clinical and population health efforts. These regional service areas also will define Medicaid purchasing boundaries and make it easier to support health improvement and prevention at the local and regional levels. Most importantly, this regional approach will empower local entities, such as counties and public health jurisdictions, to shape

a health and social services system tailored to the needs of their communities and aligned with key statewide priorities.

#### **FOUNDATIONAL BUILDING BLOCK 4**

#### Create Accountable Communities of Health

The Innovation Plan leverages innovation and collaboration already occurring in local communities by formalizing regionally governed public-private collaboratives to address shared health goals. These new partnership organizations will support communities, sectors, and systems in their regional service areas, and implement health improvement plans primarily focused on prevention strategies. Accountable Communities of Health also will help structure and oversee Medicaid purchasing. They will partner with the State to bring order and synergy to programs, initiatives, and activities based on unique regional and local characteristics.

#### **FOUNDATIONAL BUILDING BLOCK 5**

#### Leverage and align state data capabilities

Washington agencies will partner with one another and the private sector to address the longer-term needs for clinical health data management solutions, services, and tools to support case management and treatment decisions at the point of care, and new methods of paying for value versus volume. Washington will partner with the Institute for Health Metrics and Evaluation and local public health to develop new data capabilities and technical assistance to support community population health management.

#### **FOUNDATIONAL BUILDING BLOCK 6**

#### Provide practice transformation support

To align and amplify the array of exemplary public and private learning collaborative programs currently providing practice and community transformation support, the State will create a Transformation Support Regional Extension Service that operates at the state and community levels. This entity will ensure providers receive the necessary support in Washington's rapidly changing health care environment.

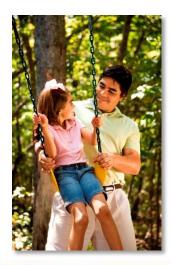
#### FOUNDATIONAL BUILDING BLOCK 7

#### Increase workforce capacity and flexibility

Washington will prepare its health workforce to care for the whole person and to work in teams to engage individuals and families and provide care effectively for those with complex and chronic conditions.

In addition to these seven building blocks, Washington has existing health information technology and information exchange transformation plans in place that address uptake and spread of health technologies. These are linked to and supportive of the Innovation Plan's strategies.

Ultimately, implementation of Washington's plan will impact nearly every health consumer and taxpayer in the state and is conservatively estimated to yield a \$730 million return on investment over the next three years. Innovation Plan initiatives will continue to drive greater returns in later years as delivery and payment reform initiatives take root. Washington's prevention investments will save money as fewer people suffer from preventable illness and untimely death, and will reduce the toll of illness in the state's workforce, schools, and communities.



### SECTION 3

# Washington's Innovation Model

Excerpt from State Health Care Innovation Plan. Focus: Strategy 1, pages 41 - 49

# Three Transformative Strategies



s described, the state will achieve transformation through three strategies:

- 1. Drive value-based purchasing across the community, starting with the State as "first mover."
- 2. Improve health overall by building healthy communities and people by prioritizing prevention and early mitigation of disease throughout the life course.
- 3. Improve chronic illness care through better integration of care and social supports, particularly for individuals with physical and behavioral co-morbidities.

Each of these strategies is supported by the seven building blocks just discussed. Together, these strategies and building blocks are the foundation for attaining the ultimate goals of better health, better care, and lower cost for all state residents.

These three strategies rely on a balance of competitive and collaborative forces. Governmental regulation is used only where necessary to ensure an effective health care marketplace, remove outdated barriers, and enable flexibility in public purchasing to support the health care delivery system.

### Strategy 1

# Drive value-based purchasing across the community, starting with the State as "first mover"

Washington will move away from a largely fee-for-service reimbursement system to an outcomes-based payment system that delivers better health and better care at lower costs. Specifically, within five years, Washington aims to move 80 percent of its State-financed health care to outcomes-based payment and work in tandem with other major purchasers to move at least 50 percent of the commercial market to outcomes-based payment.<sup>1</sup>

To achieve the "affordable care" five-year state health care innovation aim, Washington State as a purchaser will take a lead role as "first mover" to accelerate market transformation. Washington will lead by example by changing how it purchases care and services in State-purchased insurance programs, starting with the Public Employees Benefits (PEB) program, and Medicaid procurement. To influence the commercial market, Washington in tandem with its own State-purchasing efforts will engage multiple payers, providers, and purchasers in aligning common value-based purchasing and payment and basic system requirements across the community, much as other sophisticated industries and sectors do today to eliminate duplication and waste and encourage innovation.

#### Spotlight on ...

#### **Outcome Measures**

Under Engrossed Substitute House Bill 1519, the Washington State Legislature directed the Department of Social and Health Services and the Health Care Authority to base contract performance assessment for Medicaidfunded mental health, chemical dependency, physical health and long term care services on common outcomes. Performance measure categories include clinical measures as well as improvements in client health status, wellness, meaningful activities and housing stability; reductions in involvement with the criminal justice system, avoidable costs, crisis services, jails and prison; and reductions in population-level health disparities. Contracts must include these performance measures by July 1, 2015. While these additional, non-clinical measures will initially be reflected in State procurement, they may also be applied more broadly to inform and assess community partnerships.

# Lead by example—Financing and purchasing across all State-purchased programs

As a major purchaser and payer for clinical and support services, Washington State has a considerable footprint in the marketplace. The State currently provides health insurance to more than 1.5 million people through PEB and Medicaid. As a state that has embraced the Medicaid expansion, this number will grow to over 1.8 million, or nearly a third of Washington's insured population between 2014 and 2017. Additionally, Washington State's Department of Labor & Industries (L&I) oversees and procures benefits to over 2 million workers, touching more than 120,000 injured workers in 2012.

Medicaid and PEB currently have separate procurement cycles, approval processes, and regulations. Washington will create a common framework to align timelines and approaches for the 2016 procurement cycle. Subject to approval by the PEB board and labor partner engagement, common strategies would require all contractors (including providers) providing State-financed health care benefits to do the following as a condition of receipt of State funds:

<sup>&</sup>lt;sup>1</sup> Washington recognizes that fee-for-service payment should not be eliminated, as it is appropriate for some forms for services (e.g., acute, low intensity).

- Measure and report common performance (cost and quality) measures. To measure the overall quality, value, and cost of State-financed health care, Washington will require active utilization of a common set of adult and pediatric measures, and the contribution of cost and quality data to the all-payer claims database, with public reporting on cost and quality performance.
- Implement evidence-based purchasing and guidelines recommended by the Dr. Robert Bree Collaborative and the Washington Health Technology Assessment (HTA) Program. Washington has an opportunity to build upon the momentum of two existing innovative programs in Washington: the Bree Collaborative and HTA. Both produce evidence-based standards of care and purchasing guidelines that, when implemented, move the state toward better health, better and more appropriate care, and lower costs.

As a major purchaser, Washington State will prioritize areas of high-variation, high-cost procedures and therapies and use its levers as a purchaser to drive innovation in current and future Bree areas of focus, including:

- Obstetric services
- Elective joint replacement
- End-of-life care and preferences
- Opioid use
- Spine/low back pain
- Cardiac care
- Participate in the Foundation for Health Care Quality's clinical quality improvement programs. The Foundation for Health Care Quality (FHCQ) administers quality improvement programs in cardiac, obstetrics, spine, and surgery. Using clinical performance data as a tool, FHCQ works with providers and hospitals to adopt evidence-based practices and improve the quality of care delivered. The State will work with its payer partners to require participating providers to participate in FHCQ clinical quality programs including, but not limited to, Clinical Outcomes Assessment Program (COAP), Obstetrics COAP, and Spine SCOAP.
- Enable use of a provided suite of high-quality decision aids and training. Research shows that use of evidence-based recommendations are heightened through person and family engagement, including shared decision making. The State will enable the use of high-quality decision aids beginning with the deployment of a new maternity care decision aid suite, and over time implementing additional suites in the various Bree topic areas.
- Implement a robust employee wellness program and other strategies for a healthier workforce. Washington State's employee wellness program will be significantly strengthened, including a new Diabetes Prevention Program and assistance for employees who want to quit using tobacco, along with additional recommendations regarding food procurement and breastfeeding policies. In his recent Executive Order, Governor Inslee directed a joint Health Care Authority and Department of Health "State Employee Health and Wellness" steering committee to develop a comprehensive wellness program for state employees for implementation January 2014. This executive order and implementation of subsequent policies could serve as a template for other non-State entities to implement similar policies.

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<sup>&</sup>lt;sup>2</sup> Executive Order No. 13-06 focuses on three key areas to improve health: providing wellness assistance to all state agencies so they can create their own effective wellness programs, incorporating wellness in state employee health insurance plans, and requiring state agencies to develop and implement healthy food and beverage policies. (http://governor.wa.gov/office/execorders/documents/13-06.pdf)

In addition, the State will pursue implementation of the following proven, value-based benefit design strategies starting in 2016. These examples represent initial models being planned; the capacity and capability of State contractors to design and implement innovations that move both State-purchased care and the market at large away from traditional fee-for-service payment will be a central feature in future procurement cycles:

- Apply reference pricing and tiered/narrowed networks. Reference pricing establishes a standard price for a drug, procedure, or service and then generally asks consumers to pay the charges beyond that amount. By 2016, Washington will implement reference pricing for joint replacements and colonoscopies in its PEB contracts, once approved. Both Safeway and CalPERS have demonstrated that well-designed reference pricing practices yield better quality care and savings for members and employers. Washington also will encourage its contractors to build tiered networks based on price and quality into its PEB program, subject to needed approval and ongoing dialogue with the State's labor partners. Cost differentials will be created so consumers share in the benefits of choosing to use providers delivering high-quality care at lower cost. Washington will model its tiered network approach upon Intel's tiered networks strategy.
- Move toward Accountable Care Organizations (ACOs) and alternative payment models for Medicaid and State employees. An accountable care organization (ACO) is characterized by a payment and care delivery model that seeks to tie provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients. Under ACOs, provider groups willing to be accountable for the overall costs, utilization, and quality of care for their patients are eligible for a share of the savings achieved by improving care. Washington is pursuing ACO models as an additional option for public employees and Medicaid.<sup>4</sup> During the development phase, Washington will look to innovative best practices and model programs such as L&I's center of excellence/ACO model called Centers for Occupational Health & Education (COHEs), created to help severely injured employees return to paid employment in an efficient, person-centered way. The State may consider adopting its care management strategies for its ACO models.

As Washington builds new payment methodologies, it will incorporate the efforts already moving forward with Washington's Federally Qualified Health Centers and Rural Health Clinics to build an alternative payment methodology that rewards innovation and outcomes over volume of services delivered, while enabling the enhancement of the critical services provided by these integral community based providers.

#### Serve as Multi-Stakeholder and Multi-Payer Market Organizer

In tandem with reforming its own procurement and implementing value-based design strategies in state-purchased programs, Washington State also will actively partner with other purchasers, payers, and providers to develop and adopt complementary strategies that enable rapid delivery system change.

"The Plan's core strategy for the State to take a lead role as "first mover" is vitally important to creating a strong primary care system, which is needed as the foundation for accountable care."

> - Cindy Robertson North Shore-Medical & Rural Health Clinic Association of Washington (RHCAW)

<sup>&</sup>lt;sup>3</sup> Cliff EQ, Spangler K, Delbanco S, Perelman N, Fendrick MA. A Potent Recipe for Higher-Value Health Care: Aligning Quality, Price Transparency, Clinical Appropriateness and Consumer Incentives (White Paper from CPR and The University of Michigan Center for Value-Based Insurance Design), (Sept. 2013) (http://www.catalyzepaymentreform.org/news-and-publications/cpr-in-the-news/94-news-and-publications).

<sup>&</sup>lt;sup>4</sup> HCA in consultation with Washington State's Office of the Insurance Commissioner, Office of the Attorney General, and Department of Health will review and determine the legal definition and licensure/regulatory status of ACOs to ensure that ACOs not engaged in insurance are not subject to insurance regulations.

Washington State will lead multi-stakeholder efforts to align and bring to scale current transformative payment and delivery strategies. Together, the strategies offer a cohesive pathway to facilitate action and achieve the various goals of the Innovation Plan.

#### Spotlight on ...

#### **Rural Health**

Vast portions of rural Washington State are challenged by provider scarcity; individuals who are more difficult to serve; physical and cultural distance; separation between primary care, specialists, and tertiary services; and long-term supports and services. Challenges are heightened even further by seasonal travel constraints and limited public transportation.

These factors also pose challenges to effective prevention and early intervention services known to reduce more severe health issues later on. While linkages to limited local resources are increasingly made through an efficient use of local workforce, the constraints of serving rural areas make it harder to support individuals holistically.

However, these barriers have also made rural communities adapt in innovative and collaborative ways. Rural systems are leaders in deploying community paramedicine and peer counselors, and using telemedicine and electronic support tools to engage individuals in achieving their own health goals.

The Innovation Plan aims to adopt and bring to scale these promising and best practices both to benefit rural communities and their urban counterparts. It also provides the necessary infrastructure and system supports to assist rural communities in ensuring their unique challenges are better recognized and supported.

Currently, individual purchasers, providers, and payers are engaged in a number of separate innovative payment and delivery reform efforts, by themselves or with other stakeholder groups. While Washington State and the market encourages innovation, the patchwork of alternative payment and delivery system reform models with differing and potentially contradicting measures and metrics can be burdensome to providers, and limiting in terms of effecting a sizeable share of the market. Recent stakeholdering efforts also indicate any one health reform strategy or implementation by any one stakeholder group in isolation is likely to be far less effective than aligned efforts implemented at the same time across multiple payers, purchasers, and provider groups.

Better alignment, however, must not devolve into one cookie cutter approach. Competition among payers and providers will continue to drive innovation even as collaboration moves forward on choice of metrics, measurement methodologies for processes of care, health outcomes, and performance reporting processes and structures.

# Implement the "Public/Private Transformation Action Strategy"

As a part of deliberations leading to development of the Innovation Plan, plan leaders asked the Washington Health Alliance (the Alliance)—formerly the Puget Sound Health Alliance—to convene approximately 50 purchasers, health plan, provider, and other thought leaders from across the state to develop overarching goals and objectives for transforming the health care delivery system in Washington state. Emphasis was placed on strategies that can be aligned and implemented across multiple payers, providers, and purchasers to significantly accelerate health care transformation within the state. The scope of this work primarily focuses on hospital and ambulatory care settings. Within the Innovation Plan's strategy regarding healthy people and communities, the State has proposed the development of a companion tool, which will strive to recognize and address the community determinants that often impact clinical success.

The "Public/Private Transformation Action Strategy"—a consensus product of a stakeholder process—sets an ambitious agenda for change that requires payers, providers, purchasers, and consumers to each change what they do in order to make it possible for all sectors to achieve better value and improved health. See Appendix C for the Public/Private Transformation Action Strategy.

Washington State will partner with the Alliance to organize "next phase" deliberations with and among multiple stakeholder groups to operationalize the plan. The next phase begins with securing more concrete commitments to the alignment process, defining what each stakeholder is prepared to contribute to implementation of the Public/Private Transformation Action Strategy, and what it needs from other stakeholders in order to do so in the following domains:

- Redesign health care delivery to reduce cost, improve quality, and improve patient experience;
- Restructure health care payment systems to support and reward providers who deliver high-value care;
- Restructure health care benefit design to enable and encourage patients to improve their health and use high-value health care services; and
- Educate and encourage state residents to improve their health and use high-value health care services.

As a first step, a critical mass of stakeholders will formally commit to the needed reciprocal actions to support the Transformation Action Strategy. Specifically:

- Purchasers commit to ensure they have programs and tools in place to educate, encourage, and facilitate the ability of employees/members to maintain and improve their health; to develop and use RFPs for evaluating and selecting health insurance or third-party insurance using specific value-based strategies; and to offer value-based benefit designs that clearly incentivize employees to maintain and improve their health, choose a primary care team to help maintain their health and coordinate their care, and use high-value providers and services for all aspects of their care.
- **Providers** commit to care coordination and redesigning delivery of health care to ensure high-quality, evidence-based health care is delivered, errors are minimized, and unnecessary care eliminated; to take responsibility for coordinating the services the patient receives during a full episode of care and further coordinate care for the patient; to work with purchasers/payers to design and use payment systems that appropriately tie payment to cost, quality, and patient experience outcomes; and to collect and publish information about the quality and cost of care offered by their institution and/or medical practice.
- Payers commit to work with providers to develop alternative payment methods and with purchasers on value-based benefit designs; to work with purchasers to develop and implement value-based benefit designs; and to routinely provide medical claims data to a statewide data collection mechanism.

See Appendix D for a sample commitment statement for purchasers, payers, and provider organizations.

Once goals and expectations of each group are firmly established, key stakeholders, collectively, will identify actionable opportunities for achieving a defined goal for reduction in health care spending. Criteria for prioritizing action steps and opportunities will be established.

Operationalizing the Transformation Action Strategy will be an iterative process; once

opportunities are identified, tactics will be implemented. Over time, progress will be systematically measured and the process will be evaluated and adjusted as new opportunities are identified. Washington State has historically provided anti-trust safe harbors/State action protections to promote multi-stakeholder innovations in health care and a similar approach could be utilized if necessary.

The State will monitor individual organizations' commitment to the Transformation Action Strategy by asking stakeholders to reaffirm their commitments in writing at various points. If commitment and interest in moving the market wanes, the State will consider using various levers such as legislation to implement strategies on a system wide level.

The ultimate goal of the Transformation Action Strategy is for all stakeholder groups to act consistently in mutually reinforcing ways across selected activities. The incentive for each stakeholder group to actively participate and stay engaged in the process will be the end result of a less fragmented, more efficient system.

# Align public and private purchasers on purchasing expectations and benefit design efforts

Washington will work with the Alliance's Purchaser Affinity Group to implement a suite of common, value-based purchasing and benefit design strategies to significantly drive the market as part of the Public/Private Transformation Action Strategy. Its membership includes a number of large purchasers such as Boeing, King County, the Alaska Air Group, and the Carpenters Trust of Western Washington, as well as a number of small and mid-size employers that, collectively, purchase health insurance for over 1.6 million covered lives, and are actively interested in implementing value-based benefit strategies. The Purchaser Affinity Group therefore can serve as a strong pacesetter to drive transformation through more aligned sourcing.

Common purchasing and benefit design strategies of interest include: a common RFP such as eValue8<sup>5</sup> coupled with value-based payment requirements such as those outlined in the Catalyst for Payment Reform request for information<sup>6</sup>, mandatory collection and reporting of a common statewide adult and pediatric measure set, voluntary participation of self-insured purchasers in the state's evolving all-payer claims database, and other transparency and purchasing strategies implemented as part of the State as a "first mover" strategies. Common strategies will activate and complement the Transformation Action Strategy work and will also include augmented focus on workplace safety and wellness programs. Washington's goal is to have agreement among purchasing entities that have at least 60 percent total market share by 2019.

<sup>6</sup> Aligned Sourcing. Catalyst for Payment Reform. Web. <a href="http://www.catalyzepaymentreform.org/2013-03-03-05-08-38/2013-03-05-10-43/aligned-sourcing">http://www.catalyzepaymentreform.org/2013-03-03-05-08-38/2013-03-05-10-43/aligned-sourcing</a>

<sup>&</sup>lt;sup>5</sup> eValue8<sup>™</sup> was created by business coalitions and employers like Marriott and General Motors to measure and evaluate health plan performance. eValue8<sup>™</sup> asks health plans probing questions about how they manage critical processes that control costs, reduce and eliminate waste, ensure patient safety, close gaps in care and improve health and health care. It is most appropriately used in the commercial marketplace, not Medicaid.

#### Stakeholder Readiness for Reform

The Public/Private Transformation Action Strategy is an ambitious change agenda requiring all sectors to change their practices. However, preliminary readiness signs are promising. On the whole, each stakeholder group—purchasers, providers, health plans, State government, and other health care organizations—is in agreement with the objectives, strategies and guiding principles of the Transformation Action Strategy, as evidenced by a survey conducted with over 60 thought leaders representing a critical mass of purchasers, payers and providers in Washington. In addition, each stakeholder group rated its readiness to implement the Transformation Action Strategy in the next five years as high (see figure below).

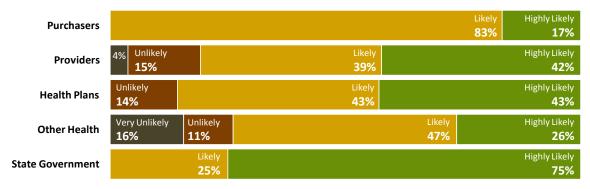
"We look forward to partnering with the State on strategies that will move the needle on creating better value and a more accountable delivery system. We also look forward to collaborating with providers, payers, and purchasers on additional strategies that will improve quality and reduce costs for the entire community."

 Joseph Gifford, MD, Chief Executive, ACO of Washington, Providence Health & Systems

This level of readiness positions Washington well to achieve its five-year state health care innovation aims for clinical sector transformation.

#### Most Indicate "Readiness to Implement" in the Next Five Years

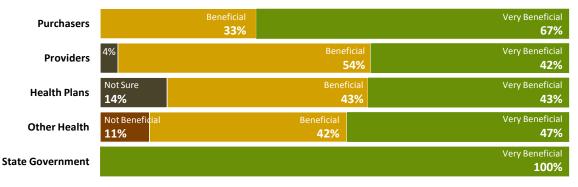
Q. How likely do you think it is that, within 5 years, your organization's policies and programs will be mostly consistent with the objectives and guiding principles?



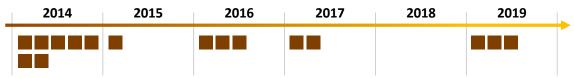
Stakeholders, speaking on their own behalf, are also optimistic about transformation, and that transformation will be beneficial to individual consumers.

#### Most Agree that Transformation will be Beneficial

Q. Speaking as an individual consumer of health care, rather than as part of an organization, do you believe that implementing the strategies and guiding principles would be beneficial to you?



### ROADMAP FOR HEALTH SYSTEM TRANSFORMATION Key Value-Based Purchasing Milestones



#### 2014

#### JANUARY

 Launch voluntary survey of all health plans on current levels of value-based payment

#### MARCH

 Public/Private Transformation Action Strategy implementation begins

#### APRIL

• PEB ACO RFI

#### JULY

- Establish value-based purchasing baseline across market
- 60 percent of market signs commitment pledges

#### SEPTEMBER

• Determine State-financed health care joint procurement schedule

#### DECEMBER

 Goals and expectations of each stakeholder group defined, prioritization areas of alignment selected

#### 2015

### JANUARY • All contractors providing Statefinanced health care report to

financed health care report to APCD, implement Bree and HTA, participate in FHCQ clinical QI programs

#### 2016

#### JANUARY

- Reference pricing in PEB for joint replacement/colonoscopies
- Common RFP elements implemented across purchasers
- ACO models in Medicaid and selfinsured

#### 2017

#### JANUARY

- More value based payment in state plans by 15 percentage points
- Entities with 60 percent market share agree on common strategies

#### 2019

- 80 percent of actions in Public/Private Transformation Action Strategy adopted across state
- 80 percent of state-financed health care value-based payment
- 50 percent of commercial market value-based payment



# DELIVERING VALUE

# How Value-Based Purchasing Improves Quality and Lowers Costs

ISSUED BY BUYING VALUE

Michael Bailit and Megan Burns | Bailit Health Purchasing

This purchasing guide is intended to assist private purchasers of health care coverage to switch from the traditional health care purchasing model of paying based on volume to the rapidly emerging model of paying based on value. Paying based on value is a proven technique of improving quality and lowering costs. It emphasizes purchasing strategies that that a) use alternative payment models that motivate and reward quality and efficiency and b) support delivery system reform. This guide describes the need for payment and delivery system reform, highlights the most promising reform ideas and then describes some steps health care purchasers can take to switch to purchasing on value.

Improving Quality and Lowering Costs in Health Care through Value-Based Purchasing Changing from paying for health care services based on volume to paying for health care based on value has long been a major goal for leading private health care purchasers and is becoming a spotlight issue for smaller purchasers. Resistance from providers, who largely benefit from being paid based on volume, has been a historical barrier to such reform.

Now, however, new Medicare payment reforms required by the 2010 Affordable Care Act (ACA), have paved the way to convincing providers to embrace value-based payment methodologies and to transform their processes for delivering care. By 2017, the Centers for Medicare and Medicaid Services (CMS) will attach nine percent of Medicare payments to some form of value purchasing. Another element of the ACA, "The Partnership for Patients," challenges private purchasers to use payments in support of ambitious safety improvement goals set by HHS. Private purchasers, both large and small, will need to capitalize on this opportunity to pay on value and to avoid the cost-shifting that providers often claim accompanies Medicare payment.

Fee-for-Service Payments and Siloed Care Are Bad Business

In the current fee-for-service-based health care system, providers are paid for each service performed, without regard to whether the service improves the health status of the patient. In fact, providers are paid the same amount—if not more—for services performed when the patient is *harmed* by treatment or if no change in health status occurs as the result of a service. Simply put, the more services provided, the more the provider is paid. In virtually no other field do we purchase without any regard for value. Aside from being a costly way to pay for care and one that does not safeguard the patient or consumer, this payment model results in overtreatment which is often harmful to the patient. While patients often believe that more care is better care, there is extensive evidence that this simply is often not true.

In addition, the fee-for-service payment model provides neither motivation nor support for providers to coordinate care, leaving it up to patients to navigate through various "silos" of care where providers focus on just one aspect of a patient's health, often with no one clinician treating the patient as a whole person. This lack of integration and coordination leads to poor quality and is also a contributing factor to higher costs.

What Does it Mean to "Pay for Value"?

### Partnership for Patients

Two goals of the Partnership for Patients:

- Keep patients from getting injured or sicker. By the end of 2013, preventable hospital-acquired conditions would decrease by 40% compared to 2010. Achieving this goal would mean approximately 1.8 million fewer injuries to patients with more than 60,000 lives saved over three years.
- Help patients heal without complication. By the end of 2013, preventable complications during a transition from one care setting to another would be decreased so that all hospital readmissions would be reduced by 20% compared to 2010. Achieving this goal would mean more than 1.6 million patients would recover from illness without suffering a preventable complication requiring re-hospitalization within 30 days of discharge.

For more information or to join the Partnership for Patients go to: www.healthcare.gov/compare/ partnership-for-patients/index.html If rewarding health care providers for simply delivering more (and more expensive) services yields higher costs and care that is not always better and sometimes harmful, how else might purchasers design their health benefit purchasing strategies?

Paying for value entails buying health benefits through new mechanisms for payment, which in turn will motivate and reward providers for better ways of delivering health care services. In simple terms, require your insurer or administrator to change provider payment incentives and delivery models, and the delivery system will deliver more efficient and effective care.

Paying for value is not a new idea.<sup>3</sup> It is one that has evolved over time, however. First generation efforts introduced the idea of offering providers bonuses for superior quality with respect to preventive care measures. Second generation efforts, such as CMS' new Hospital Value-Based Purchasing initiative, place provider payments at risk, so that providers can experience lower payments if their performance is sub-par, and higher payments if their quality is strong.<sup>4</sup>

The third generation of paying-for-value strategies seeks more fundamental, structural reforms in the way care is delivered—away from traditional fee-for-service models and toward integrated systems of care.

The unceasing rise of health benefit costs has caused employers, governments and insurers to take more aggressive action to drive change and support these more fundamental reforms. At a time of economic challenge, health care benefits can no longer be an annual employer budget buster.

The sections that follow describe paying-for-value strategies that address *payment reform* and *delivery system reform*. The ACA calls for widespread use of these two reform strategies in Medicare, Medicaid and extending them to private health care coverage.

#### What is Payment Reform?

The principle goal of payment reform is to move away from the current payment system that pays providers for each service performed, toward a payment system that encourages the delivery of care consistent with scientific findings about what works, rewards improved health status and incentivizes providers to spend health benefit purchaser dollars wisely. While aligning payment incentives with desired performance is essential if a purchaser is to pay for value, it requires a degree of technical expertise. The operational details of any new payment model must be worked out with insurers (or plan administrators) and plans, but purchasers need to be clear at the start on what they want and expect from each party. Here are examples of several alternative payment models being employed by insurers and providers in a variety of care settings.

• Shared Savings. Shared savings is a payment strategy that offers incentives for providers to reduce health care spending for a defined patient population (e.g., a group of employees) by offering the providers a percentage of net savings realized as a result of their efforts. Under this payment model, providers are rewarded if they can manage health care services to come in below a "budget." The budget represents expected costs related to a comprehensive set of covered services for a group of patients who receive their primary care from the provider organization. The budget can be defined prospectively. This involves forecasting using past claims experience information. Alternatively, the budget can be defined retrospectively by comparing provider performance in managing cost to the experience of all other providers contracted with the payer. In this latter scenario, a provider who performs better than the average for all of the other providers is viewed as coming in "below budget", and thus generating savings.

Shared savings models are attractive to employer purchasers and to insurers because they introduce an incentive to manage costs within a budget that simply does not exist in traditional volume-incenting payment arrangements. This incentive can cause providers to reconsider their test-ordering patterns, their referral patterns, and steps they can take to make themselves more accessible (to prevent avoidable emergency department visits and hospital admissions) and to improve coordination of care (to prevent avoidable hospital readmissions).

Shared savings models are also attractive to providers who are currently only contracted with payers under fee-for-service arrangements. Shared savings arrangements offer an opportunity for the provider to share with the payer (or self-insured employer) in any savings generated through the provider's efforts, without the provider assuming any financial risk should expenditures come in above the budget.

## Case Study: Shared Savings

A cooperative multi-payer, multi-provider medical home initiative in the Northeast region of Pennsylvania involves a shared savings opportunity for participating primary care practices with two regional insurers: Blue Cross of Northeastern Pennsylvania and Geisinger Health Plan. During the first 15 months of implementation in 2009 and 2010, practices were eligible for up to 50% of the savings that they generated relative to prospectively defined budgets established independently by each insurer for their commercial and Medicare Advantage lines of business. The savings were calculated with risk adjustment and net of supplemental payments that the practices received during the time period

to support their medical home operations. In order to share in the savings, practices were contractually obligated to meet at least nine of 14 performance criteria, including measures such as improvement in the percentage of total population diabetic patients with HbA1c (blood sugar) below 9%, improvement in the percentage of hypertensive patients with blood pressure <140/90 and the percentage reduction in the practice's 30-day hospital readmission rate. The insurers concluded their evaluations in 2011 and made savings payments to those practices that generated net savings and performed well relative to the performance criteria.

# The four types of bundled payments:

- 1. Inpatient procedure-based (e.g., hip replacement)
- Outpatient procedure-based (e.g., colonoscopy)
- Inpatient acute medical care (e.g., treatment of a heart attack)
- 4. Chronic care (e.g., annual treatment for a patient with diabetes)

- Shared savings payment models are in use by a variety of insurers and providers but are still too new to draw definitive conclusions about their results. This payment model is common among key delivery reform efforts like the "accountable care organization" (ACO) and the medical home.<sup>6</sup>
- **Bundled Payment.**<sup>7</sup> Sometimes referred to as "episode-based payment," a bundled payment is a payment for all of the services needed by a patient, across multiple care providers and possibly multiple care settings, for a procedure or chronic condition for a defined time period. Participating providers may include hospitals, physicians and other providers who have responsibility for an inpatient care episode that is defined as extending through a post-discharge rehabilitation phase. If a contracted provider(s) (e.g., a hospital and its affiliated professionals) can manage cost and quality by reducing avoidable complications, it can retain the difference between the bundled payment and what the costs incurred for service delivery. However, if the provider(s) fail to reduce avoidable complications, it runs the risk of the payments being less than the costs incurred to deliver the services.

There are some other bundled payment efforts under way beyond those using the PROMETHEUS Payment model. For example, CMS announced in August 2011 the Bundled Payments for Care Improvement initiative. Applicants for these models were invited to define the episode of care as the acute care hospital stay only (Model 1), the acute care hospital stay plus post-acute care associated with the stay (Model 2), or just the post-acute care, beginning with the initiation of post-acute care services after discharge from an acute inpatient stay (Model 3). Under the fourth model, CMS would make a single, prospective bundled payment that would encompass all services furnished during an inpatient stay by the hospital, physicians and other practitioners. In addition, private insurers have launched bundled payment efforts as have the Medicaid programs in Arkansas and Massachusetts.

# Case Study: Bundled Payments

PROMETHEUS Payment® model is a new form of bundled payment being tested among many purchasers across the country. The PROMETHEUS Payment system assigns a dollar value or an "evidence-informed case rate" (ECR) to an entire episode of care for a condition or a procedure. The episode of care includes treatments and tests that are usually recommended as clinical guidelines for the condition or procedure. The provider(s) who treat the patient are eligible to receive the ECR as payment in addition to a quality bonus based on patient outcomes and the avoidance of common, yet preventable complications. PROMETHEUS Payment currently has available ECRs for 20 different episodes of care.8

PROMETHEUS has been implemented in three pilot programs and is currently being put into place in additional sites. The first pilot was implemented by HealthPartners, a Minnesota non-profit

HMO that also operates multi-payer clinics. The pilot included only services related to acute myocardial infarction and ran in four of HealthPartners's provider networks in 2009. The second pilot was implemented beginning in 2010 by the Employers' Coalition on Health (ECOH), a non-profit employer coalition-based PPO headquartered in Rockford, Illinois and is intended to run through 2012. This pilot is at least initially focused on services related to diabetes, hypertension and coronary artery disease. The third pilot began in Pennsylvania in the first quarter of 2010 through the collaborative efforts of Independence Blue Cross and Crozer-Keystone, the latter a non-profit integrated provider. This pilot has initially focused on hip and knee replacement procedures. While still being tested, early results of the PROMETHEUS Payment model are proving to be promising. To obtain more information on the PROMETHEUS Payment model, visit: www.hci3.org.

• Global Payment.<sup>10</sup> A global payment is a comprehensive payment to a group of providers that is intended to account for most or all of the expected cost of care for a group of patients for a defined time period. While generally synonymous with the term "capitation," advocates of the concept use the term "global payment" to distinguish its design and application from early capitation models which were less sophisticated and under which some providers suffered financial losses. Today, global payment design and implementation strategies are improved over earlier efforts. For example, many insurers have added forms of risk-adjustment (to account for the relative illness burden of the population) and risk sharing (to protect the provider if costs are higher than expected) so that providers don't face potential catastrophic financial loss and the incentive to skimp on care, which was a common concern with early forms of capitation arrangements.

Many other global payment pilots and broad-based implementations have been occurring and will occur across the country in the coming months. <sup>14</sup> Of special note is the CMS Pioneer ACO model involving 32 organizations, all being paid using a global payment arrangement in lieu of traditional fee-for-service payment beginning in 2012. <sup>15</sup> For more information about Pioneer ACOs, see the inset below.

## Case Study: Global Payment

Recent evaluations of new global payment arrangements have yielded encouraging results, including for CalPERS, the California Public Employees' Retirement System. Through Blue Shield of California, CalPERS offered its Sacramento-area employees and their families a limited-network HMO comprised of a large physician group and a multi-hospital system. The limited-network HMO was created with a promise of no cost increase for one year, and an insurer/provider target of a \$32 per member, per month cost *decrease*. The insurer and two provider groups

agreed to accept the global payment risk jointly, and to share in any savings. Over 41,000 employees and dependents enrolled.<sup>11</sup> Through October 2010, the organizations' combined efforts led to a 17 percent reduction in patient re-admissions; a half-day reduction in the average patient length of stay; a nearly 14 percent drop in the total number of days patients spend in a facility; and a 50 percent reduction in the number of patients who stay in a hospital 20 or more days.<sup>12</sup> The final result of the effort was \$20 million in savings for the care of 41,500 patients.<sup>13</sup>

#### What is Delivery System Reform?

The principal goal of delivery system reform is to move away from a system where individual providers care for patients in "silos" to a more coordinated and evidence-based approach where providers collaborate on the patient's behalf to recommend and provide care that is known to improve the health status of a patient. Delivery system reform and payment system reform go hand-in-hand, but can be advocated for separately.

Delivery system reform is on display in two integrated care models now under way in nearly every state. "Medical home" is an innovation focused on the transformation of primary care that has been in ever-growing implementation since 2008. Accountable care organizations represent a more far-reaching delivery system innovation that began to spread in 2010, spurred by the ACA. Each is described below.

• Medical Home. A medical home (alternatively, "Patient-Centered Medical Home") is a primary care practice that organizes and delivers care in a fundamentally different manner than is currently commonplace. <sup>16</sup> Medical homes are required to master core competencies, including a focus on care coordination and care management of chronic conditions using a team-based approach to manage all care for a patient. Medical homes commit to enhancing access to care

(e.g., seeing patients during non-traditional hours), engaging the patient in self-management, practicing evidence-based care and using data to test and assess improvements in care delivery.

In order to transform how they operate, primary care practices often are provided some form of technical assistance. The assistance can range from the provision of external certification standards from an organization such as NCQA or JCAHO, to more intensive supports such as coaching by an expert in medical home transformation and/or participating in a learning collaborative with other practices. Many payers require that practices obtain recognition from an external accreditation organization, although the impact that such recognition has on practice medical home performance remains uncertain.

Medical homes often receive supplemental payments to cover the costs of traditionally non-reimbursed medical home services in addition to traditional fee-for-service payment. In increasing instances, medical homes are also afforded the opportunity to share in any savings that they generate, such as in the Northeast Pennsylvania example cited earlier. Incentives for high quality and efficiency are often also part of the payment model, either as a stand-alone bonus incentive or integrated into the shared savings methodology, as has been the case in Northeast Pennsylvania.

## Case Study: Medical Home

One medical home initiative is the Ambulatory Intensive Caring Unit (A-ICU) in Atlantic City, New Jersey. The A-ICU is a medical home-type model that focuses on the most chronically ill patients. The union, UNITE HERE, and the local health care system partnered with foundation and consulting resources to form these intensive primary care clinics. To encourage participation in the A-ICU, the union members with the highest health care costs were given free access to physicians and prescriptions. Within the first year, the union experienced a 25 percent drop in costs.<sup>18</sup>

Similar programs exist for casino workers in Las Vegas and for Boeing employees in Seattle and are now being established in several other states after the results of the UNITE HERE experience and those of Boeing became public. The nature of the Boeing A-ICU has been described as follows:

"Each [A-ICU]-enrolled patient received a comprehensive intake interview, physical exam, and diagnostic testing. A care plan was developed in partnership with the patient. The plan was executed through intensive in-person, telephonic and email contacts — including frequent proactive outreach by an RN, education in self-management of chronic conditions, rapid access to and care

coordination by the [A-ICU] team, daily team planning huddles to plan patient interactions, and direct involvement of specialists in primary care contacts, including behavioral health when feasible. Mercer and Renaissance provided administrative and clinical support, respectively, including weekly telephone check-ins with the RN care managers for joint problem solving. Quarterly collaborative meetings were held with all teams and organizational partners to share learnings. Qualitatively observed gains included refinement of care managers' patient engagement skills, more proactive care and care coordination, and easier patient access to care providers."<sup>19</sup>

Most medical home initiatives, however, are *not* focused only on care for the most chronically ill patients. Instead, they seek to affect total practice transformation for *all* patients, balancing the need for intensive care management for the most ill patients in the practice with attention to preventive care and risk prevention with the balance of a practice's patient population. Medical home initiatives that focus on the sickest patients are most likely to generate a short-term ROI, but are unlikely to avoid other future costs that will be generated through avoidable lifestyle-induced chronic illness that has yet to develop or to become severe.

There are over two-dozen multi-stakeholder medical home initiatives alone across the country, 17 with many others that are single-payer-based. Most of these practice efforts are supported with enhanced payments from commercial and/or public payers. The multi-stakeholder initiatives are the result of the collaborative efforts of payers, providers, employers and other interested stakeholders. Payers participating in multi-payer initiatives on a pilot basis have sometimes decided to implement their own broader initiative following successful pilot experiences.

To learn if there is a medical home pilot in your area or for more information, see: www.pcpcc.net/.

### Pioneer ACO Model

The CMS Innovation Center launched a pilot to test the quality and financial impact of payment arrangements of ACOs. There are 32 integrated care organizations from across the country from large organizations such as the University of Michigan and Partners Health to smaller organizations like Gensys PHO in southeastern Michigan. These 32 organizations will test global payment models over three years and will be held to strict quality measures. For more information on the three year model and a list of the 32 organizations, see:

http://innovations.cms.gov/ documents/pdf/PioneerACO-General\_ Fact\_Sheet\_2\_Compliant\_2.pdf • Accountable Care Organization (ACO).<sup>20</sup> The accountable care organization concept was conceived relatively recently,<sup>21</sup> but builds upon years of past experience with medical groups contracting with health insurers to care for populations of patients on a global payment basis. The idea received a significant boost in 2010 when the ACA created a new Medicare ACO program that began January 1, 2012. This ACA provision prompted frenzied activity among many providers to position themselves to become ACOs, even before the rules of the Medicare ACO program were defined. (For more information on Pioneer ACOs, see inset.)

An accountable care organization is a local provider entity that agrees to assume responsibility for all of the health care and most if not all of the related expenditures for a defined population of patients, with payment typically linked in some fashion to performance on resource management and quality. The provider entity can take many different forms, including a physician group practice, a physician independent practice association and an integrated delivery system comprised of hospitals, physicians and other professionals. Payment is typically in the form of a shared savings or a global payment arrangement.

The accountable care organization concept builds upon that of a medical home. In fact, many believe that an ACO cannot clinically or financially succeed without a foundation comprised of medical homes. <sup>22</sup> The ACO concept extends beyond the medical home in that it formally links the full continuum of care to the medical home, and provides an opportunity for collaboration and improved continuity as a patient moves throughout the delivery system.

### Case Study: Accountable Care Organization<sup>23</sup>

The largest insurer in Massachusetts, Blue Cross Blue Shield of Massachusetts (BCBSMA), implemented its Alternative Quality Contract (AQC) with provider groups beginning in 2009 to reward high quality, appropriate and efficient care by supporting transformation to a health care system in which financial and clinical goals are aligned. Like many global payment arrangements, the "upside" and "downside" risk (i.e., potential gains and losses, respectively) is shared to protect both parties.

BCBSMA established the AQC as an alternative voluntary model of payment for provider organizations. The strategy has four central components:

- 1. Integration across the continuum of care. Contracted providers assume clinical and financial responsibility for all care required by a patient, and organizing and coordinating that care whether it is delivered by the contracted provider or another entity.
- 2. Accountability for performance measures (ambulatory and inpatient). The ability of a contracted provider to financially succeed under the AQC is linked to the ability to earn incentives worth up to 10% of the global payment. These incentives are tied to inpatient and outpatient performance measures. This potential incentive payment is in addition to earnings that can result from reduction of overuse and misuse and safeguards against the possibility of under-treatment, thus encouraging physicians to deliver the best care possible.

- **3. Global payment for all medical services (health statusadjusted).** Contracted providers are paid a PMPM amount to cover all medically needed services. The base payment is determined based upon historical health care cost expenditure levels, and is adjusted for health status. The global budget is adjusted annually for a negotiated inflation factor. The level of risk can vary by provider group, but within a group, the upside risk is always equal to the downside risk.
- **4. Sustained partnerships (five-year contract).** Because BCBSMA seeks long-term, redefined relationships through the AQC, providers must commit to a five-year agreement.

BCBSMA reported that providers were eager to contract with BCBSMA in this manner, believing that that it would be advantageous to participate in a reform initiative on a smaller scale before facing broader changes in payment and expectations regarding care delivery.

The first published independent evaluation of the AQC contract reported that with regard to spending on health care services, there was a 1.9% savings in Year 1 relative to a control group, an increase of 2.6 percentage points in the percentage of patients meeting chronic care quality thresholds, an increase of 0.7 percentage points in the percentage of patients meeting pediatric care thresholds, and no significant improvement in adult preventive care. Because BCBSMA provided infrastructure support and paid quality bonus payments, overall spending exceeded the value of the 1.9% savings.<sup>24</sup>

How Private Purchasers Can Switch to Paying on Value<sup>25</sup> Moving from paying for volume to paying for value requires changes for purchasers, payers and providers. These changes are often coupled with incentives for consumers and patients to use higher value providers, like those within medical homes or ACOs. The following five steps are suggestions payers can use to help facilitate the switch to paying on value.<sup>26</sup>

1. Make payment and delivery system reform a requirement with contracted insurers, plans and providers. a.) Find out what the insurer (or plan administrator) is already doing or planning through the Catalyst for Payment Reform Request for Information (see inset), National Business Coalition on Health eValue8 Survey or simple direct inquiry. b.) Specify the payment and/or delivery model(s) of greatest interest, and negotiate into contracts with insurers and plans (see Catalyst for Payment Reform model contract language at www. catalyzepaymentreform.org/Model\_Contract\_Language.html. c.) Specify the measures of quality performance and cost effectiveness you want, considering alignment with those established by Medicare, and require timely reports of data. d.) Require a rigorous process for evaluating cost and clinical effectiveness, as well as assessing lessons learned and applying them in both payment and delivery system model refinement.

# Catalyst for Payment Reform (CPR)

CPR's health plan Request for Information (RFI) on payment reform allows employers and other health care purchasers to query health plans about their current provider payment practices and plans for future reforms. Specifically, the RFI will help purchasers gather information on the amount of total physician and hospital compensation that is tied to performance through various value-based purchasing programs. The RFI embodies a strategic menu of reform areas that gives health care purchasers and insurers the capacity to plan, implement and evaluate payment policies that promote high-quality and cost-effective care.

www.catalystpaymentreform.org/ RFI.html

- 2. Team up. It is a large task to drive change in health care payment and delivery systems. Individual purchasers would be well served by trying to advance change with other individual purchasers or with coalitions such as those comprising the National Business Coalition on Health, or with multi-stakeholder coalitions that exist in some regions, representing the voices of employers, consumers, providers and insurers. Catalyst for Payment Reform is developing two new important resources for purchasers a National Compendium on Payment Reform and a National Scorecard on Payment Reform that are projected to be available in March 2013. The National Business Group on Health, Catalyst for Payment Reform, and the Pacific Business Group on Health are other key organizations for purchasers to consider joining. While some purchasers should be aware of anti-trust law when working in concert with other purchasers, effective value-based purchasing can be implemented well within the law. (See anti-trust guidelines in toolkit here.)
- 3. Encourage members to choose less costly providers and models of insurance. Large health care purchasers can advocate for the use of less costly, but high quality, models of insurance that favorably structure cost-sharing arrangements of insurer products so consumer out-of-pocket costs are limited. For example, purchasers can eliminate or lower co-payments for preventive health care and care within a medical home. Union leaders can encourage their membership to participate in health benefit programs that influence consumer use of costly care to ensure adequate enrollment and sustainability of the model.
- 4. Serve as a vocal advocate for reform. Value-based purchasers need to be vocal advocates for reform to help encourage change throughout the marketplace. The Partnership for Patients, a public-private partnership that encourages delivery system reform to improve patient-safety, is being supported by many value-based purchasers. For more information on the Partnership for Patients and how to join, see inset. In addition, some state legislatures play a significant role in facilitating and shaping payment and delivery system reform. Legislators need to hear the voice of purchasers and will respond if the voice is insistent, multiplied and repeated.
- 5. Be patient. Payment and delivery reform will take time to be properly implemented, and initial efforts won't all be effective. Excessive zeal on the parts of health care purchasers, insurers and providers will likely result in early failure. Patience and caution will be necessary to implement, test, and perfect the payment and delivery system model changes.

#### Conclusion

Pay-for-value strategies, like those identified in this guide, help purchasers use their influence to improve health care access and quality and reduce costs. There is no "one-size-fits-all" approach, but with the basic knowledge of delivery system and payment system reform efforts, purchasers can better understand which models will work best for the health care needs of their members and within their local health care marketplace. Purchasers can then apply sound and proven strategies to improve the value that they receive for their benefit dollars.

#### **Endnotes**

- <sup>1</sup>Brownlee S. <u>Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer.</u> Bloomsbury Publishing USA, 2008.
- <sup>2</sup> Fisher E. "More Medicine is Not Better Medicine". New York Times, December 1, 2003.
- <sup>3</sup> Maxwell J. et al., "Managed Competition in Practice: 'Value Purchasing' by Fourteen Employers," *Health Affairs* (May/June 1998): pages 216–226.
- <sup>4</sup> "Administration Implements Affordable Care Act Provision to Improve Care, Lower Costs", US Department of Health and Human Services news release, April 29, 2011. See <a href="https://www.hhs.gov/news/press/2011pres/04/20110429a.html">www.hhs.gov/news/press/2011pres/04/20110429a.html</a>. Accessed December 26, 2011.
- <sup>5</sup> Bailit M and Hughes C. Key Design Elements of Shared-Savings Payments Arrangements, The Commonwealth Fund, August 2011. www.commonwealthfund.org/Publications/Issue-Briefs/2011/Aug/Shared-Savings-Payment-Arrangements. aspx.
- <sup>6</sup> For additional detailed case studies of shared savings arrangements, see Bailit MH, Hughes C, Burns M and Freedman D. "Shared Savings Payment Arrangements: Case Studies" The Commonwealth Fund, New York, NY, in process.
- <sup>7</sup> "Implementing Bundled Payment" Catalyst for Payment Reform Action Brief, April 2011. www.catalyzepaymentreform. org/uploads/CPR\_Action\_Brief\_Bundled\_Payment.pdf.
- 8 See www.hci3.org/what\_is\_prometheus/framework/evidence\_informed\_case\_rates for detailed information regarding the 20 ECRs. Accessed December 26, 2011.
- 9 See http://innovations.cms.gov/initiatives/bundled-payments/ for more information regarding this Medicare initiative.
- 10 "Implementing Global Payment" Catalyst for Payment Reform Action Brief, April 2011. www.catalyzepaymentreform.org/uploads/CPR\_Action\_Brief\_Global\_Payment.pdf.
- "I" "Implementing Global Payment" Catalyst for Payment Reform Action Brief, April 2011. www.catalyzepaymentreform.org/uploads/CPR\_Action\_Brief\_Global\_Payment.pdf.
- <sup>12</sup> "Integrated Health Care Pilot Exceeds Expectations", CalPERS press release, April 12, 2011. See www.calpers.ca.gov/index.jsp?bc=/about/press/pr-2011/april/integrated-health.xml. Accessed December 26, 2011.
- <sup>13</sup> Helfand D. "Healthcare Partnership pays big dividends" Los Angeles Times, August 2, 2011.
- <sup>14</sup> Delbanco SF et. al. "Promising Payment Reform: Risk-Sharing with Accountable Care Organizations" The Commonwealth Fund, July 2011. www.commonwealthfund.org/Publications/Fund-Reports/2011/Jul/Promising-Payment-Reform.aspx.
- ${}^{15}\,See \, http://innovations.cms.gov/documents/pdf/PioneerACO-General\_Fact\_Sheet\_2\_Compliant\_2.pdf \, for \, more \, information \, regarding \, the \, Pioneer \, ACO \, program. \, \, Accessed \, December \, 26, 2011.$
- <sup>16</sup> "Establishing Medical Homes" Catalyst for Payment Reform Action Brief, April 2011. www.catalyzepaymentreform.org/uploads/CPR\_Action\_Brief\_PCMH.pdf.
- <sup>17</sup> See www.pcpcc.net/pcpcc-pilot-projects for information regarding multi-stakeholder medical home initiatives. Accessed December 26, 2011.
- <sup>18</sup> Gawande, A. "The Hot Spotters." *The New Yorker* January, 2011.
- <sup>19</sup> See http://healthaffairs.org/blog/2009/10/20/are-higher-value-care-models-replicable/.
- <sup>20</sup> "Implementing Accountable Care Organizations" Catalyst for Payment Reform Action Brief, April 2011. www.catalyzepaymentreform.org/uploads/CPR\_Action\_Brief\_ACO.pdf.
- <sup>21</sup> Fisher ES et. al. "Creating Accountable Care Organizations: The Extended Hospital Medical Staff: *Health Affairs*, Vol. 26, pp. w44-w57, December 5, 2007.
- <sup>22</sup> Patient-Centered Primary Care Collaborative, in partnership with The Commonwealth Fund and the Dartmouth Institute for Health Policy and Clinical Practice. "Better to Best: Value-Driving Elements of the Patient Centered Medical Home and Accountable Care Organizations, March 2011, Washington SC.
- <sup>23</sup> Op Cit., Delbanco, and Bailit M and Hughes C. "Physician Payment Reform" in "National Business Coalition on Health Value-Based Purchasing Guide." National Business Coalition on Health, Washington, DC, January 2011.
- <sup>24</sup> Song A et. al. "Health Care Spending and Quality in Year 1 of the Alternative Quality Contract", New England Journal of Medicine, July 13, 2011.
- <sup>25</sup> Bailit M and Hughes C. "Physician Payment Reform" in "National Business Coalition on Health Value-Based Purchasing Guide." National Business Coalition on Health, Washington, DC, January 2011.
- $^{26}$  Purchasers with an understanding of their population characteristics can specify certain improvement expectations, but to get started on paying on value, it is not necessary to have a full analysis of a purchaser's population.
- <sup>27</sup> For many of Medicare's new payment initiatives (Shared Savings and Pioneer ACO) a common set of performance measures have been identified. For more information go to: www.cms.gov/sharedsavingsprogram/37e\_Quality\_Measures\_Standards.asp#TopOfPage.



#### **Overview of Products**

The Bree Collaborative has developed two products for total knee and total hip replacement (TKR/THR) surgeries:

- 1. Warranty adopted at July 18<sup>th</sup>, 2013 Bree meeting

  The Warranty defines complications and time-frames after surgery during which those complications should be attributed to the original surgery. The purpose of the Warranty is to track clinical and financial accountability for the extra care needed to diagnose, manage, and resolve those complications.
- Bundle adopted at November 21<sup>st</sup>, 2013 Bree meeting
   The Bundle defines expected components of pre-operative, intra-operative, and post-operative care needed for successful TKR/THR surgery. The Bundle includes both clinical components and quality standards.
  - a. Clinical components:
    - Documentation of disability due to osteoarthritis despite conservative therapy
    - Documentation of fitness for surgery
    - Repair of the osteoarthritic joint
    - Post-operative care and return to function
  - b. Quality standards:
    - Appropriateness
    - Evidence-based surgery
    - Rapid return to function
    - Patient care experience
    - Patient safety

The warranty is a stand-alone product that does not include quality standards other than accountability for complications. The bundle includes both clinical components and quality standards. The Bree Collaborative recommends that the elements of the bundle not be separated since each component is necessary to ensure the appropriateness, safety, and quality of joint replacement surgery.

Providers are responsible for gathering all of the necessary documentation to demonstrate that bundle conditions and quality standards have been met. An appeal process should be in place for cases in which a provider recommends proceeding with TKR/THR surgery for a patient who does not meet the appropriateness standards.

The Bree Collaborative will review the warranty and bundle every three years and update as needed.



**Bundle: Clinical Components for Total Knee or Total Hip Replacement Surgery** 

#### I. DISABILITY DUE TO OSTEOARTHRITIS DESPITE CONSERVATIVE THERAPY

Prior to surgery, candidates for joint replacement therapy should have clearly documented disability and evidence of osteoarthritis according to standardized radiographic criteria. Unless highly disabling osteoarthritis is evident at the time the patient first seeks medical attention, a trial of conservative therapy is appropriate.

#### A) Document disability

- 1. Document disability according to Knee Osteoarthritis Outcome Score (KOOS) or Hip Osteoarthritis Outcome Score (HOOS).
- Document self-reported productivity loss related to usual activity (absenteeism and presenteeism).

#### B) Document osteoarthritis

1. Review standard x-ray of the affected joint and interpret according to Kellgren-Lawrence scale. Total joint replacement therapy generally requires a grade of 3 or 4.

# C) Document conservative therapy for at least three months unless symptoms are severe and x-ray findings show advanced osteoarthritis

- 1. The length of time and intensity of conservative therapy will vary by patient-specific factors such as severity of symptoms and ability to engage actively in treatments such as physical therapy. The Bree Collaborative recommends patient-customized conservative treatments for at least three months, focusing on improving functionality and helping patients adapt to persisting functional limitations.
- 2. Trial of one or more of the following physical measures:
  - Strengthening exercises
  - Activity modification
  - Assistive devices
  - Bracing if judged appropriate
  - Weight loss, if indicated
- 3. Trial of one or more of the following medications:
  - o Acetaminophen
  - o Oral non-steroidal anti-inflammatory drugs
  - Topical non-steroidal anti-inflammatory drugs
  - Intra-articular injection of corticosteroids

#### D) Document failure of conservative therapy

- Document lack of improvement in pain and/or function as indicated by re-measurement of HOOS/KOOS scores.
- 2. Document x-ray findings supporting need for surgery:
  - o Grade 3 or 4 on Kellgren-Lawrence scale, if not previously documented



- Avascular necrosis of subchondral bone with or without collapse
- Angular deformity of limb with threatened stress fracture
- 3. Document informed decision making *after* maximal effort and benefit of conservative treatment.

#### II. FITNESS FOR SURGERY

Prior to surgery, candidates for joint replacement therapy should meet minimal standards to ensure their safety and commitment to participate actively in return to function. If a provider chooses to proceed with TKR/THR surgery on a patient who does not meet these standards, then informed consent, individual review, and preauthorization are required.

#### A) Document requirements related to patient safety

- 1. Patient should meet the following minimum requirements prior to surgery:
  - o Body Mass Index less than 40
  - o Hemoglobin A1c less than 8% in patients with diabetes
  - o Adequate peripheral circulation to ensure healing
  - Adequate nutritional status to ensure healing
  - Sufficient liver function to ensure healing
  - o Control of opioid dependency, if present
  - o Avoidance of smoking for at least four weeks pre-operatively
  - Absence of an active, life-limiting condition that would likely cause death before recovery from surgery
  - Absence of severe disability from a condition unrelated to osteoarthritis that would severely limit the benefits of surgery
  - Absence of dementia that would interfere with recovery performing TKR/THR surgery for a patient with such dementia requires preauthorization, informed consent of a person with Durable Power of Attorney, and a contract with the patient's care provider

#### B) Document patient engagement

- 1. Patient must participate in Shared Decision-making with WA State-approved Decision Aid.
- 3. Patient must designate a personal Care Partner. 1
- 4. Patient and Care Partner must actively participate in the following:
  - Surgical consultation
  - Pre-operative evaluation
  - Joint replacement class and/or required surgical and anesthesia educational programs
  - In-hospital care
  - o Post-operative care teaching

<sup>&</sup>lt;sup>1</sup> In addition to friends, neighbors, and family members, individuals who have already had knee or hip replacement surgery have been effective Care Partners in existing programs.



- Patient's home care and exercise program
- 5. Patient must participate in end of life planning, including completion of an Advance Directive and designation of Durable Power of Attorney.

#### C) Document optimal preparation for surgery

- 1. Perform pre-operative history, physical, and screening lab tests based on review of systems:
  - Evaluate for cardiac and pulmonary fitness
  - Obtain basic lab profile, plasma glucose, prothrombin time, complete blood count, urinalysis with culture, if indicated
  - Culture nasal passages to identify staphylococcal carrier state
  - Ensure A1c 8% or less in patients with diabetes
  - o Perform x-rays of knee or hip, if not performed within previous 12 months
  - Screen for predictors of delirium
- 2. Obtain relevant consultations:
  - o Evaluate for good dental hygiene with dental consultation as necessary
  - o Refer to Anesthesia for pre-operative assessment
  - o Consult Physical Therapy to instruct in strengthening of upper and lower extremities
  - Request additional consults as necessary
- 3. Collect patient-reported measures:
  - General health questionnaire: Patient Reported Outcomes Measurement Information System-10 (PROMIS-10)
  - HOOS/KOOS survey

#### III. REPAIR OF THE OSTEOARTHRITIC JOINT

An experienced surgical team should use evidence-based practices to avoid complications related to implanted hardware; prevent infection, venous thrombosis, and blood loss; manage pain while avoiding side effects; and manage pre-existing medical problems carefully.

#### A) General standards for a surgical team performing TKR/THR surgery

- 1. The surgeon must perform at least 50 joint replacements a year.
- 2. Members of the surgical team must have documented credentials, training and experience. The roster of the surgical team should be consistent.
- 3. Elective joint arthroplasty must be scheduled to begin before 5:00 pm.
- 4. Facilities in which surgery is performed should have policies that align with the American College of Surgeons Statement on Health Care Industry Representatives in the Operating Room.

#### B) Elements of optimal surgical process

1. Optimize pain management and anesthesia:



- Use multimodal pain management format to minimize sedation and encourage early ambulation
- Minimize use of opioids
- Assess and manage other anesthesia-related risk factors such as sleep apnea and pulmonary hypertension

#### 2. Avoid infection:

- Require application of chlorhexidine skin prep by patient at bedtime and morning prior to surgery
- Use surgical hoods or laminar flow technique with closed or limited access to operating room
- Administer appropriate peri-operative course of antibiotics according to Centers for Medicare and Medicaid Services (CMS) guidelines set forth in the Surgical Care Improvement Project
- o Restrict use of urinary catheter to less than 48 hours
- 3. Avoid bleeding and low blood pressure:
  - o Administer standardized protocols using appropriate medications to limit blood loss
  - Use standardized IV fluid protocols including those implemented by RNs postoperatively with appropriate supervision and monitoring
- 4. Avoid deep venous thrombosis and embolism according to CMS guidelines set forth in the Surgical Care Improvement Project.
- 5. Avoid hyperglycemia:
  - Use standardized protocol to maintain optimal glucose control

#### C) Selection of the surgical implant

- 1. Providers must select an implant that has a <5% failure rate at ten years.<sup>2</sup>
- 2. To track outcomes, all implants must be registered with a national joint registry such as the American Joint Replacement Registry.
- 3. Informed consent should include the experience level of the surgeon with the device.

#### IV. POST-OPERATIVE CARE AND RETURN TO FUNCTION

A standard process should be in place to support the goals of avoiding post-surgical complications, ensuring rapid return to function, optimizing hospital length of stay, and avoiding unnecessary readmissions.

<sup>&</sup>lt;sup>2</sup> This performance standard is supported by evidence from both the Australian Orthopedic Association National Joint Replacement Registry and the National Joint Registry for England and Wales. The 2012 reports are available online: <a href="https://aoanjrr.dmac.adelaide.edu.au/annual-reports-2012">https://aoanjrr.dmac.adelaide.edu.au/annual-reports-2012</a> and <a href="https://www.njrcentre.org.uk/njrcentre/Portals/0/Documents/England/Reports/9th\_annual\_report/NJR 9th\_Annual Report 2012.pdf">https://www.njrcentre.org.uk/njrcentre/Portals/0/Documents/England/Reports/9th\_annual\_report/NJR 9th\_Annual Report 2012.pdf</a>, respectively.



#### A) Standard process for post-operative care

- 1. Utilize a rapid recovery track to mobilize patients on the day of surgery:
  - Provide accelerated physical therapy and mobilization if regional pain control is acceptable
  - o Provide a patient-oriented visual cue to record progress on functional milestones required for discharge
  - o Instruct patients in home exercise, use of walking aids and precautions
  - o Instruct "care partner" to assist with home exercise regimen
- 2. Patients that meet Medicare standards for placement in a skilled nursing facility will have their post-operative nursing and rehabilitative needs addressed.
- 3. Hospitalists or appropriate medical consultants will be available for consultation to assist with complex or unstable medical problems in the post-operative period.

# 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.
- Reconcile medications.
- 4. Provide patient and family/caregiver education with plan of care:
  - o Signs or symptoms that warrant follow up with provider
  - o Guidelines for emergency care and alternatives to emergency care
  - Contact information for orthopedist 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.

#### C) Arrange home health services

- 1. Provide the patient and Care Partner with information about home exercises that should be done three times daily.
- 2. Arrange additional home health services as necessary.

#### D) Schedule follow up appointments

- 1. Schedule return visits as appropriate.
- 2. Measure patient-reported functional outcomes with KOOS/HOOS instrument.
- 3. If opioid use exceeds six weeks, develop a formal plan for opioid management.



#### **GUIDANCE ABOUT BUNDLE PAYMENT CONTRACTING AND DISTRIBUTION OF PAYMENT**

The method of bundle payment contracting will need to be developed as part of the discussion and negotiations between the purchaser, provider, and payer. Therefore, this section provides only general comments rather than recommend any specific models.

The time windows for this bundle will be determined in the contracting process and include all four clinical components of the bundle. The recommended time window for the bundle extends to 90-days post-operatively. Pre-operatively, the time window should include sufficient time to deliver the care necessary to meet the appropriateness standards.

Retrospective and prospective payment models can both be effective in different situations. A retrospective model may be most suitable when a number of providers or provider groups are contributing to the delivery of the bundle. A prospective model may be most suitable for situations in which 1) a budget is determined for a single provider entity delivering the entire bundle or specified components and 2) benefit design issues can be addressed.

Many entities will need to come together to operationalize TKR/THR bundle services, including the hospital, surgeon, anesthesia, and other supporting services. The Bree Collaborative is not specifying any particular process for distributing the bundle payment across those parties, but encourages the adoption of cost and reimbursement strategies that equitably allocate resources and payments.



#### **Bundle: Quality Standards for Total Knee or Total Hip Replacement Surgery**

The provider group performing surgery must maintain or participate in a registry of all patients having first-time, single-joint total knee or total hip replacement surgery for osteoarthritis (TKR/THR patients), excluding patients with joint replacement for fracture, cancer, or inflammatory arthritis. This registry will be updated quarterly and be available for reporting to current or prospective purchasers and their health plan. It will be made available to quality organizations such as the Puget Sound Health Alliance and the Foundation for Health Care Quality.

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* 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 disability prior to surgery. Report:

- a. Proportion of TKR/THR patients (as defined above) receiving formal shared decision-making decision aids pre-operatively
- Proportion of TKR/THR patients with documented patient-reported measures of quality of life and musculoskeletal function prior to surgery – the Knee Osteoarthritis Outcome Score (KOOS), Hip Osteoarthritis Outcome Score (HOOS), or PROMIS-10 Global Health tools may be used
- c. Results of measures from 1b, specifically including responses to Quality of Life (Q1-Q4) and Pain (P1 and P4-5) scores for KOOS and HOOS and questions regarding everyday physical activities (Question 7) and pain (Question 10) 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 TKR/THR patients that have received all of the following in the peri-operative period:

- a. Measures to manage pain using multimodal anesthesia
- b. Measures to reduce risk of venous thromboembolism and pulmonary embolism
- c. Measures to reduce blood loss such as administration of tranexamic acid
- d. Measures to reduce infection such as administration of prophylactic antibiotics



e. Measures to maintain optimal blood sugar control

#### 3. Standards for ensuring rapid return to function

These standards are intended to optimize mobilization following surgery and measure patient recovery. Report:

- a. Proportion of TKR/THR patients with documented physical therapy within 24 hours of surgery
- Proportion of TKR/THR patients for which there are documented patient-reported measures of quality of life and musculoskeletal function six months following surgery – the same measures should be used as in standard 1b
- c. Results of measures from 2b, specifically including responses to the questions identified in standard 1c

#### 4. Standards for the patient care experience

These standards are intended to measure patient-centered care. Report:

- a. Proportion of TKR/THR patients surveyed using HCAHPS
- b. Results of measures from 4a, specifically including responses to Q6 and Q22 if HCAHPS is used

#### 5. Standards for patient safety and affordability

These standards are intended to measure success in avoiding complications and reducing readmissions. Report:

- a. 30-day all-cause readmission rate for TKR/THR patients
- b. 30-day readmission rate for TKR/THR patients with any of the nine complications included under the terms of the warranty



#### **Appendix: Detailed Quality Standards**

For all of the following, THR/TKR patients refers to first-time, single-joint total knee or total hip replacement surgery for osteoarthritis, excluding patients with joint replacement for fracture, cancer, or inflammatory arthritis.

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

	Numerator	Denominator				
1:	1: Standards for appropriateness					
а	Number of TKR/THR patients receiving formal shared decision-making decision	Total number of				
	aids pre-operatively.	TKR/THR patients.				
b	Number of TKR/THR patients with documented patient-reported measures of	Total number of				
	quality of life and musculoskeletal function prior to surgery (Knee	TKR/THR patients.				
	Osteoarthritis Outcome Score (KOOS), Hip Osteoarthritis Outcome Score					
	(HOOS), or PROMIS-10 Global Health tools may be used.					
С	Results of measures from 1b, specifically including responses Quality of Life (Q2 and Q4) and Pain					
	(P1, and P4-5) scores for KOOS and HOOS and questions regarding everyday phys	ical activities				
	(Question 7) and pain (Question 10) on the PROMIS-10 survey.					
2:	Standards for evidence-based surgery					
а	Number of TKR/THR patients receiving measures to manage pain while	Total number of				
	speeding recovery in a multimodal format in the peri-operative period.	TKR/THR patients.				
b	Number of TKR/THR patients receiving measures to reduce risk of venous	Total number of				
	thromboembolism and pulmonary embolism in the peri-operative period.	TKR/THR patients.				
С	Number of TKR/THR patients receiving measures to reduce blood loss such as	Total number of				
	administration of tranexamic acid in the peri-operative period.	TKR/THR patients.				
d	Number of TKR/THR patients receiving measures to reduce infection such as	Total number of				
	administration of prophylactic antibiotics in the peri-operative period.	TKR/THR patients.				
е	Number of TKR/THR patients receiving measures to maintain optimal blood	Total number of				
	sugar control in the peri-operative period.	TKR/THR patients.				
3:	Standards for ensuring rapid return to function					
а	Number of TKR/THR patients with documented physical therapy within 24	Total number of				
	hours of surgery.	TKR/THR patients.				
b	Number of TKR/THR patients with documented patient-reported measures of	Total number of				
	quality of life and musculoskeletal function six months following surgery (same	TKR/THR patients.				
	as used as in standard 1b).					
С	Results of measures from 2b, specifically including responses to the questions ide					
	1c (Quality of Life (Q2 and Q4) and Pain (P1, and P4-5) scores for KOOS and HOOS					
	regarding everyday physical activities (Question 7) and pain (Question 10) on the PROMIS-10					
	survey).					
4:	4: Standards for the patient care experience					
а	Number of TKR/THR patients surveyed using HCAHPS.	Total number of				
		TKR/THR patients.				
b	Results of measures from 4a, specifically responses to Q6 and Q22 if HCAHPS is u	sed.				



5:	5: Standards for patient safety and affordability				
а	Number of TKR/THR patients readmitted to the hospital within 30 days of	Total number of			
	discharge, all causes.	TKR/THR patients.			
b	Number of TKR/THR patients readmitted to the hospital within 30 days of	Total number of			
	discharge for any of the nine complications included under the terms of the	TKR/THR patients.			
	warranty.				



#### Warranty for Elective Total Knee & Total Hip Replacement Surgery

In developing this warranty the Accountable Payment Model (APM) subgroup of the Dr. Robert Bree Collaborative relied most heavily on a technical expert panel study of complications of total knee and total hip replacement (TKR and THR) surgery commissioned by the Centers for Medicare and Medicaid Services (CMS) (referred to as the 'CMS TEP report' in this document). <sup>1</sup> We also aligned with the High Value Healthcare Collaborative (HVHC), a group of 18 major medical systems from across the country founded by the Dartmouth Institute for Health Policy and Clinical Practice (TDI), Dartmouth-Hitchcock, Mayo Clinic, Denver Health, Intermountain Healthcare, and Cleveland Clinic, to improve quality for these surgeries. We studied private sector data from our market place and bundled payment initiatives from the Integrated Healthcare Association in California, from Meriter Health Plan in Wisconsin, and the CMS bundled payment initiative. <sup>ii</sup>

The primary intent of the warranty is to set a high priority on patient safety. It is also intended to balance financial gain for providers and institutions performing TKR and THR surgery with financial accountability for complications attributable to these procedures. In this warranty the intent is to distribute financial risk across professional and facility components in proportion to the revenue generated by the procedure.

#### <u>Definitions related to a warranty for TKR and THR</u>

- Diagnostic code for osteoarthritis excludes trauma, cancer, inflammatory arthritis (e.g. rheumatoid arthritis) and congenital malformation
- Procedural codes for TKR and THR
- Age limits
- Definition of complications excluded from additional reimbursement
- Definition of warranty period

#### Diagnostic codes<sup>1</sup>

The diagnostic code for osteoarthritis for either total knee or total hip replacements: ICD-9 <u>diagnostic</u> code = 715.X ("715 Osteoarthrosis and allied disorders")<sup>2</sup>

#### Procedure codes<sup>3</sup>

- Total hip replacement: ICD-9 <u>procedure code</u> = 81.51 (CPT procedure code = 27130 (total hip replacement)
- Total knee replacement: Associated ICD-9 <u>procedure code</u> = 81.54 (CPT procedure code = 27447 (total knee replacement)

#### Age limits<sup>4</sup>

>=18 years old (no upper limit)

<sup>&</sup>lt;sup>1</sup> Same as HVHC, IHA, and Meriter Health Plan TKR and THR bundle.

<sup>&</sup>lt;sup>2</sup> 89% of all Total Hip Replacement (81.51) in Washington State were due to some type of principal diagnosis of Osteoarthrosis (Data Source: CHARS, 2012 1st Quarter, 2011 4th Quarter, 2011 3rd Quarter, 2011 2nd Quarter); 97% of all Total Knee Replacement (81.54) in Washington State were due to some type of principal diagnosis of Osteoarthrosis (Data Source: CHARS, 2012 1st Quarter, 2011 4th Quarter, 2011 3rd Quarter, 2011 2nd Quarter).

<sup>3</sup> Same as HVHC, IHA, and Meriter Health Plan TKR and THR bundle.

<sup>&</sup>lt;sup>4</sup> The APM subgroup chose no upper age limit on the basis that it is best to defer to surgeons for the decision of whether surgery is appropriate for an older patient. Both IHA and Meriter uses an age cut off of 65 years old; HVHC uses 89 years old; the CMS requires patient to be a Medicare beneficiary (no upper limit).



#### Complications<sup>5</sup>

Definition of complications included in warranty:

- As specified by CMS TEP report (attached as an appendix to this warranty)
- Aligned with ICD-9 codes adopted by HVHC

Complications for warranty are intended to meet the following criteria:

- Represent significant complications attributable to the THA/TKA procedure
- · Are identifiable in administrative claims data
- Are fair to hospitals and physicians
- 1. Death as a result of any of the other complications included in the warranty
- 2. Surgical complications
  - a. Mechanical complications
  - b. Periprosthetic joint complications:
    - Incision and drainage
    - Revision
    - Removal
  - c. Wound infection:
    - Incision and drainage
    - Revision
    - Removal
  - d. Surgical site bleeding requiring readmission for incision and drainage
  - e. Pulmonary embolism
- Medical complications
  - a. Acute myocardial infarction
  - b. Pneumonia
  - c. Sepsis/septicemia

<sup>&</sup>lt;sup>5</sup> The APM subgroup agreed to adopt the complications list commissioned by CMS and adopted by HVHC. The APM subgroup also reviewed private payer utilization data on complications from TKR and THR produced and shared by payer subgroup members. Complications such as arrhythmia, congestive heart failure, and GI bleeding show up in private payer data analyses as complications but are omitted from HVHC list of complications. The APM subgroup agreed not to include these complications as they are not easily attributable to THR and TKR surgery.



#### Warranty period and other terms<sup>6,iii</sup>

1. Warranty period is complication-specific:

7 days	30 days	90 days
Acute myocardial infarction	Death	Mechanical complications
Pneumonia	Surgical site bleeding	Periprosthetic joint infection
Sepsis/septicemia	Wound infection	
	Pulmonary embolism	

2. The warranty is valid only at the hospital performing the surgery. Therefore, patients experiencing complications are strongly encouraged to seek treatment at that hospital.

- Integrated Healthcare Association, CA (www.iha.org) and personal communication with IHA staff;
- Meriter Health Plan, WI personal communication with staff; and
- CMS Bundled Payment for Care Improvement Initiative: http://innovation.cms.gov/initiatives/bundled-payments.

<sup>&</sup>lt;sup>i</sup> Summary of Technical Expert Panel (TEP) Evaluation of Measures: 30-Day Risk-Standardized Readmission Rate following Elective Total Hip and Total Knee Arthroplasty and Risk-Standardized Complication Rate following Elective Total Hip and Total Knee Arthroplasty. Prepared for CMS by Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation. July 19, 2010. Link: http://www.cch-quality.com/Files/CMS\_Hip.Knee\_SummaryReport\_TEP\_7-19-10\_FINAL\_Hip.TKA.pdf

"Source material for definitions:

High Value Health Care Collaborative - Ivan M. Tomek, Allison L. Sabel, Mark I. Froimson, George Muschler, David S. Jevsevar, Karl M. Koenig, David G. Lewallen, James M. Naessens, Lucy A. Savitz, James L. Westrich, William B. Weeks and James N. Weinstein. A Collaborative Of Leading Health Systems Finds Wide Variations In Total Knee Replacement Delivery And Takes Steps To Improve Value. *Health Affairs*, no. (2012): doi: 10.1377/hlthaff.2011.0935.
 (http://content.healthaffairs.org/content/early/2012/04/30/hlthaff.2011.0935.full.html)

iii Ibid.

<sup>&</sup>lt;sup>6</sup> The APM subgroup chose to adopt a warranty timeline model based on the study commissioned by CMS and adopted by HVHC. After reviewing Medicare and private payer data shared by payer subgroup members, the APM subgroup agreed that this model was preferred because it is specific, justified by the readmissions data, likely to capture procedure-related complications, protects purchasers, acceptable to providers, and endorsed by a highly respected group of orthopedists after a yearlong review process.

## **APPENDIX**

Summary of Technical Expert Panel (TEP) Evaluation of Measures 30-Day Risk-Standardized Readmission Rate following Elective Total Hip and Total Knee Arthroplasty

Risk-Standardized Complication Rate following Elective Total Hip and Total Knee Arthroplasty

### **Summary of Technical Expert Panel (TEP) Evaluation of Measures**

# 30-Day Risk-Standardized Readmission Rate following Elective Total Hip and Total Knee Arthroplasty and

# Risk-Standardized Complication Rate following Elective Total Hip and Total Knee Arthroplasty

Subtask 3.1, Deliverable 20b: Summary of Technical Expert Panel Evaluation of Measures

#### Submitted July 19, 2010:

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### Background

The Yale-New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (YNHHSC/CORE) is under contract with the Center for Medicare & Medicaid Services (CMS) to develop claims-based, risk adjusted hospital outcomes measures that reflect the quality of care for patients undergoing elective total hip arthroplasty (THA) and elective total knee arthroplasty (TKA). The measures are designed for potential use in public reporting.

YNHHSC/CORE has obtained expert and stakeholder input on two proposed measures: (1) a 30-day all-cause readmission measure and (2) a complications measure for patients undergoing elective THA and TKA. The Yale measure development team meets twice monthly via teleconference with a Working Group (WG) of experts in orthopaedic surgery, rheumatology, quality outcomes measurement, and measure development. Additionally, we convened a Technical Expert Panel (TEP) of clinicians, consumers, hospitals, purchasers, and experts in quality improvement to provide input on key methodological issues.

This report summarizes the feedback and recommendations provided by the TEP to date regarding the proposed measures. For each measure, details regarding overall approach, measure rationale, and preliminary technical specifications, will be available through CMS at <a href="https://www.cms.gov/MMS/17\_CallforPublicComment.asp#TopOfPage">https://www.cms.gov/MMS/17\_CallforPublicComment.asp#TopOfPage</a> through September 1, 2010 and will be available for public comment through August 4, 2010, 11:59 pm ET. This report is available as background for the public comment period. Of note, the measures remain in development, and the technical specifications will not be finalized until later this fall.

### The YNHHSC/CORE Development Team

The YNHHSC/CORE new measure development team includes clinical, statistical, policy, and project management experts to provide a broad range of perspectives and expertise. The YNHHSC/CORE new measures development team participates in all discussions and facets of measure development. The team is led by Laura Grosso, PhD., Jeptha Curtis, MD, and Zhenqiu Lin, PhD. Dr. Grosso is an epidemiologist with training in research methodology. Dr. Curtis has extensive experience in developing new measures and led the development of two, NQF approved PCI mortality measures and two additional measures (ICD complications and PCI readmission) that are currently under review at the NQF. Dr. Lin is an expert in measure development using Medicare claims data. The YNHHSC/CORE new measures development team is listed below.

Jeptha Curtis, M.D. Assistant Professor of Medicine, Yale University School of Medicine

Elizabeth Drye, M.D., S.M. Associate Research Scientist, Yale University School of Medicine

Lori Geary, M.P.H. Project Manager, YNHHSC/CORE Laura M. Grosso, Ph.D., M.P.H. Associate Research Scientist, Yale University School of Medicine

Linda Harris, M.P.H.
Project Coordinator, YNHHSC/CORE

Harlan Krumholz, M.D., S.M. Harold H. Hines Jr. Professor of Medicine, Yale University School of Medicine

Zhenqiu Lin, PhD. Senior Analyst, YNHHSC/CORE

Carole Oladele, M.P.H. Research Assistant, YNHHSC/CORE

Smitha Vellanky, MSc. Research Assistant, YNHHSC/CORE

Yongfei Wang, M.S. Analyst, Yale University School of Medicine

### **The Working Group**

The Working Group (WG) is comprised of individuals with expertise relevant to orthopedic quality measurement. The Yale team conducts bimonthly meetings with the WG to obtain detailed feedback and guidance on key clinical and methodological decisions pertaining to measure development (see Appendix A for the call schedule). The group provides a forum for focused expert review and discussion of technical issues during measure development prior to consideration by the broader TEP.

Working Group Members

Daniel J. Berry, MD Professor of Orthopedics, Mayo Clinic College of Medicine Chair, Department of Orthopædic Surgery, Mayo Clinic

Kevin J. Bozic, MD, MBA Associate Professor and vice chair, Department of Orthopaedic Surgery at the University of California, San Francisco Chair, Health Systems Committee, AAOS

Robert Bucholz, MD Professor, Orthopædic Surgery, University of Texas Southwestern Medical Center Past President, American Academy of Orthopædic Surgeons (AAOS)

Lisa Gale Suter, MD Assistant Professor, Yale University School of Medicine, Rheumatology (West Haven Veterans Association Hospital) Charles M. Turkelson, PhD
Director of Research and Scientific Affairs, AAOS

Lawrence Weis, MD

Assistant Professor, Yale Orthopædics and Rehabilitation, Yale University School of Medicine, Orthopædics (West Haven Veterans Association Hospital)

### Types of issues reviewed by the Working Group

- Identifying procedure(s) for inclusion in the measure(s)
- o Deciding whether to combine hip and knee procedure cohorts for measurement
- Defining the outcomes to be measured
- Reviewing the criteria for identifying planned readmissions
- Developing coding strategies for capturing severity of complications
- Defining the follow-up periods for complications
- Reviewing the risk adjustment methodology

### **The Technical Expert Panel**

In alignment with the CMS Measures Management System (MMS), YNHHSC/CORE also released a public call for nominations and convened a technical expert panel (TEP). Potential members were solicited via e-mail per recommendations by the WG and CMS.

The role of the TEP is to provide feedback on key methodological decisions, made in consultation with the WG. The TEP is comprised of individuals with diverse perspectives and backgrounds and includes clinicians, consumers, hospitals, purchasers, and experts in quality improvement. The appointment term for the TEP will be through September 30, 2010.

### Specific responsibilities of TEP members include:

- Review background materials provided by YNHHSC/CORE prior to each TEP meeting
- Participate in all TEP meetings
- Provide input to YNHHSC/CORE on key clinical, methodological, and other technical decisions
- Provide feedback to YNHHSC/CORE on key policy or other non-technical issues
- Review TEP summary report prior to public release
- Assist in development of proposed reporting framework

Members of the TEP are listed below.

### Technical Expert Panel Members

Mark L. Francis, MD

Professor of Medicine and Biomedical Sciences, Chief, Division of Rheumatology, Department of Internal Medicine, Texas Tech University Health Sciences Center Texas Tech University, Health Sciences Center

Cynthia Jacelon, PhD, RN, CRRN Associate Professor, School of Nursing, University of Massachusetts Association of Rehabilitation Nurses

Norman Johanson, MD Chairman, Orthopedic Surgery, Drexel University College of Medicine

C. Kent Kwoh, MD

Professor of Medicine, Associate Chief and Director of Clinical Research, Division of Rheumatology and Clinical Immunology University of Pittsburgh

Courtland G. Lewis, MD American Association of Orthopaedic Surgeons

Jay Lieberman, MD

Professor and Chairman, Department of Orthopedic Surgery, University of Connecticut Health Center; Director, New England Musculoskeletal Institute

Peter Lindenauer, MD, M.Sc.

Hospitalist and Health Services Researcher, Baystate Medical Center; Professor of Medicine, Tufts University

Russell Robbins, MD, MBA Principal, Mercer's Total Health Management

Barbara Schaffer THA Patient

Nelson SooHoo, MD, MPH Professor, University of California at Los Angeles

Steven H. Stern, MD

Vice President, Cardiology & Orthopedics/ Neuroscience, UnitedHealthcare

Richard E. White, Jr., MD American Association of Hip and Knee Surgeons

Technical Expert Panel Meetings

YNHHSC/CORE conducted two TEP meetings to date (see Appendix B for TEP meeting schedule). In contrast to the WG calls, the TEP calls follow a more structured format consisting of presentation of key issues and our proposed approach, followed by open discussion of these issues by the TEP members.

During the first TEP meeting, the Yale team reviewed the measure development process and presented the proposed measure outcomes and cohorts for inclusion in the measures. The second meeting focused on the approach to model building and the risk adjustment methodology. The following recommendations were presented to the TEP:

- 1. Develop two measures for a combined cohort of THA and TKA procedures:
  - 30-day all-cause readmission
  - Complications measure to include death, surgical, and medical complications

### Death

Surgical complications

- Mechanical complications
- Periprosthetic joint infection requiring at least one of the following procedure codes:
  - Incision and drainage
  - Revision
  - Removal
- Wound infection requiring at least one of the following procedure codes:
  - Incision and drainage
  - o Revision
  - Removal
- Surgical site bleeding requiring incision and drainage
- Pulmonary embolism

### Medical complications

- Acute myocardial infarction (AMI)
- Pneumonia
- Sepsis/septicemia
- 2. Do not count elective, planned readmissions in the readmission measure
- 3. Use complication-specific follow-up periods

7 Days	30 Days	90 Days
Acute myocardial infarction	Death	Mechanical complications
Pneumonia	Surgical site bleeding	Periprosthetic joint infection
Sepsis/septicemia	Wound infection	
	Pulmonary embolism	

The TEP supported these complementary measures with some revisions, as detailed in the tables 1 and 2 below. The TEP agreed, as revised, the measures assess separate domains of quality, with limited overlap. The complications measure will inform targeted quality improvement efforts and the readmission measure captures an additional domain of care including transition to outpatient settings. Tables 1 and 2 detail the key issues discussed during the first two TEP meetings and the TEP's responses.

Table 1. Key Issues Discussed on Death and Complications Measure and TEP Feedback

Key Issues Discussed	TEP Feedback	
Definitions of complications included in the measure  After conducting a comprehensive literature review and in consultation with the Working Group (WG), YNHHSC/CORE identified complications for inclusion in a death and complications measure. The complications met the following criteria:  O Represent significant complications attributable to the THA/TKA procedures O Are identifiable in administrative claims data O Are fair to hospitals and physicians  For complications with varying severity (periprosthetic joint infection, wound infection, surgical site bleeding), YNHHSC/CORE, in consultation	The TEP agreed that the complications captured in the measure ought to be clinically significant and, to the extent possible,	
with the WG, recommended requiring procedures/interventions associated with these complications as indicators of severity. The complications presented to the TEP included:		
Death		
Surgical complications  Mechanical complications  Periprosthetic joint infection (requiring incision and drainage and/or removal or revision)  Surgical site bleeding (requiring incision and drainage)  Wound infection (requiring incision and drainage)  Pulmonary embolism		
Medical complications		

### **Key Issues Discussed**

### **Determination of Follow-up Period for Complications**

Defining the most appropriate follow-up period for surgical and medical complications was a key step. To inform this decision, YNHHSC/CORE and the WG reviewed the unadjusted complication rates for each complication over a 90-day period. Most complication rates peaked during the index admission period and then reached a plateau approximately 30 days following the date of admission.

The team agreed to a 30-day follow-up period for surgical complications and death and a 7-day follow-up period for the medical complications (AMI, pneumonia, and sepsis/septicemia). Follow-up was limited to 7 days for the medical complications because WG members felt they were more likely to be attributable to the procedure if they occurred within 7 days of the index admission date. Furthermore, a 7-day follow-up period would limit overlap with the 30-day all-cause readmission measure.

### **TEP Feedback**

After reviewing the analyses, the TEP members agreed that a 30-day follow-up period was appropriate for most surgical complications and death. They noted that the follow-up period should reflect complications that are reasonably attributable to the procedure and/or care at during the index hospitalization. Some members noted that mechanical complications and PJI occurring 90 days post procedure can still be attributable to the index procedure as they are directly related to the procedure itself. The TEP suggested extending the follow-up period for mechanical complications and PJI to 90 days post the index admission.

YNHHSC/CORE made this change to the measure. The final definitions and timeframes for the complications included in the measure are as follows:

7-day follow-up period (from date of index admission to 7 days post date of index admission)

- AMI
- o Pneumonia
- Sepsis/septicemia

30-day follow-up period (from date of index admission to 30 days post date of index admission)

- Death
- Wound infection
- Surgical site bleeding
- Pulmonary embolism

90-day follow-up period (from date of index admission to 30 days post date of index admission)

- Mechanical complications
- o Periprosthetic joint infection

Table 2. Key Issues Discussed on Readmission Measure and TEP Feedback

Key Issues Discussed	TEP Feedback	
Risk Adjustment Methodology  YNHHSC/CORE presented the risk adjustment methodology and reviewed candidate and final variables for inclusion in the risk-standardized readmission model.	Several TEP members voiced strong concern that SES was not included as a covariate in the risk-standardized models, as it may be inversely associated with adverse outcomes post THA and The Furthermore, the members expressed concern that not adjusting SES could create perverse incentives for hospitals to avoid	
<ul> <li>Goal is to adjust for patient demographic and clinical characteristics while illuminating important quality differences. This methodology is consistent with guidance from NQF.</li> <li>The models adjust for case mix differences based on the clinical status of the patient at the time of admission. Conditions that may represent adverse outcomes due to care received during the index admission are not included in the risk adjusted model (Appendix B). Although these adverse outcomes certainly increase the risk of mortality, complications, and readmission, including them as covariates in a risk-adjusted model could attenuate the measure's ability to accurately characterize the quality of care delivered by hospitals.</li> <li>Consistent with NQF guidelines, the models do not adjust for patients' admission source and their discharge disposition (e.g. skilled nursing facility) because these factors are associated with structure of the health care system, not solely patients' clinical risk factors.</li> <li>Likewise, the models do not adjust for socioeconomic status (SES), race, or ethnicity because risk-adjusting for these factors would hold hospitals to different standards of care depending on their case mix.</li> </ul>	treatment of low SES patients otherwise needing elective hip or knee replacements.  YNHHSC/CORE explained that this issue has been carefully considered and explained that there may be disparities in the quality of the care provided to low SES populations, and that risk adjusting for these factors would obscure these disparities. YNHHSC/CORE noted that patients of lower SES have more comorbid conditions and that the models adjust for comorbidities in the risk-standardized models.  In order to further address the TEP's concerns, YNHHSC/CORE agreed to perform additional analyses to determine the potential impact of SES status on hospitals' risk standardized outcome rates (both for readmission and complications) and if necessary to consider stratifying the measure by SES.	

Key Issues Discussed	TEP Feedback
Exclusion of Planned Readmissions from the Measure  Some patients undergo a second elective THA/TKA within 30 days of the index hospitalization and are therefore scheduled for a readmission to the hospital. We identify these as planned readmissions and they do NOT count as readmissions in the measure if they occur between 8 and 30 days post date of discharge.  Rationale:  It is unlikely for a patient to undergo a second elective THA/TKA within one week of the index procedure. If a patient receives a second primary THA/TKA within 7 days of the index procedure, the readmission is more likely to result from a complication from the index procedure. This type of readmission may also be coded erroneously as an elective rather than a revision procedure.  If a patient receives a second primary THA/TKA 8-30 days following the index procedure, and is accompanied with a primary discharge diagnosis of osteoarthritis, the readmission is likely planned and will not be counted as a readmission in the measure. In the coming years, we will conduct a validation study using medical records to confirm the accuracy of this approach.	The TEP agreed that not counting planned readmissions in the measure is critical to the face validity of the measure. TEP members suggested revising the criteria for identifying planned readmissions for another elective THA/TKA to include the following primary discharge diagnosis codes because patients with these diagnoses also undergo elective THA/TKA:  • Rheumatoid arthritis  • Osteonecrosis  • Arthropathy (excluding septic arthropathy codes)  Some TEP members also noted that patients may be readmitted for another elective procedure less than 8 days post index discharge date and suggested we identify these patients at any time from the index date of admission.  YNHHSC/CORE, in consultation with the WG, modified the criteria to identify and not count as readmissions in the measure planned readmissions at any time from the date of discharge to 30 days post date of discharge.
Preliminary GLM Model Results for 30-day All-cause Readmission Measure	TEP members reviewed the preliminary model and did not have any question/issues regarding the model or the model performance.
YNHHSC/CORE presented the preliminary results of the GLM model to the TEP during the second meeting. The model had an ROC of 0.64 and presented the risk factors associated with readmission.	

### Conclusion

TEP feedback was instrumental in refining our approach to measure development. The Working Group and the Technical Expert Panel continue to provide clinical and methodological expertise and YNHHSC/CORE will consult with both groups as the models are further refined. After our final consultation with the TEP members, we will present the final models to the NQF in September of 2010.

## Appendix A: Working Group Conference Call Schedule (to date)

- 1. February 19, 2010 (Kickoff call)
- 2. February 26, 2010
- 3. March 26, 2010
- 4. April 23, 2010
- 5. April 27, 2010
- 6. May 7, 2010
- 7. May 21, 2010
- 8. June 4, 2010
- 9. June 18, 2010
- 10. July 2, 2010

## Appendix B: Technical Expert Panel Call Schedule (to date)

- 1. June 11, 2010, 12:30-2:00pm ET
- 2. July 1, 2010, 3:30-5:00pm ET

Appendix C: Detailed Comp	olication Specifications
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### **MECHANICAL COMPLICATIONS**

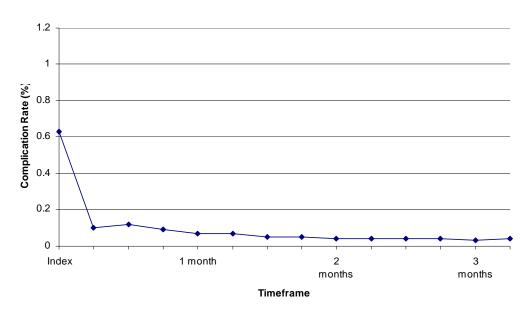
Complication I	CD-9 Code <sup>*</sup> Description
996.4 <sup>1</sup>	Mechanical complication of internal orthopedic device implant and graft
996.40 <sup>2</sup>	Unspecified mechanical complication of internal orthopedic device, implant, and graft
996.41 <sup>2</sup>	Mechanical loosening of prosthetic joint
996.42 <sup>2</sup>	Dislocation of prosthetic joint
996.44 <sup>2</sup>	Peri-prosthetic fracture around prosthetic joint
996.47 <sup>2</sup>	Other mechanical complication of prosthetic joint implant
996.49 <sup>2</sup>	Other mechanical complication of other internal orthopedic device, implant, and graft

WI	nen to Count as Complication			
Index Admission		Rationale		
•	Presence of any mechanical complication code listed above in a primary or secondary diagnosis field	•	These codes identify mechanical complications related to the index procedure	
Re	admission			
•	Presence of any mechanical complication code listed above in a primary <u>or secondary</u> diagnosis field	•	These codes identify all mechanical complications, including those identified at the time of a readmission (even though mechanical complication may not be the primary reason for that readmission), since all are likely to be procedure-related	
Fo	llow-up Period for Complications Measure			
•	During index admission or within 90 days from admission date	•	Data indicate that the rate is elevated until 90 days post procedure  Mechanical complications occurring 90 days post procedure can still be attributable to the index procedure	

<sup>&</sup>lt;sup>1</sup> Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. *J Arthroplasty*, 18(6): 693-708.

<sup>&</sup>lt;sup>2</sup> Memtsoudis S, Gonzalez Ella Valle A, Besculides M, Gaber L, Sculco T. (2008). In-hospital complications and mortality of unilateral, bilateral, and revision TKA. *Clin Orthop Relat Res*, 466:2617-2627.

### **Mechanical Complications - Complication Rate over time**



Data Source: Medicare Part A Inpatient Data, 2008

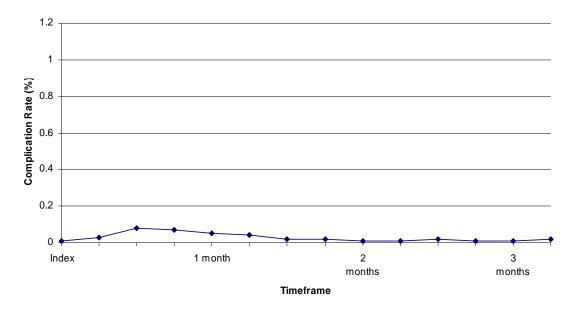
# PERIPROSTHETIC JOINT INFECTION (PJI)

Complication	on ICD-9 Code	Description
996.66 <sup>3</sup>	Infection and	inflammatory reaction due to internal joint prosthesis
Interventio	n ICD-9 Code	Description
86.22	Excisional del	bridement of wound, infection, or burn
86.28	Nonexcisiona	l debridement of wound, infection, or burn
86.04	Other incision	n with drainage of skin and subcutaneous tissue
81.53	Revise Hip Re	placement, NOS
81.55	Revision of Kı	nee replacement, NOS
81.59	Revision of jo	int replacement of lower extremity, not elsewhere classified
00.70	REV Hip Repl	-acetab/fem
00.71	REV Hip Repl	-acetab comp
00.72	REV Hip Repl	-fem comp
00.73	REV Hip Repl	-liner/head
00.80	Replacement	of femoral, tibial, and patellar components (all components)
00.81	Replacement	of tibial baseplate and tibial insert (liner)
00.82	Revision of kr	nee replacement, femoral component
00.83	Revision of kr	nee replacement, patellar component
00.84	Revision of to	otal knee replacement, tibial insert (liner)
80.05	Arthrotomy f	or removal of prosthesis, hip
80.06	Arthrotomy f	or removal of prosthesis, knee
80.09	Arthrotomy f	or removal of prosthesis, other unspecified sites

<sup>&</sup>lt;sup>3</sup> Thomas C, Cadwallader HL, Riley TV. (2004). Surgical-site infections after orthopaedic surgery: statewide surveillance using linked administrative databases. *J Hosp Infect*, (57(1): 25-30.

W	hen to Count as Complication		
Index Admission		Rationale	
•	Presence of periprosthetic joint infection code listed above in a primary or secondary diagnosis field AND the presence of at least one of the following procedure codes:  o Incision and drainage o Revision o Removal	•	These codes identify periprosthetic joint infection related to the index procedure Requiring an intervention sets an appropriate threshold for severity and will therefore more likely capture true joint infections and reduce false positives
Re	admission		
•	Presence of periprosthetic joint infection code listed above in a primary or secondary diagnosis field AND the presence of at least one of the following procedure codes:  o Incision and drainage o Revision o Removal	•	These codes identify all periprosthetic joint infections, including those identified at the time of a readmission (even though PJI may not be the primary reason for that readmission), since all are likely to be procedure-related
Follow-up Period for Complications Measure			
•	During index admission or within 90 days from admission date	•	Although the rate tapers off after approximately 6 weeks, it remains slightly elevated until 90 days post procedure Periprosthetic joint infections occurring 90 days post procedure can still be attributable to the index procedure

# Periprosthetic joint infection with Incision & Drainage and/or Revision/Removal - Complication Rate over Time



Data source: Medicare Part A Inpatient Data, 2008

<b>Complication ICD-9 Code</b>	Description	SI
998.1 <sup>4,5,6</sup> clas	Hemorrhage or hematoma complicating a procedure not elsewhere ssified	(
998.11 <sup>1,3,7,8</sup>	Hemorrhage complicating a procedure	
998.12 <sup>1,3,4,5</sup>	Hematoma complicating a procedure	
998.13 <sup>3</sup>	Seroma complicating a procedure	
286.5 <sup>5</sup>	Bleeding from anticoagulation	В
719.10 <sup>1</sup>	Hemarthrosis site unspecified	В
719.16 <sup>1</sup>	Hemarthrosis involving lower leg	
719.17 <sup>1</sup>	Hemarthrosis involving ankle and foot	
Intervention ICD-9 Code	Description	
86.04	Other incision with drainage of skin and subcutaneous tissue	
86.22	Excisional debridement of wound, infection, or burn	
86.28 Nonexcisional debridement of wound, infection, or burn		

When to Count as Complication		Rationale	
Inc	dex Admission		
•	Presence of any bleeding code listed above in a	These codes ide	entify surgical site bleeding related to
	primary or secondary diagnosis field AND:	the index proce	dure
	<ul> <li>o procedure code for incision and</li> </ul>	Requiring an int	tervention sets an appropriate

<sup>&</sup>lt;sup>4</sup> Bozic K, Vail T, Pekow P, Maselli J, Lindenauer P, Auerbach A. (2009). Does aspirin have a role in venous thromboembolism prophylaxis in total knee arthroplasty patients? J Arthroplasty, 00(0): 1-8.

<sup>&</sup>lt;sup>5</sup> Memtsoudis S, Gonzalez Ella Valle A, Besculides M, Gaber L, Sculco T. (2008). In-hospital complications and mortality of unilateral, bilateral, and revision TKA. Clin Orthop Relat Res, 466:2617-2627.

<sup>&</sup>lt;sup>6</sup> Deyo R, Martin B, Kreuter W, Jarvik J, Mirza S. (2010). Trends, major medical complications, and charges associated with surgery for lumbar

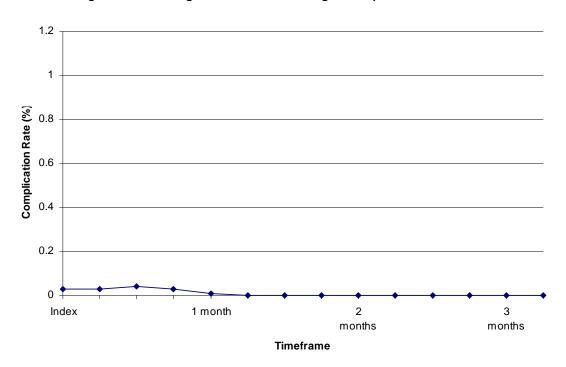
spinal stenosis in older adults. *JAMA*, 303(13): 1259-65.

<sup>7</sup> Version 4.1 technical documentation AHRQ Quality Indicators. December, 2009. Agency for Healthcare Research and Quality, Rockville, MD. http://www.qualityindicators.ahrq.gov/TechnicalSpecs41.htm

<sup>&</sup>lt;sup>8</sup> Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. J Arthroplasty, 18(6): 693-708.

drainage	threshold for severity and will therefore more likely capture true surgical site bleeding and reduce false positives
Readmission	
Presence of any bleeding code listed above in the primary or secondary diagnosis fields AND:     o procedure code for incision and drainage	These codes identify all surgical site bleeds, including those identified at the time of a readmission (even though bleeding may not be the primary reason for that readmission), since all are likely to be procedure-related
Follow-up Period for Complications Measure	
During index admission or within 30 days from admission date	<ul> <li>Data indicate that rate decreases after 30 days</li> <li>Consistent with clinical course</li> </ul>

Surgical site bleeding with Incision & Drainage - Complication Rate over Time



Data Source: Medicare Inpatient Part A Data, 2008

### **WOUND INFECTION**

Complication	ICD-9 Code <sup>*</sup> Description
998.6 <sup>2,9</sup>	Persistent postoperative fistula not elsewhere classified
998.83 <sup>2,3,10</sup>	Non-healing surgical wound
998.3 <sup>4</sup>	Disruption of wound
998.30 <sup>2,3,4</sup>	Disruption of wound, unspecified
998.31 <sup>2,3,4</sup>	Disruption of internal operation (surgical) wound
998.32 <sup>2,3,4</sup>	Disruption of external operation (surgical) wound
998.33	Disruption of traumatic wound repair
998.5 <sup>2,3,4,11</sup>	Postoperative infection not elsewhere classified
$998.51^{4}$	Infected postoperative seroma
998.59 <sup>4,12</sup>	Other postoperative infection
996.67 <sup>7</sup>	Infection and inflammatory reaction due to other internal orthopedic device implant and
	graft

Intervention	ICD-9 Code Description
86.22	Excisional debridement of wound, infection, or burn
86.28	Nonexcisional debridement of wound, infection, or burn
86.04	Other incision with drainage of skin and subcutaneous tissue
81.53	Revise Hip Replacement, NOS
81.55	Revision of Knee replacement, NOS
81.59	Revision of joint replacement of lower extremity, not elsewhere classified
00.70	REV Hip Repl-acetab/fem
00.71	REV Hip Repl-acetab comp
00.72	REV Hip Repl-fem comp
00.73	REV Hip Repl-liner/head
00.80	Replacement of femoral, tibial, and patellar components (all components)
00.81	Replacement of tibial baseplate and tibial insert (liner)
00.82	Revision of knee replacement, femoral component
00.83	Revision of knee replacement, patellar component
00.84	Revision of total knee replacement, tibial insert (liner)
80.05	Arthrotomy for removal of prosthesis, hip
80.06	Arthrotomy for removal of prosthesis, knee
80.09	Arthrotomy for removal of prosthesis, other unspecified sites

<sup>&</sup>lt;sup>9</sup> Memtsoudis S, Gonzalez Ella Valle A, Besculides M, Gaber L, Sculco T. (2008). In-hospital complications and mortality of unilateral, bilateral, and revision TKA. Clin Orthop Relat Res, 466:2617-2627.

<sup>&</sup>lt;sup>10</sup> Deyo R, Martin B, Kreuter W, Jarvik J, Mirza S. (2010). Trends, major medical complications, and charges associated with surgery for lumbar spinal stenosis in older adults. *JAMA*, 303(13): 1259-65.

11 Thomas C, Cadwallader HL, Riley TV. (2004). Surgical-site infections after orthopaedic surgery: statewide surveillance using linked

administrative databases. *J Hosp Infect*, (57(1): 25-30. <sup>12</sup> Centers for Medicare and Medicaid Services No-Pay List

<sup>\*</sup>NOTE: Wound infection codes not used: 890.0, 890.1, 890.2, 891.0, 891.1, 891.2, 894.1, 894.2, 998.89, 999.3, 999.31, 999.39, 686.9, 682.5, 682.6

When to Count as Complication	
Index Admission	Rationale
<ul> <li>Presence of any wound infection code listed above in a primary or secondary diagnosis field AND the presence of <u>at least one</u> of the following procedure codes:         <ul> <li>o Incision and drainage</li> <li>o Revision</li> <li>o Removal</li> </ul> </li> </ul>	<ul> <li>These codes identify wound infection related to the index procedure</li> <li>Requiring an intervention sets an appropriate threshold for severity and will therefore capture true wound infections and reduce false positives</li> </ul>
Readmission	
<ul> <li>Presence of any wound infection code listed above in a primary or secondary diagnosis field AND the presence of <u>at least one</u> of the following procedure codes:         <ul> <li>o Incision and drainage</li> <li>o Rewision</li> <li>o Removal</li> </ul> </li> </ul>	These codes identify all wound infections, including those identified at the time of a readmission (even though wound infection may not be the primary reason for that readmission), since all are likely to be procedure-related
Follow-up Period for Complications Measure	
During index admission or within 30 days from admission date	<ul> <li>Data indicate that rate decreases after 30 days</li> <li>Consistent with clinical course</li> </ul>

Data Source: Medicare Inpatient Data, 2008

## **PULMONARY EMBOLISM (PE)**

When to Count as Complication		
Index Admission	Rationale	
Presence of any pulmonary embolism code listed in the primary or secondary diagnosis fields	These codes identify PE related to the index procedure	
Readmission		
Presence of any pulmonary embolism code listed above in the primary or secondary diagnosis fields	These codes identify all PEs, including those identified at the time of a readmission (even though PE may not be the primary reason for that readmission), since all are likely to be procedure-related	
Follow-up Period for Complications Measure		
During index admission or within 30 days from admission date	<ul> <li>Data indicate that rate decreases after 30 days</li> <li>Consistent with clinical course</li> </ul>	

<sup>&</sup>lt;sup>13</sup> Version 4.1 technical documentation AHRQ Quality Indicators. December, 2009. Agency for Healthcare Research and Quality, Rockville, MD. http://www.qualityindicators.ahrq.gov/TechnicalSpecs41.htm

<sup>&</sup>lt;sup>14</sup> Solomon D, Chibnik L, Losina E, Huang J, Fossel A, Husni E, Katz J. (2006). Development of a preliminary index that predicts adverse events after total knee replacement. Arthritis Rheum, 54(5): 1536-1542.

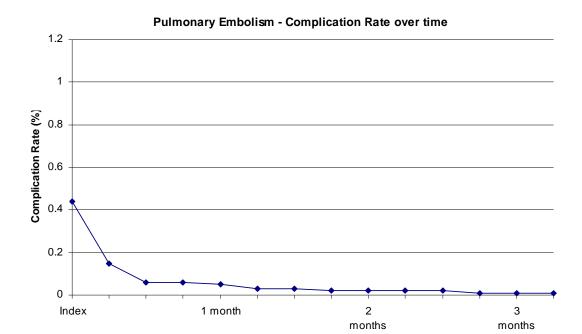
<sup>15</sup> Huddleston J, Maloney W, Wang Y, Verzier N, Hunt D, Herndon J. (2009). Adverse events after total knee arthroplasty. J Arthroplasty, 24(6):

<sup>16</sup> Memtsoudis S, Gonzalez Ella Valle A, Besculides M, Gaber L, Sculco T. (2008). In-hospital complications and mortality of unilateral, bilateral, and revision TKA. Clin Orthop Relat Res, 466:2617-2627.

<sup>&</sup>lt;sup>17</sup> Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. *J Arthroplasty*, 18(6): 693-708.

18 Deyo R, Martin B, Kreuter W, Jarvik J, Mirza S. (2010). Trends, major medical complications, and charges associated with surgery for lumbar

spinal stenosis in older adults. JAMA, 303(13): 1259-65.



Time frame

Data Source: Medicare Inpatient Part A Data, 2008

## **ACUTE MYOCARDIAL INFARCTION (AMI)**

Complication ICD-	
<u>410</u> <sup>19,20</sup>	Acute myocardial infarction
<u>410.0</u> <sup>1,21</sup>	Acute myocardial infarction of anterolateral wall
410.00 <sup>1</sup>	Acute myocardial infarction of anterolateral wall episode of care unspecified
410.01 <sup>1</sup>	Acute myocardial infarction of anterolateral wall initial episode of care
<u>410.1</u> <sup>1,3</sup>	Acute myocardial infarction of other anterior wall
410.10 <sup>1</sup>	Acute myocardial infarction of other anterior wall episode of care unspecified
410.11 <sup>1</sup>	Acute myocardial infarction of other anterior wall initial episode of care
410.2 <sup>1,3</sup>	Acute myocardial infarction of inferolateral wall
410.20 <sup>1</sup>	Acute myocardial infarction of inferolateral wall episode of care unspecified
410.21 <sup>1</sup>	Acute myocardial infarction of inferolateral wall initial episode of care
410.3 <sup>1,3</sup>	Acute myocardial infarction of inferoposterior wall
410.30 <sup>1</sup>	Acute myocardial infarction of inferoposterior wall episode of care unspecified
410.31 <sup>1</sup>	Acute myocardial infarction of inferoposterior wall initial episode of care
410.4 <sup>1,3</sup>	Acute myocardial infarction of other inferior wall
410.40 <sup>1</sup>	Acute myocardial infarction of other inferior wall episode of care unspecified
410.41 <sup>1</sup>	Acute myocardial infarction of other inferior wall initial episode of care
410.5 <sup>1,3</sup>	Acute myocardial infarction of other lateral wall
410.50 <sup>1</sup>	Acute myocardial infarction of other lateral wall episode of care unspecified
410.51 <sup>1</sup>	Acute myocardial infarction of other lateral wall initial episode of care
410.6 <sup>1,3</sup>	True posterior wall infarction
410.60 <sup>1</sup>	True posterior wall infarction episode of care unspecified
410.61 <sup>1</sup>	True posterior wall infarction initial episode of care
<u>410.7</u> <sup>1,3</sup>	Subendocardial infarction
410.70 <sup>1</sup>	Subendocardial infarction episode of care unspecified
410.71 <sup>1</sup>	Subendocardial infarction initial episode of care
<u>410.8</u> <sup>1,3</sup>	Acute myocardial infarction of other specified sites
410.80 <sup>1</sup>	Acute myocardial infarction of other specified sites episode of care unspecified
410.81 <sup>1</sup>	Acute myocardial infarction of other specified sites initial episode of care
<u>410.9</u> <sup>1,3</sup>	Acute myocardial infarction of unspecified site
<u>410.90</u> <sup>1</sup>	Acute myocardial infarction of unspecified site episode of care unspecified
410.91 <sup>1</sup>	Acute myocardial infarction of unspecified site initial episode of care

<sup>&</sup>lt;sup>19</sup> Yale/CORE cohort definition for pneumonia

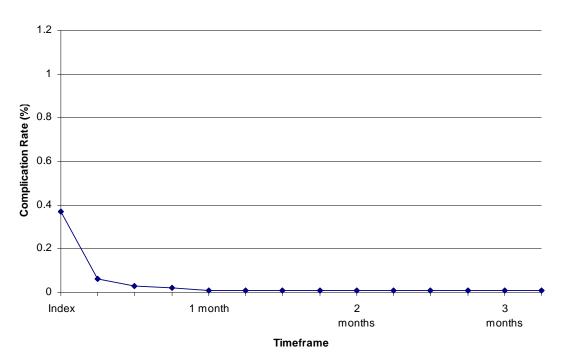
Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. *J Arthroplasty*, 18(6): 693-708.

21 Deyo R, Martin B, Kreuter W, Jarvik J, Mirza S. (2010). Trends, major medical complications, and charges associated with surgery for lumbar

spinal stenosis in older adults. *JAMA*, 303(13): 1259-65.

When to Count as Complication		
Index Admission	Rationale	
Presence of any AMI code listed above in a primary or secondary diagnosis field	These codes identify AMI related to the index procedure	
Readmission		
Presence of any AMI code listed above in a primary field only	<ul> <li>These codes identify AMI's that were the <u>primary</u> reason for a readmission</li> <li>AMIs that are secondary diagnoses in readmissions may represent a history of AMI or a complication of the second admission</li> </ul>	
Follow-up Period for Complications Measure		
During index admission or within 7 days from index admission date	<ul> <li>More likely to be attributable to procedure if it occurs within 7 days of procedure</li> <li>Rate decreases sharply 7 days from admission and returns to baseline within 30 days</li> <li>Limits overlap with 30-day all-cause readmission measure</li> </ul>	

**AMI - Complication Rate over Time** 



### **PNEUMONIA**

Complication ICD-9 Complication	ode Description
480 <sup>22</sup>	Viral pneumonia
480.0 <sup>1</sup>	Pneumonia due to adenovirus
480.1	Pneumonia due to respiratory syncytial virus
480.2 <sup>1</sup>	Pneumonia due to parainfluenza virus
480.3 <sup>1</sup>	Pneumonia due to sars-associated coronavirus
480.8	Pneumonia due to other virus not elsewhere classified
480.9 <sup>1</sup>	Viral pneumonia unspecified
481,23,24,25,26	Pneumococcal pneumonia
4824,5	Other Bacterial Pneumonia
<u>482.0</u> <sup>1,5</sup>	Pneumonia due to klebsiella pneumoniae
<u>482.1</u> 1,5	Pneumonia due to pseudomonas
<u>482.2</u> <sup>1,2,3,5</sup>	Pneumonia due to hemophilus influenzae (h. influenzae)
482.3	Pneumonia due to streptococcus
482.30 1,2,3,5	Pneumonia due to streptococcus unspecified
482.31 <sup>1,2,3,5</sup>	Pneumonia due to streptococcus group a
482.32 <sup>1,2,3,5</sup>	Pneumonia due to streptococcus group b
482.39 <sup>1,2,3,5</sup>	Pneumonia due to other streptococcus
482.4	Pneumonia due to staphylococcus
482.40 <sup>1,5</sup>	Pneumonia due to staphylococcus unspecified
482.41 1,2,3,5	Methicillin susceptible pneumonia due to staphylococcus aureus
482.42 <sup>5</sup>	Methicillin resistant pneumonia due to staphylococcus aureus
482.49 <sup>1,5</sup>	Other staphylococcus pneumonia
482.81 <sup>1,5</sup>	Pneumonia due to anaerobes
482.82 <sup>1,5</sup>	Pneumonia due to escherichia coli [e.coli]
482.83 <sup>1,5</sup>	Pneumonia due to other gram-negative bacteria
<u>482.84</u> <sup>1,5</sup>	Pneumonia due to legionnaires' disease
482.89 <sup>1,5</sup>	Pneumonia due to other specified bacteria
<u>482.9</u> <sup>1,2,3,5</sup>	Bacterial pneumonia unspecified
483 <sup>1,2,3</sup>	Pneumonia due to other specified organism
483.0 <sup>1</sup>	Pneumonia due to mycoplasma pneumoniae
<u>483.1</u> 1	Pneumonia due to chlamydia
<u>483.8</u> <sup>1</sup>	Pneumonia due to other specified organism

<sup>&</sup>lt;sup>22</sup> Yale/CORE cohort definition for pneumonia <sup>23</sup> Version 4.1 technical documentation AHRQ Quality Indicators. December, 2009. Agency for Healthcare Research and Quality, Rockville, MD.

http://www.qualityindicators.ahrq.gov/TechnicalSpecs41.htm

24 National Quality Forum Endorsed Standard-Bacterial Pneumonia.

25 Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. *J Arthroplasty*, 18(6): 693-708.

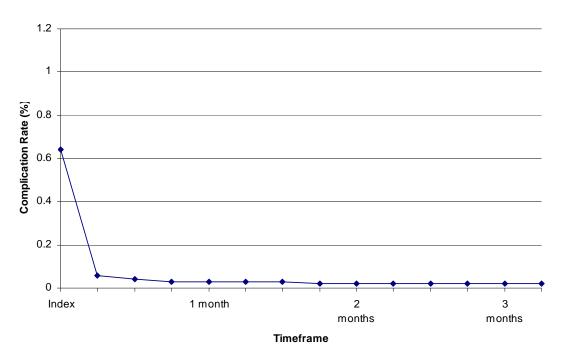
26 Deyo R, Martin B, Kreuter W, Jarvik J, Mirza S. (2010). Trends, major medical complications, and charges associated with surgery for lumbar

spinal stenosis in older adults. JAMA, 303(13): 1259-65.

485 <sup>1-5</sup>	Bronchopneumonia organism unspecified
486 <sup>1-5</sup>	Pneumonia organism unspecified

When to Count as Complication		
Index Admission	Rationale	
<ul> <li>Presence of any pneumonia code listed above in a primary or secondary diagnosis field</li> </ul>	These codes identify pneumonia related to the index procedure	
Readmission		
<ul> <li>Presence of any pneumonia code listed above in a primary diagnosis field only</li> </ul>	<ul> <li>These codes identify pneumonias that were the <u>primary</u> reason for a readmission</li> <li>Pneumonias that are secondary diagnoses in readmissions may represent a history of pneumonia or a complication of the second admission</li> </ul>	
Follow-up Period for Complications Measure		
During index admission or within 7 days from index admission date	<ul> <li>More likely to be attributable to procedure if it occurs within 7 days of procedure</li> <li>Rate decreases sharply 7 days from admission and returns to baseline within 30 days</li> <li>Limits overlap with 30-day all-cause readmission measure</li> </ul>	
487.0 Influenza with pne		
507.0 <sup>4</sup> Pneumonitis due to inhalation of food or vomitus		

## Pneumonia - Complication Rate over Time



## SEPSIS/SEPTICEMIA

Complications IC	CD-9 Code Description	
038 <sup>27</sup>	Septicemia	
$038.0^{28,29}$	Streptococcal septicemia	
038.1 <sup>2,3</sup>	Staphylococcal septicemia	
$038.10^{2,3}$	Staphylococcal septicemia unspecified	
038.11 <sup>2,3</sup>	Methicillin susceptible staphylococcus aureus septicemia	
038.12 <sup>2,3</sup>	Methicillin resistant staphylococcus aureus septicemia	
$038.19^{2,3}$	Other staphylococcal septicemia	
038.2 <sup>2,3</sup>	Pneumococcal septicemia	
038.3 <sup>2,3</sup>	Septicemia due to anerobes	
038.4 <sup>2,3</sup>	Septicemia due to other gram-negative organisms	
$038.40^{2,3}$	Septicemia due to gram negative organisms unspecified	
038.41 <sup>2,3</sup>	Septicemia due to h. influenzae	
038.42 <sup>2,3</sup>	Septicemia due to e. coli	
038.43 <sup>2,3</sup>	Septicemia due to pseudomonas	
038.44 <sup>2,3</sup>	Septicemia due to serratia	
038.49 <sup>2,3</sup>	Other septicemia due to gram-negative organisms	
038.8 <sup>2,3</sup>	Other specified septicemias	
038.9 <sup>2,3</sup>	Unspecified septicemia	
785.52 <sup>2,3</sup>	Septic shock	
785.59 <sup>2,3</sup>	Other shock without trauma	
790.7	Bacteremia	
995.91 <sup>2,3</sup>	Systemic inflammatory response syndrome due to infectious process w/out organ dysfunction	
995.92 <sup>2,3</sup>	Systemic inflammatory response syndrome due to infectious process with organ dysfunction	
998.0 <sup>2,3</sup>	Postoperative shock not elsewhere classified	
998.59	Post procedural sepsis	
	·	

Weaver F, Hynes D, Hopkinson W, Wixson R, Khuri S, Daley J, Henderson W. (2003). Preoperative risks and outcomes of hip and knee

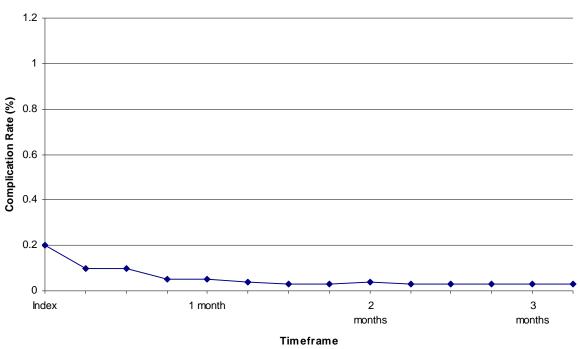
arthroplasty in the Veterans Health Administration. *J Arthroplasty*, 18(6): 693-708.

\*\*Version 4.1 technical documentation AHRQ Quality Indicators. December, 2009. Agency for Healthcare Research and Quality, Rockville, MD. <a href="http://www.qualityindicators.ahrq.gov/TechnicalSpecs41.htm">http://www.qualityindicators.ahrq.gov/TechnicalSpecs41.htm</a>

Solomon D, Chibnik L, Losina E, Huang J, Fossel A, Husni E, Katz J. (2006). Development of a preliminary index that predicts adverse events after total knee replacement. Arthritis Rheum, 54(5): 1536-1542.

When to Count as Complication		
Index Admission	Rationale	
<ul> <li>Presence of any sepsis/septicemia code listed above in a primary or secondary diagnosis field</li> </ul>	These codes identify sepsis/septicemia related to the index procedure	
Readmission		
<ul> <li>Presence of any sepsis/septicemia code listed above in a primary diagnosis or secondary diagnosis field</li> </ul>	<ul> <li>Sepsis/septicemia rates will be underestimated if identified using primary diagnosis field only, as these codes are found more frequently in the secondary diagnosis fields</li> <li>Primary field may indicate the source of sepsis/septicemia</li> </ul>	
Follow-up Period for Complications Measure		
During index admission or within 7 days from index admission date	<ul> <li>More likely to be attributable to procedure if it occurs within 7 days of procedure</li> <li>Rate decreases 7 days from admission and returns to baseline within 30 days</li> <li>Limits overlap with 30-day all-cause readmission measure</li> </ul>	

### Sepsis/Septicemia - Complication Rate over time



Data source: Medicare Part A Inpatient Data, 2008



# **Affordable Care Act Update**

Public Employees Benefits Board Retreat January 30, 2014

Nathan Johnson – Director of Policy, Planning and Performance

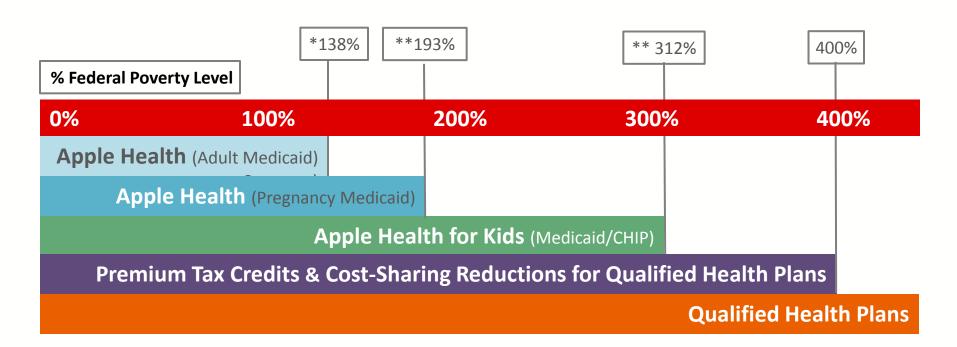
# **Today's Topics**

- Medicaid Expansion
- Health Benefit Exchange
- Broader ACA Impacts



# **Medicaid Expansion**

# **ACA: New Coverage Continuum**



<sup>\*</sup> The ACA's "133% of the FPL" is effectively 138% of the FPL because of a 5% across-the-board income disregard

<sup>\*\*</sup> Based on a conversion of previous program eligibility standards converted to new MAGI income standards

# 2013 FPL Levels (may be revised Apr 2014)

Federal Poverty Level	Annual Income: Individual	Annual Income Level: Family of 3
100%	\$11,496	\$19,536
133%	\$15,288	\$25,980
138%	\$15,864	\$26,952
200%	\$22,980	\$39,060
300%	\$34,476	\$58,596
400%	\$45,960	\$78,120

Source: http://aspe.hhs.gov/poverty/13poverty.cfm

Per HHS directive, after inflation adjustment, the guidelines are rounded and adjusted to standardize the differences between family sizes.

# Single Door to Find Coverage – Began Oct 2013



Find Health Coverage that is Right for You

Welcome to Washington Healthplanfinder, a new way to help you find, compare and select a quality health insurance plan that is right for you, your family and your budget.

Find and Compare Health Plans

Apply for Coverage

#### Small Business Options

HOME | SIGN IN | ESPAÑOL

If you are a small business owner with up to 50 employees in Washington, you can provide health insurance through Healthplanfinder and you may be eligible for tax credits.

If your employer has signed up for coverage through Washington Healthplanfinder, you will receive instructions and log-in information directly from your employer.

Cover Your Employees

### Click.Compare.Covered

More people than ever before are now eligible for low-cost or free health insurance. Middle-income and low-income individuals and families generally qualify. Healthplanfinder is the only way you can access these savings.

Learn More +

Renew my Washington Apple Health> >

WASHINGTON HEALTHPLANFINDER-APPROVED PLANS:

Sign In	
USERNAME	
£	
PASSWORD	
Remember Me	
Sign In	
Forgot your username?	
Forgot your password?	
Create an account	

CUSTOMER SUPPORT ( ?)

### New WA Medicaid Brand Name

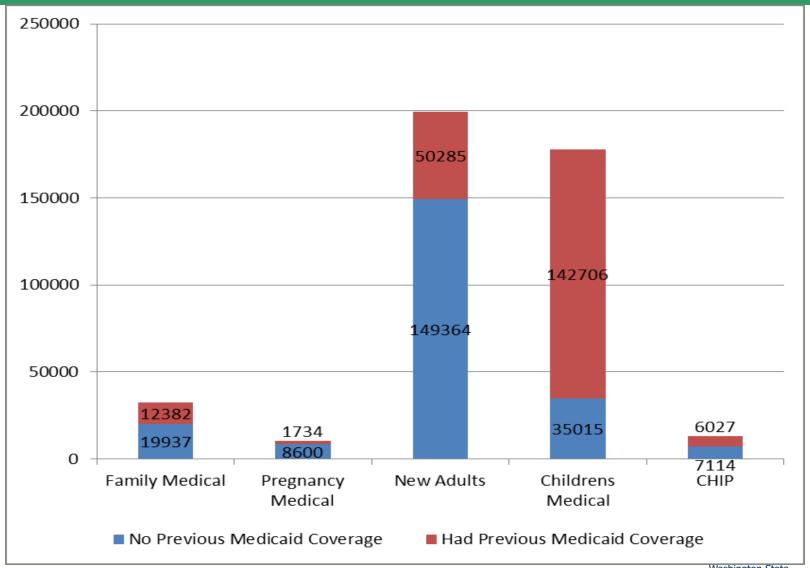


Capitalizing on the success of "Apple Health for Kids," Washington's Medicaid program will be known as Apple Health. The new name is being phased in slowly, to avoid confusion and give clients and providers time to adjust.

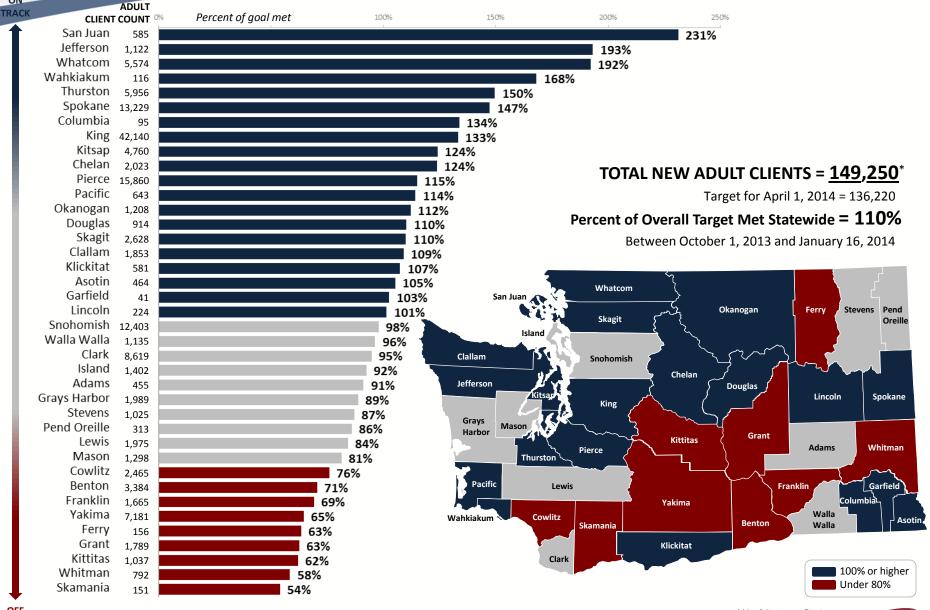




### January 16 Enrollment Snapshot



### Progress Toward April 1, 2014 Medicaid Expansion Enrollment Target



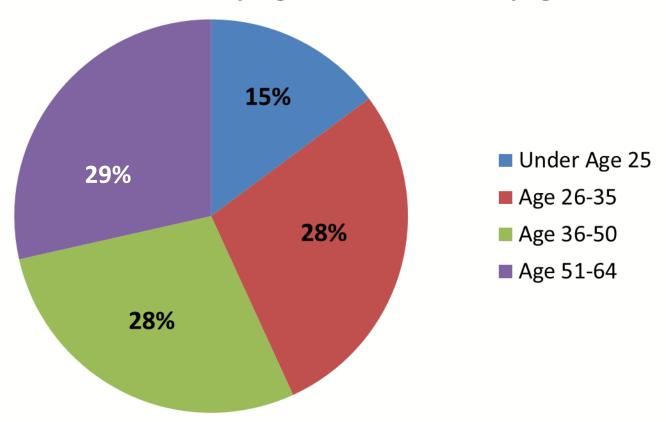
<sup>\*114</sup> additional clients do not map to Washington counties.



PACE

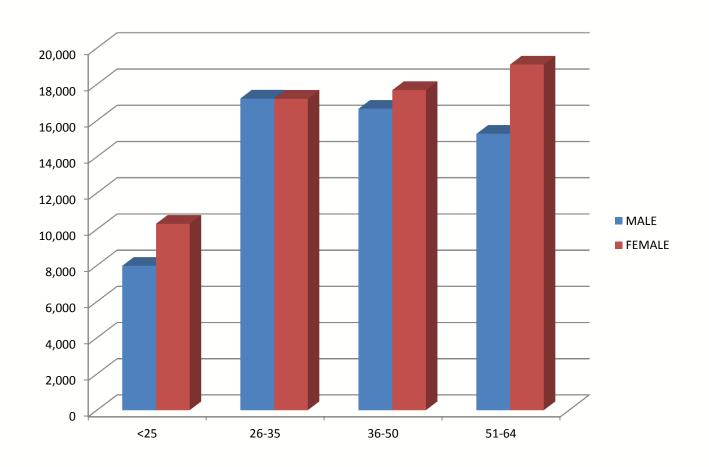
### **Nearly Half Newly Eligible Adults Under Age 35**

#### Distribution of Newly Eligible Medicaid Adults by Age



Enrolled October 1, 2013 – December 31, 2013 for coverage beginning January 1, 2014

### Gender Breakdown by Age for Newly Eligible Adults



Enrolled October 1, 2013 - December 31, 2013 for coverage beginning January 1, 2014

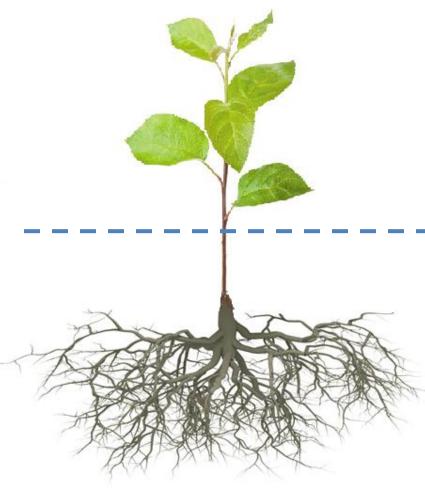


### **Health Benefit Exchange**

### **Exchange Functions & Services**



### The Exchange as a Business



#### **Above the Surface**

- The Washington Healthplanfinder
- Marketing & Outreach (e.g., Advertising)
- Customer Support (e.g., Navigators, Call Center)

#### **Below the Surface**

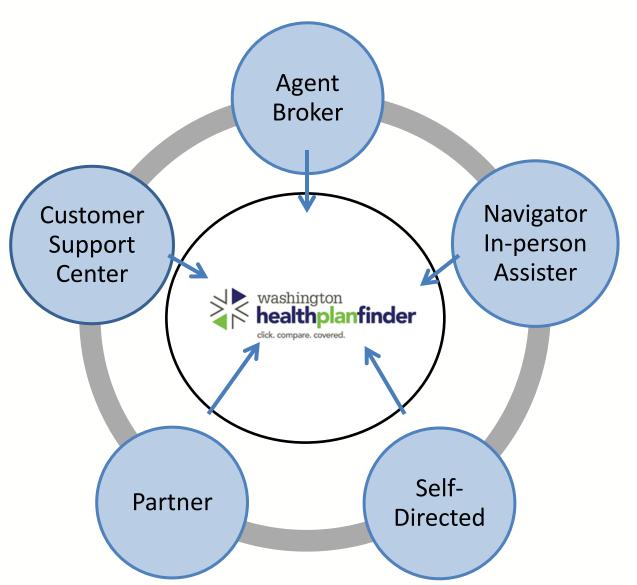
- Develop and Host Infrastructure
- Eligibility Determination and Tax Credits
- Review and Certify Qualified Health Plans
- Aggregate Premiums
- Customer Support management and training
- Navigator grant monitoring
- Program integrity
- Appeals
- Quality Rating System



### **Exchange Basics**

- Individuals >138% of FPL and small groups (1-50)
- Tax credits available for individuals 138%-400% of FPL
- Cost sharing reductions available for <250% FPL</li>
- "Qualified health plan" (QHP) offerings
- Metallic tiers of actuarial value
- Apples-to-apples comparisons for consumers, one-stop shop
- 10 essential health benefits
- Navigators, agents/brokers, call center assistance

### How will people access health care coverage?





### **Qualified Health Plans**

38 Board approved Qualified Health Plans













8 Multi-state plan





### Individual Mandate

- The penalty in 2014 is the higher of :
  - 1% of your yearly household income. The maximum penalty is the national average yearly premium for a bronze plan.
  - \$95 per person for the year (\$47.50 per child under 18). The maximum penalty per family using this method is \$285.
- The fee increases every year. In 2015 it's 2% of income or \$325 per person. In 2016 and later years it's 2.5% of income or \$695 per person. After that it is adjusted for inflation.
- If you're uninsured for just part of the year, 1/12 of the yearly penalty applies to each month you're uninsured. No penalty if you're uninsured for less than 3 months.

## **Employers in the Exchange**

- Small Business Health Options Program (SHOP)
- Organizations with 25 or fewer workers may be eligible for a tax credit to help provide coverage for employees
- Beginning 2016, companies up to 100 will be defined as "small employers"
- In 2017, the Exchange has the option to offer plans to large employers (>100)

### Implications of the ACA for Large Employers



While the Medicaid Expansion and Health Benefit Exchange receive much of the focus, there are several broad provisions of the ACA that impact nearly all employers and health plans, whether fully insured or self-funded.

#### For Example:

- Employer Responsibility, starting in 2015
- Fees to finance the Patient-Centered Outcomes
- Research Fund (PCORI) \$1 per-person, per-year
- No Cost Sharing for Preventive Services
- No Lifetime or Annual Limits
- Dependent Coverage to Age 26
- Limitations on Cost-Sharing



### **Contact Information**

#### **Nathan Johnson**

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State Health Care Innovation Plan web site - www.hca.wa.gov/SHCIP



### Governor's 2014 Supplemental Proposal and 4 Year Outlook

	FY 2014	FY 2015	FY 2016	FY 2017
Governor's Proposed Funding Rate	\$ 782	\$ 703	\$ 956	\$ 1,008
Projected end of year Assets:				
Reserves	\$ 188,015,955	\$ 203,033,914	\$ 219,508,904	\$ 233,956,811
Surplus (Deficit) Position	\$ 270,182,997	\$ 527,896	\$ 181,299	\$ 922,390

### Historical/Projected Funding Rates (per State Active Subscriber Per Month)

	Required Funding Rate without Surplus/Deficit Considerations	Funding Rate Adjustment due to Surplus/Deficit Considerations	Final Actual/Projected Funding Rate	Percentage Change in Actual/Projected Funding Rate	Percentage Change in Funding Requirements without Surplus/Deficit Considerations
FY 2008	\$660.49	\$46.51	\$707		
FY 2009	\$745.89	(\$184.89)	\$561	-20.65%	12.93%
FY 2010	\$802.13	(\$57.13)	\$745	32.80%	7.54%
FY 2011	\$792.67	\$57.33	\$850	14.09%	-1.18%
FY 2012	\$704.35	\$145.65	\$850	0.00%	-11.14%
FY 2013	\$741.13	\$58.87	\$800	-5.88%	5.22%
FY 2014	\$822.33	(\$40.33)	\$782	-2.25%	10.96%
FY 2015	\$900.15	(\$197.15)	\$703	-10.10%	9.46%
FY 2016	\$956.25	(\$0.25)	\$956	35.99%	6.23%
FY 2017	\$1,007.46	\$0.54	\$1,008	5.44%	5.35%

### Historical/Projected Medical Benefit Cost Sharing (per State Active Subscriber Per Month)

	Employee's Share of Medical Benefits Cost	Average Employee Medical Weighted Premium	Change	Percentage Change	State Index Rate (Employer's Share of Medical Benefits Cost)	Change	Percentage Change
		By Calend	dar Year			By Fiscal Year	
2008	11.19%	\$78.63			\$369		
2009	11.31%	\$85.69	\$7.06	8.98%	\$395	\$26.00	7.05%
2010	11.43%	\$86.02	\$0.33	0.39%	\$393	(\$2.00)	-0.51%
2011	11.80%	\$101.86	\$15.84	18.41%	\$443	\$50.00	12.72%
2012	15.11%	\$135.58	\$33.72	33.11%	\$444	\$1.00	0.23%
2013	14.72%	\$136.78	\$1.20	0.88%	\$463	\$19.00	4.28%
2014	14.83%	\$138.47	\$1.69	1.24%	\$466	\$3.00	0.65%
2015	14.87%	\$146.68	\$8.21	5.93%	\$493	\$27.00	5.79%
2016	14.99%	\$157.26	\$10.57	7.21%	\$524	\$31.00	6.29%
2017	14.89%	\$165.01	\$7.75	4.93%	\$554	\$30.00	5.73%



# PEBB Wellness Incentive Program 2015 Enhancements

Michele Ritala Manager, Benefit Strategy & Design Public Employees Benefits Division January 30, 2014



### 2014 Wellness Program Challenges

- Inconsistent member experience
  - Member attestation on PEBB website
  - Three health assessments offered by health plans
  - Some activities supported through health plans but not all
- Complicated to explain and promote
- Lack of tools for wellness coordinators
- But it will get better!

### Plan for 2015 Enhancements

- RFP for Health Portal & Wellness Program Administrator underway
  - Central place for PEBB members for wellness program
  - Provide state-of-the-art wellness program experience, services,
     & tools across the population
  - Strengthen worksite connection with tools and support for wellness coordinators
  - Increase participation in wellness & chronic condition management programs
  - Connect members to health plan benefits



# Wellness Strategy at a Glance

#### **SmartHealth Portal**

One place that connects employees to wellness program tools, action plans, & information

#### **PEBB Health Benefits**

Coverage & Access to health management programs, preventive care, providers, & incentive

#### **Team WorkWell**

Wellness Coordinator training program to build supportive worksites



### One Health & Wellness Portal

- Bring all wellness & health management programs under one umbrella
- Branded as SmartHealth, PEBB's wellness program for public employees
- Can be customized by employer (wellness coordinator)
- Engages employees with challenges launched agencywide, between agencies, or statewide
- Mobile applications

### One Health Assessment

- Evidence-based and customizable
- Allows PEB Division to assess health risks on population basis
- Enhances ability to tailor program offerings to address risks and measure progress
- Connects member to personalized action plan
- Paper option available

# Individual Action Plans (IAPs)

- Action plans are tailored to member based on answers to health assessment
- IAPs are offered by wellness vendor, health plan, internally, or other vendors
  - Examples: Quit for Life, Diabetes programs, PEBB program-sponsored challenge
- Wellness vendor tracks member participation toward earning incentive
- Alternatives to online experience available

### The Worksite Connection

- The worksite is key to engaging employees
- Wellness coordinators can customize the portal, initiate challenges, strengthen social network
- Coordinators can measure success
- Promoting one program in one place is more effective than through multiple health plans
- Team WorkWell trains wellness coordinators to use vendor's tools and resources

# Agency Request Legislation

- Amends RCW 41.05.120 to create the Public Employees' Benefits Board Program Benefits Account.
- Currently PEB Division restricted to purchasing medical services through health plans
- Bill allows PEB Division to contract directly with nontraditional services that don't fit "medical model"
- Examples include health portal, worksite biometrics, Living Well, weight management
- Direct contracts offer more control, lower costs, and less administrative burden



# Questions?

#### **SmartHealth Portal**

One place that connects employees to wellness program tools, action plans, & information

#### **PEBB Health Benefits**

Coverage & Access to health management programs, preventive care, providers, & incentive

#### **Team WorkWell**

Wellness Coordinator training program to build supportive worksites

Michele Ritala <u>Michele.ritala@hca.wa.gov</u> Tel: 360-725-1169





# UMP Prescription Drug Benefit ACA Impacts

Donna Sullivan, PharmD Office of the Chief Medical Officer January 30, 2014

# **ACA and Prescription Drug Costs**

- Affordable Care Act (ACA) requires member pharmacy out-of-pocket costs be applied to a maximum out-ofpocket (MOOP) limit, effective 2015
- Maximum MOOP may not exceed limits set for high deductible health plans (\$6,350 single/\$1,270 family)
  - Current UMP (non-Medicare) MOOP for medical expenses is \$2,000. No limit on member pharmacy OOP.

# Benefit Change Decision

- If no benefit changes are made, applying member pharmacy OOP costs to current MOOP results in cost of \$12.5 million to the plan
- Current Collective Bargaining Agreement (CBA) limits benefit changes to:
  - Increasing the current MOOP and applying pharmacy costs, OR
  - Creating separate pharmacy MOOP

# Benefit Change Options 2015

- Combine medical/pharmacy MOOP and leave at \$2,000
  - Plan cost = \$12.5 million annually
- Increase combined medical/pharmacy MOOP examples
  - Increase MOOP to \$2,500; Cost mitigated = \$4.5 million
  - Range of options on next slide
- Create separate pharmacy MOOP
  - + \$700 Pharmacy MOOP = \$4.6 million of the cost mitigated
  - \$2000 Pharmacy MOOP = \$11.2 million of the cost mitigated
  - Range of options on next slide



# 2015 Design Options

al & Rx OP		yer Costs igated	Separate Rx MOOP	-	loyer Costs litigated		Separate Rx MOOP	-	oyer Costs litigated	
	\$	in M		\$ in M				\$ in M		
ease Com	bined N	100P	Creat	e Rx I	MOOP and Ke	ep N	ep Medical MOOP at \$2000			
<b>CO 400</b>	Φ	0.0	<b>#</b> 500	Φ.	4.4		<b>#4.000</b>	ф	40.0	
\$2,100		0.9	\$500		1.4		\$1,800		10.8	
\$2,200	\$	1.8	\$600	\$	3.2		\$1,900	\$	11.0	
\$2,250	\$	2.3	\$700	\$	4.6		\$2,000	\$	11.2	
\$2,300	\$	2.7	\$800	\$	5.8		\$2,100	\$	11.4	
\$2,400	\$	3.6	\$900	\$	6.8		\$2,200	\$	11.5	
\$2,500	\$	4.5	\$1,000	\$	7.6		\$2,300	\$	11.6	
\$2,600	\$	5.4	\$1,100	\$	8.3		\$2,400	\$	11.7	
\$2,700	\$	6.3	\$1,200	\$	8.9		\$2,500	\$	11.8	
\$2,800	\$	7.3	\$1,300	\$	9.3		\$2,600	\$	11.8	
\$2,900	\$	8.2	\$1,400	\$	9.7		\$2,700	\$	11.9	
\$3,000	\$	9.1	\$1,500	\$	10.1		\$2,800	\$	12.0	
\$3,100	\$	10.0	\$1,600	\$	10.4		\$2,900	\$	12.0	
\$3,200	\$	10.9	\$1,700	\$	10.6		\$3,000	\$	12.1	

# Potential Changes in 2016

- PEBB not limited to MOOP changes in 2016
- Other benefit changes, such as increasing pharmacy deductible or combining current medical/pharmacy deductibles, would spread the cost among more people, save costs to the plan, and keep premiums lower

# Potential 2016 Design Options

Assuming same yearly benefit cost of \$12.5M										
Medical Deductible	• •	ver Costs gated		Rx Deductible	Employer Costs Mitigated		Integrated Deductible	•		
	\$ 1	in M				\$ in M				\$ in M
Maintain combined Maintain Rx ded		-		Maintain combine Maintain medical				Maintain combined MOOP at \$20 Create integrated deductible		
Increase Medical	Deductik	ole Only		Increase Rx Deductible Only			Create Integrated Deductible			
\$250	\$	-		\$100	\$	-		\$250	\$	(2.7)
\$265	\$	1.7		\$150	\$	5.8		\$300	\$	5.0
\$280	\$	3.3		\$200	\$	11.1		\$350	\$	12.4
\$295	\$	6.1		\$250	\$	15.3		\$400	\$	19.4
\$300	\$	6.6		\$300	\$	19.1		\$450	\$	26.2
\$310	\$	7.5		\$350	\$	22.4		\$500	\$	32.9
\$325	\$	9.1		\$400	\$	25.1		\$550	\$	39.2

# **Pros/Cons Discussion**

Plan Design Change Options for 2015, per CBA										
Separate Pharm	cy and Medical MOOP	Combined Pharmacy and Medical MOOP								
Pros	Cons	Pros	Cons							
<ul> <li>There are no "losers" –         RX costs do not current         apply to MOOP</li> <li>Compliant with ACA</li> <li>Results in no change to         the UMP Classic medical         MOOP</li> <li>Allows a revenue neutral         approach without         increasing the medical         deductible</li> </ul>	<ul> <li>Inconsistent with the market</li> <li>More difficult to explain to members</li> </ul>	<ul> <li>Provides ease of comparison with other PEBB plans</li> <li>Consistent with the market</li> <li>Compliant with ACA</li> <li>Higher combined MOOP enables more effective reference-pricing in future benefit years</li> <li>Consistent with governor's proposed funding rate</li> <li>Easier to explain</li> </ul>	Some who will not gain from the benefit will pay for it, e.g. low prescription utilizers with higher medical costs							

# Questions?

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Prescription Drug Program

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Tel: 206-521-2037





# Retiree Dental Only Coverage

January 30, 2014

Mary Fliss
Deputy Director
PEB Division

Barb Scott
Policy and Rules Manager
PEB Division

### Purpose of Briefing

- Summary of Issue
- Current Status

- Analysis
- Next Steps

## Questions?

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