

# Musculoskeletal Program Report

## **Virginia Department of Human Resource Management**



**General Assembly Report  
June 30, 2014**

# Musculoskeletal Program Outline

- **Background**
- **Current Claims Data**
- **Current Demographic Data**
- **Current Patient Management**
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- **Appendix**

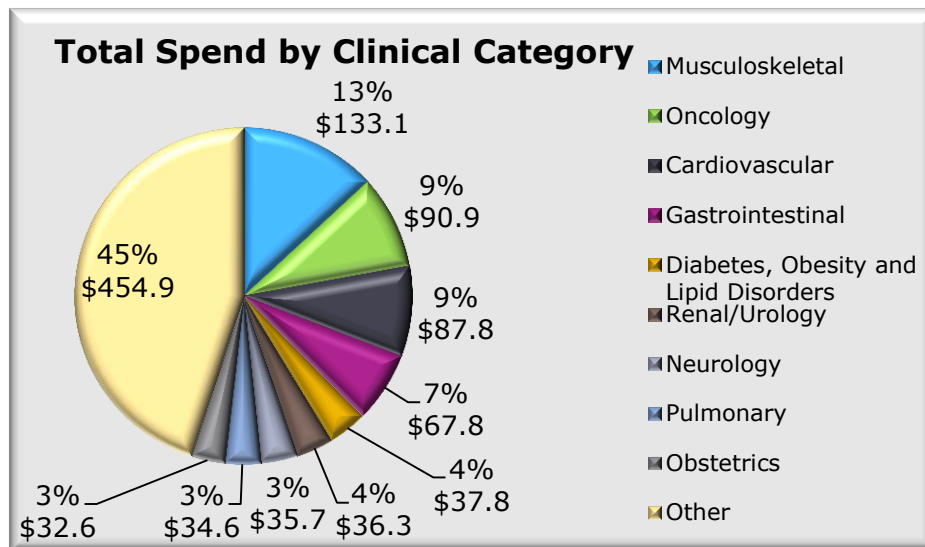
# Background

**The Department of Human Resource Management was instructed to evaluate strategies for treatments associated with musculoskeletal (MSK) disorders, an area identified in recent studies as having potential for savings and improved healthcare outcomes. Language for the study was included in Chapter 1, 2014 Special Session I, Acts of Assembly, Item 83.G:**

- *"By June 30 the Department shall evaluate new strategies for treatments associated with muscular-skeletal disorders, and implement such strategies where cost savings reasonably appear indicated."*

# Current Claims Data

- Musculoskeletal is the largest clinical category in 2013
  - **13%** of total spend
  - **\$133 Million** total spend
- MSK spend decreased 4.2% from the prior year



Other: includes wellness/preventive healthcare and categories <3%.  
Data as of November 2012-October 2013.

## November 2012 – October 2013

Service Category	Total Spend (Millions)
Inpatient	\$38.5 M
Outpatient	\$35.6 M
Professional	\$44.0 M
Pharmacy	\$15.0 M
<b>TOTAL</b>	<b>\$133.1 M</b>

# Current Claims Data – MSK Inpatient

- **Inpatient: \$38.5 Million or 29% of MSK spend**
  - 96% of inpatient spend is surgical
  - 4% of inpatient spend is medical
  - 36%, or \$12.6 million, of inpatient spend is related to spinal conditions

<b>Frequent Inpatient Procedures</b>	<b>Total Spend (Millions)</b>	<b>Services</b>	<b>Services/1000</b>	<b>Total Spend/Service</b>	<b>% of IP Spend</b>
Spine	\$ 11.5	196	1.0	\$59,228	36%
Knee Replacement	\$ 10.3	363	1.8	\$28,490	33%
Hip Replacement	\$ 5.2	189	0.9	\$27,810	17%

Data as of November 2012-October 2013

# Current Claims Data – MSK Outpatient

- **Outpatient: \$35.6 Million or 27% of MSK spend**
  - 21% of outpatient spend is imaging, the largest MSK outpatient spend
  - 35% of outpatient spend is related to spinal conditions

<b>Frequent Outpatient Procedures</b>	<b>Total Spend (Millions)</b>	<b>Services</b>	<b>Services/1000</b>	<b>Total Spend/Service</b>	<b>% of OP Spend</b>
Imaging Procedures	\$7.6	4,332	21.5	\$1,758	21%
Spine Procedures	\$2.5	225	1.1	\$11,219	7%
Shoulder Procedures	\$1.5	234	1.2	\$6,449	4%
Physician Visit & Evaluation	\$1.5	2,791	13.8	\$531	4%
Physical Therapy	\$1.3	4,290	21.3	\$311	3%
Knee Arthroscopy & Repair	\$1.2	343	1.7	\$3,484	3%

Data as of November 2012 – October 2013

# Current Claims Data – MSK Professional

- **Professional: \$44.0 Million or 35% of MSK spend**

- Orthopedic Surgery is the largest professional spend at \$8.7 M or 20% of all professional MSK fees
- Physical Therapy represents 10% of all professional MSK spend, or \$4.4 M

Largest Provider Specialties	Total Spend (Millions)	Total Spend PMPM	Visits	Visits/1000	Services	Claimants	Cost/Visit
ORTHOPEDIC SURGERY	\$8.7	\$3.59	30,981	153.6	58,362	12,684	\$281
PHYSICAL THERAPY	\$4.4	\$1.82	50,998	252.9	124,399	5,725	\$86
CHIROPRACTOR	\$3.6	\$1.50	59,569	295.4	150,844	7,631	\$61
ANESTHESIOLOGY	\$3.0	\$1.25	4,559	22.6	5,841	3,302	\$661
RHEUMATOLOGY	\$2.5	\$1.05	5,210	25.8	12,930	2,179	\$487
FAMILY PRACTICE	\$2.2	\$0.91	20,788	103.1	32,792	13,730	\$106
PHYSICAL MEDICINE & REHABILITATION	\$1.4	\$0.57	6,578	32.6	12,250	2,672	\$208
PODIATRY	\$1.2	\$0.49	7,619	37.8	13,173	3,835	\$155
INTERNAL MEDICINE	\$1.0	\$0.44	9,783	48.5	14,241	5,923	\$110
RADIOLOGY	\$0.887	\$0.37	11,160	55.3	14,432	8,646	\$80
NEUROLOGICAL SURGERY	\$0.815	\$0.34	1,683	8.3	2,307	907	\$485
PAIN MANAGEMENT	\$0.766	\$0.32	3,568	17.7	6,773	1,110	\$215
DIAGNOSTIC RADIOLOGY	\$0.668	\$0.28	6,670	33.1	8,667	5,228	\$100
ORTHOPEDICS	\$0.444	\$0.18	1,616	8.0	3,376	877	\$275
SPORTS MEDICINE	\$0.345	\$0.14	1,961	9.7	3,650	953	\$176

Data as of November 2012 – October 2013

# Current Claims Data – MSK Pharmacy

- **Pharmacy: \$15.0 Million or 11% of MSK spend**
  - 41% of pharmacy spend is on biologics
  - 23% of pharmacy spend is on brand drugs going generic in 2014

Brand Name	Plan Paid (Millions)	Plan Paid %	Plan Paid PMPM	Plan Paid/Service	Total Spend (Millions)	Total Spend PMPM	Total Spend/Service	Services	Services/1000
ENBREL	\$6.9	25.9%	\$0.96	\$2,939	\$7.0	\$0.98	\$3,004	2,341	3.9
NEXIUM	\$4.8	17.9%	\$0.67	\$287	\$5.4	\$0.75	\$323	16,597	27.8
HUMIRA	\$4.0	15.0%	\$0.56	\$3,184	\$4.1	\$0.57	\$3,247	1,255	2.1
CELEBREX	\$1.4	5.3%	\$0.20	\$218	\$1.6	\$0.23	\$255	6,396	10.7
OXYCONTIN	\$1.4	5.2%	\$0.19	\$437	\$1.5	\$0.21	\$481	3,176	5.3
CYMBALTA	\$1.2	4.7%	\$0.17	\$251	\$1.4	\$0.20	\$283	4,941	8.3
SIMPONI	\$0.893	3.4%	\$0.12	\$3,615	\$0.911	\$0.13	\$3,689	247	0.4
METAXALONE	\$0.710	2.7%	\$0.10	\$187	\$0.772	\$0.11	\$204	3,785	6.3
FENTANYL	\$0.642	2.4%	\$0.09	\$216	\$0.689	\$0.10	\$232	2,959	5.0
FORTEO	\$0.607	2.3%	\$0.08	\$1,448	\$0.632	\$0.09	\$1,508	419	0.7
LYRICA	\$0.599	2.3%	\$0.08	\$224	\$0.680	\$0.10	\$254	2,673	4.5
OPANA ER	\$0.564	2.1%	\$0.08	\$546	\$0.606	\$0.08	\$586	1,033	1.7
ORENCIA	\$0.334	1.3%	\$0.05	\$2,903	\$0.341	\$0.05	\$2,963	115	0.2
SYNVISC-ONE	\$0.258	1.0%	\$0.04	\$1,091	\$0.274	\$0.04	\$1,160	236	0.4
EUFLEXXA	\$0.240	0.9%	\$0.03	\$917	\$0.253	\$0.04	\$969	261	0.4
OXYCODONE HCL	\$0.240	0.9%	\$0.03	\$36	\$0.332	\$0.05	\$50	6,613	11.1
FLECTOR	\$0.226	0.8%	\$0.03	\$262	\$0.262	\$0.04	\$304	860	1.4
NUCYNTA	\$0.220	0.8%	\$0.03	\$179	\$0.269	\$0.04	\$219	1,224	2.1
TRAMADOL HCL ER	\$0.219	0.8%	\$0.03	\$192	\$0.239	\$0.03	\$210	1,136	1.9
CIMZIA	\$0.208	0.8%	\$0.03	\$3,582	\$0.211	\$0.03	\$3,651	58	0.1
TRACLEER	\$0.207	0.8%	\$0.03	\$6,279	\$0.209	\$0.03	\$6,329	33	0.1
HYDROCODONE-ACETAMINOPHEN	\$0.198	0.7%	\$0.03	\$3	\$0.737	\$0.10	\$11	62,049	104.0
FENTORA	\$0.196	0.7%	\$0.03	\$8,539	\$0.197	\$0.03	\$8,581	23	0.0
AVINZA	\$0.187	0.7%	\$0.03	\$499	\$0.197	\$0.03	\$526	374	0.6
VENLAFAXINE HCL ER	\$0.180	0.7%	\$0.03	\$114	\$0.211	\$0.03	\$134	1,572	2.6

Data as of November 2012 – October 2013  
Medications commonly used for MSK

= Biologics     = Generic in 2014



# Current Demographic Data – Lifestyle Risks

## **Overweight/Obesity**

- 34.9% of U.S. adults are obese
- 82% of patients admitted into Acute Inpatient Rehab Stay for knee replacement were morbidly obese with a Body Mass Index > 35

## **Smoking**

- 18.1% of U.S. adults smoke cigarettes
- Increases the risk of osteoporosis
- Increases risk of injury
- Has a detrimental effect on bone and wound healing

## **Sedentary Lifestyle/Lack of Exercise**

- More than 60% of U.S. adults have a sedentary lifestyle
- Increases the risk of osteoporosis
- Increases the risk of osteoarthritis
- Increases the risk of back pain
- Can result in obesity, itself a risk factor for musculoskeletal disease

# Current Demographic Data

## Cost by Relationship Type

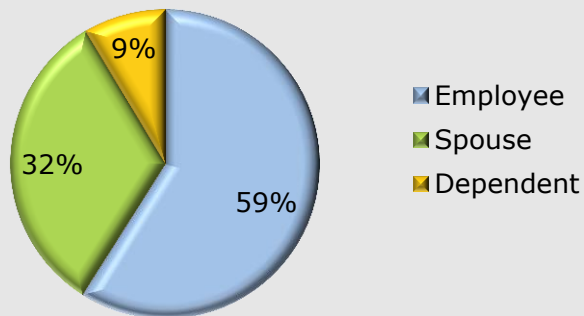
	Total Spend (Millions) *	Plan Paid (Millions) *
Employee	\$79.0 M	\$70.2 M
Spouse	\$43.1 M	\$38.7 M
Dependent	\$11.0 M	\$9.7 M
<b>TOTAL</b>	<b>\$133.1 M</b>	<b>\$118.7 M</b>

\*difference is member cost-share

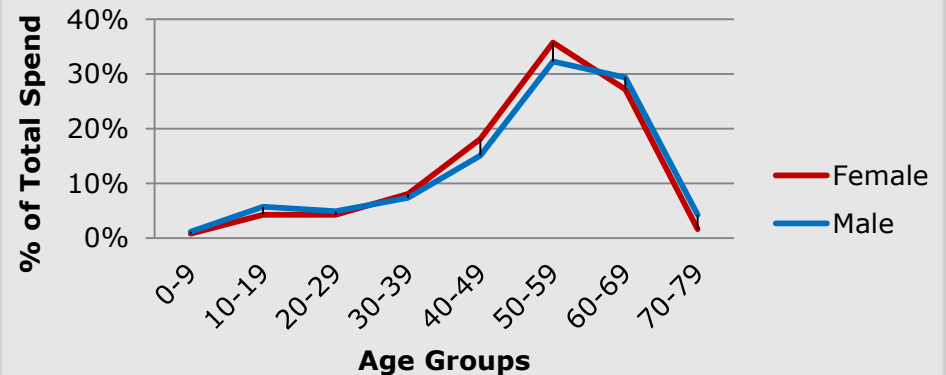
## Aging population at risk for MSK conditions

- 73% of total MSK spend is with members aged 45-69

## Relationship Type by Spend

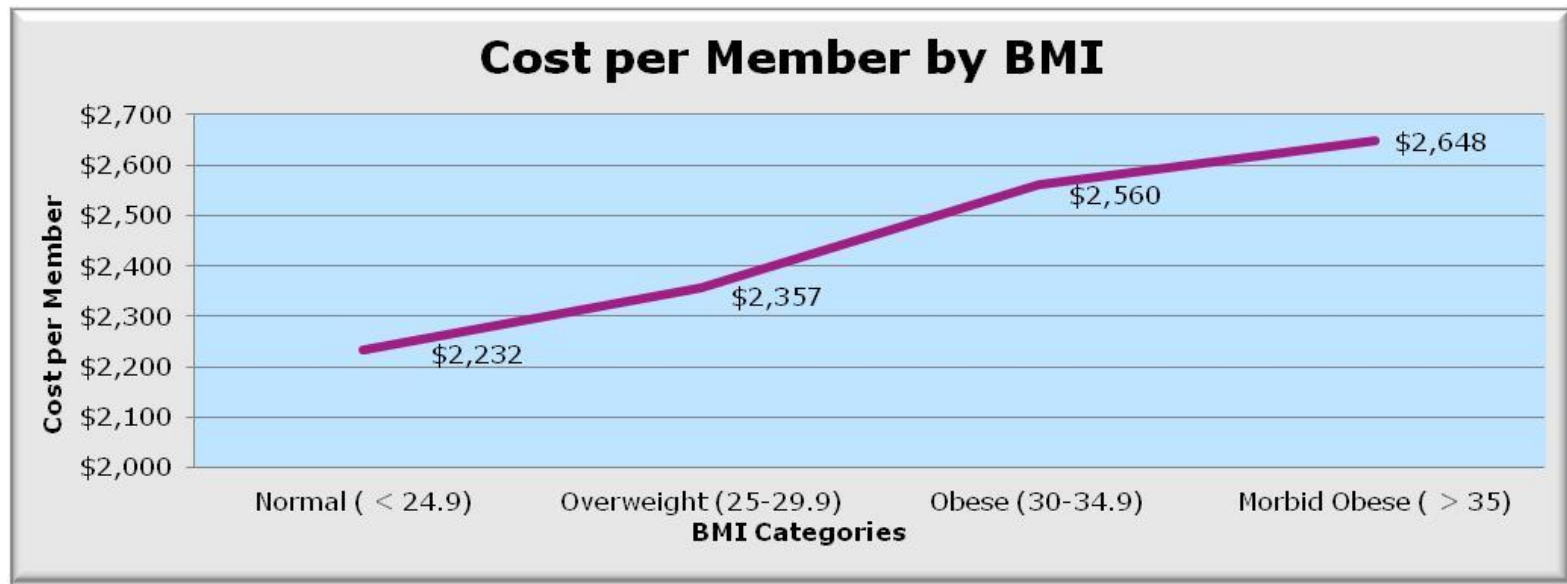


## % of Spend by Age and Gender



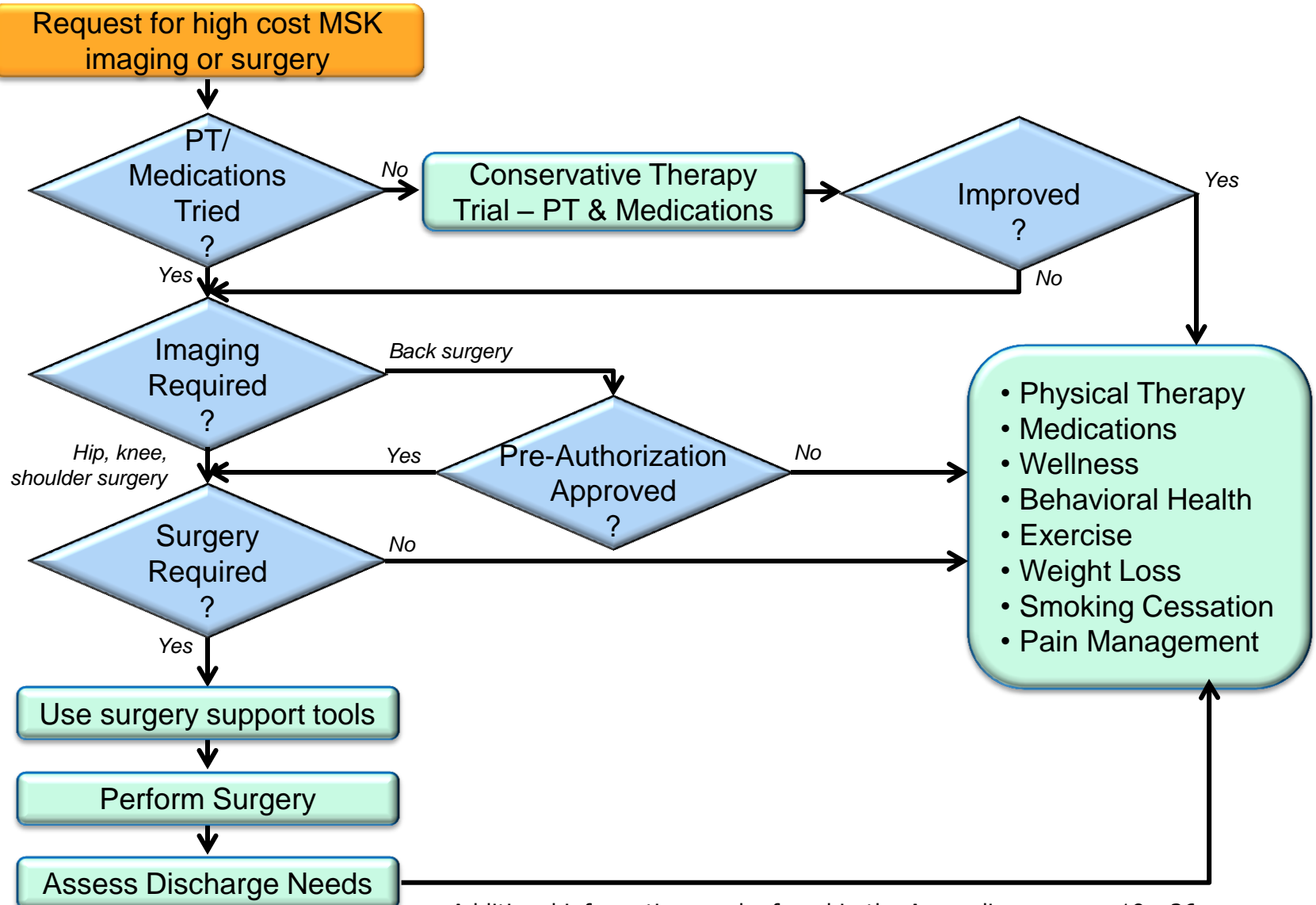
# Current Demographic Data – Body Mass Index (BMI)

- 44% or 66,630 of all 150,797 eligible members had biometric testing results including BMI
- 33% or 21,812 of those members have MSK conditions
- Cost per member increases as BMI increases



Data as of November 2012 – October 2013

# Current Care Management Process



# Current Patient Management

## Disease Management

- Helps individuals with chronic health conditions understand their conditions and manage their care to reach optimal health
- MSK conditions and risk factors targeted include osteoporosis, osteoarthritis, chronic back and neck pain, and obesity
- Members in disease management frequently have multiple conditions

Identified for MSK Related Conditions	Nurse Engaged	Unresponsive to outreach	Opted Out	Low risk education only	Total Identified
Chronic Back/Neck	731	957	126	123	1,937
Osteoarthritis	712	799	119	121	1,751
Osteoporosis	93	122	22	123	360
Rheumatoid Arthritis	110	150	20	26	306
Weight Management	1,974	1,837	164	233	4,208

Data as of March 31, 2014

# Current Patient Management

## Wellness & Lifestyle Coaching

- Engage and manage members with elevated lifestyle risk factors to impact them BEFORE they develop costly chronic conditions
- Conditions identified
  - Weight management
  - Insufficient exercise
  - Stress
  - Poor nutrition
  - Smoking
- Data used
  - Health assessment responses
  - Medical claims
  - Lab results
  - Pharmacy claims



Data as of March 31, 2014

# Future Improvement Strategies

<b>Strategy 1</b>	<b>Increase Value of Integrated Health Management</b>
<b>Actions</b>	<ul style="list-style-type: none"><li>➤ Reinforce a culture of personal responsibility for health<ul style="list-style-type: none"><li>• Health Assessments</li><li>• Biometric Screenings</li><li>• VBID programs</li><li>• Rewards</li></ul></li></ul>
	<ul style="list-style-type: none"><li>➤ Increase member awareness of available programs and tools<ul style="list-style-type: none"><li>• Transparent cost and quality comparisons (see page 19)</li><li>• Centers of Excellence/Institutes of Quality (see page 19)</li><li>• Surgery decision support (see page 20)</li><li>• Disease Management and Coaching (see pages 21-23)</li></ul></li></ul>
	<ul style="list-style-type: none"><li>➤ Enhance effectiveness of current programs and tools<ul style="list-style-type: none"><li>• Improve vendor systems to enhance data exchange</li><li>• Improve risk management through earlier identification and engagement of at-risk members</li></ul></li></ul>
<b>Implementation</b>	➤ Ongoing

# Future Improvement Strategies

<b>Strategy 2</b>	<b>Implement Physical Therapy (PT) VBID Pilot Program</b>
<b>Actions</b>	<ul style="list-style-type: none"><li>➤ Reduce financial barrier for PT<ul style="list-style-type: none"><li>• Reduce co-payment for COVA Care from \$35 to \$15</li><li>• Reduce co-insurance for COVA HealthAware from 20% to 10%</li></ul></li></ul>
	<ul style="list-style-type: none"><li>➤ Increase utilization of PT<ul style="list-style-type: none"><li>• 11% PT utilization currently</li><li>• Research indicates clinic-based PT twice as effective as home-based PT</li><li>• Research does NOT indicate that one type of PT provider is superior to others</li></ul></li></ul>
	<ul style="list-style-type: none"><li>➤ Avoid or delay surgery</li></ul>
	<ul style="list-style-type: none"><li>➤ Improve health outcomes<ul style="list-style-type: none"><li>• Reduce pain</li><li>• Improve physical function</li><li>• Fewer complications</li></ul></li></ul>
<b>Implementation</b>	<ul style="list-style-type: none"><li>➤ Estimate July 1, 2015</li></ul>



# Future Improvement Strategies

<b>Strategy 3</b>	<b>Bundle Payment for Total Knee and Hip Replacement</b>
<b>Actions</b>	<ul style="list-style-type: none"><li>➤ Implement a single payment per episode for all services and costs spanning multiple providers across multiple settings<ul style="list-style-type: none"><li>• Episode concept begins on day of admission and extends a certain number of days</li><li>• Episode concept includes rehabilitation, PT, readmissions for revisions, failures, complications, home nursing and durable medical equipment</li></ul></li></ul>
	<ul style="list-style-type: none"><li>➤ Ensure quality care</li></ul>
	<ul style="list-style-type: none"><li>➤ Encourage collaboration among providers</li></ul>
	<ul style="list-style-type: none"><li>➤ Promote best outcomes with a holistic approach, reducing complications and readmissions</li></ul>
	<ul style="list-style-type: none"><li>➤ Focus on quality and reduction of unnecessary care through financial incentive to providers</li></ul>
<b>Implementation</b>	<ul style="list-style-type: none"><li>➤ Estimate July 1, 2017 or later</li></ul>

# Appendix

- Describes programs and processes currently in place
- Vendors use unique programs and strategies to address the evolving state of health and the marketplace

# Appendix – Current Member Tools

<b>Program</b>	<b>Description</b>	<b>Vendor</b>
<b>Cost and Quality Comparison Tools</b>	<ul style="list-style-type: none"> <li>• Provide information to help members select a hospital for medical care for certain procedures, conditions and diagnoses.</li> <li>• Allow members to compare hospitals based on:               <ol style="list-style-type: none"> <li>1. The number of patients treated per year</li> <li>2. Mortality</li> <li>3. Complications</li> <li>4. Length of stay</li> <li>5. Cost</li> </ol> </li> <li>• Promote successful re-direction for high-tech procedures, including MSK related CTs, MRIs, Hip and Knee Replacements.</li> </ul>	Aetna and Anthem
<b>Centers of Excellence/ Institutes of Quality</b>	<ul style="list-style-type: none"> <li>• Award Quality and Safety, Cost of Care and Efficiency and Accessibility Quality designations to facilities in order to identify comprehensive orthopedic treatment centers that can provide both inpatient and outpatient procedures.</li> <li>• Post results on respective vendor web sites and on their provider directories to help members make better informed healthcare decisions when they choose a facility for knee replacement, hip replacement and spine surgery.</li> </ul>	Aetna and Anthem

# Appendix – Current Member Tools

Program	Description	Vendor
<p><b>Surgery Decision Support (Powered by Welvie)</b></p>	<ul style="list-style-type: none"> <li>• Help users understand procedures, tests and surgeries for conditions for which there is more than one clinically appropriate treatment.</li> <li>• Help users select the appropriate treatment based on their understanding of these options.</li> <li>• Guide users through a personalized, interactive, curriculum focused on decision-making for currently proposed or future surgery.</li> <li>• Show users, through videos, quizzes and content, how to work proactively and effectively with providers to obtain an accurate diagnosis and the most appropriate treatment for their condition, based on the user's tolerance of risk, beliefs and desired outcomes.</li> <li>• Help users understand and evaluate all treatment options and alternatives, as well as identify inherent risks and benefits.</li> <li>• Use six easy steps to help members:             <ul style="list-style-type: none"> <li>• Get the right diagnosis</li> <li>• Find the best doctor</li> <li>• Make the right treatment decision</li> <li>• Research hospitals</li> <li>• Prepare for surgery</li> <li>• Recover at home</li> </ul> </li> </ul>	<p>Aetna</p>

# Appendix – Current Disease Management

Condition	Key Clinical Issues and Goals	Vendor
<b>Osteoporosis</b>	<ul style="list-style-type: none"> <li>• Educate on the fundamental nature of osteoporosis.</li> <li>• Educate that adequate dietary intake, medications and attention to lifestyle factors can prevent or stop the progression of osteoporosis.</li> <li>• Educate on the importance of bone density scan testing, results and regular follow-up.</li> <li>• Discuss risk factors which may cause or worsen osteoporosis.</li> <li>• Understand the importance of a work-up for underlying causes in men with osteoporosis.</li> <li>• Ensure that members understand the key clinical issues, self-management issues and monitoring issues.</li> <li>• Educate on warning signs of osteoporosis complications .</li> <li>• Conduct fall risk assessment.</li> <li>• Educate on medication adherence and barriers.</li> </ul>	ActiveHealth
<b>Osteoarthritis</b>	<ul style="list-style-type: none"> <li>• Educate members on the fundamental nature of osteoarthritis (OA).</li> <li>• Review traditional and alternative medications used to treat OA.</li> <li>• Educate members that among the self-management strategies, weight loss and exercise are usually the mainstays of treatment.</li> <li>• Assess functional ability and review pain control.</li> <li>• Address the ability to do activities of daily living, including self-care, vocational activities, and avocational activities.</li> <li>• Ascertain whether the member is adherent with their regimen and if not, understand and address barriers to adherence.</li> <li>• Assess and educate as needed on blood pressure (BP), body mass index (BMI), depression, and smoking.</li> </ul>	ActiveHealth

# Appendix – Current Disease Management

Condition	Key Clinical Issues and Goals	Vendor
<b>Chronic Back and Neck Pain</b>	<ul style="list-style-type: none"> <li>• Educate on the fundamental nature of pain.</li> <li>• Educate on the principle of using the least toxic, most effective medications, therapies and surgeries.</li> <li>• Educate on the importance of maintaining, as closely as possible, normal activities of daily living (ADL's).</li> <li>• Educate on common risk factors for chronic low back pain and strategies used to reduce or eliminate them.</li> <li>• Discuss the value of a second opinion by a non-surgeon before having elective surgery.</li> <li>• Understand the importance of a work-up for underlying causes in men with osteoporosis.</li> <li>• Educate on warning signs that might signal serious complications of chronic low back and neck pain or underlying untreated systemic disease.</li> </ul>	ActiveHealth
<b>Obesity</b>	<ul style="list-style-type: none"> <li>• Educate that the most effective strategies for conservative weight loss are combinations of therapies that include caloric reduction, exercise, and behavioral modification therapy.</li> <li>• Educate about the importance of Body Mass Index (BMI) and waist size as indicators of the risk for serious medical problems associated with obesity.</li> <li>• Assist with education, strategies and motivational coaching to meet member's stage of change.</li> <li>• Review and support doctor-prescribed weight loss goals.</li> <li>• Educate about various weight loss diets and how to identify and avoid foods with poor nutritional value.</li> <li>• Educate about the importance of doctor-prescribed physical activity and exercise for effective, sustained weight loss and weight management.</li> </ul>	ActiveHealth

# Appendix – Current Lifestyle Coaching

<b>Condition</b>	<b>Key Clinical Issues and Goals</b>	<b>Vendor</b>
<b>Weight Management, Exercise, Nutrition, Stress Management</b>	<ul style="list-style-type: none"><li>• Identify members with elevated lifestyle risk factors to impact them BEFORE they develop costly chronic conditions or health and wellness issues.</li><li>• Provide one-on-one collaboration by nurses, dietitians, nutritionists, exercise physiologists and health educators with high risk members to set meaningful goals, identify barriers and create strategies to overcome them.</li><li>• Offer suggestions, tips and encouragement to help members reach the goals that they set such as losing weight, eating healthier, and managing stress.</li><li>• Allow online engagement with digital coaching modules and other tools through MyActiveHealth.</li></ul>	ActiveHealth

# Appendix – Current Provider Tools

Program	Description	Vendor
<b>Provider Education and Decision Support - Provider Care Management Solutions</b>	<ul style="list-style-type: none"> <li>• Make a web-based application available to provider practices participating in WellPoint’s Enhanced Personal Health Care programs.</li> <li>• Provide alerts, dashboards and reports giving provider practices the tools to manage patients’ health and to thrive in a value-based payment environment.</li> <li>• Stratify the Wellpoint patient population based on risk and prevalence of chronic conditions.</li> <li>• Offer actionable clinical insights at the provider and member-level showing gaps in care, high risk readmissions and avoidable ER visits.</li> <li>• Monitor and improve performance in the Enhanced Personal Health Care payment model, connecting the dots between actionable activities and value-based financial incentives.</li> </ul>	Anthem



# Appendix – Current Precertification Management

Program	Description	Vendor
<b>Inpatient and Outpatient Precertification Program</b>	<ul style="list-style-type: none"> <li>• Permit eligibility verification/confirmation, determination of coverage and communication with the treating provider and/or plan participant in advance of the procedure, service or supply.</li> <li>• Enable the vendor to identify plan participants for pre-service discharge planning and refer plan participants to other programs administered within the benefit plan.</li> </ul>	Aetna and Anthem
<b>Spine Surgery Focused Review</b>	<ul style="list-style-type: none"> <li>• Evaluation by nurses trained in identifying spine surgery cases for MD (Orthopedic) review to ensure clinical appropriateness using Milliman and Anthem Coverage Guidelines.</li> <li>• Review for lumbar decompressions (laminectomies), lumbar fusions and cervical and lumbar artificial intervertebral discs.</li> </ul>	Anthem

# Appendix – Current Utilization Management

<b>Program</b>	<b>Description</b>	<b>Vendor</b>
<b>Utilization Management Concurrent Review</b>	<ul style="list-style-type: none"> <li>• Work closely with providers to review the appropriateness, medical need and value of clinical services.</li> <li>• Base review on established evidenced-based criteria/guidelines.</li> <li>• Collaborate with treating providers to ensure that the delivery of care occurs in the most appropriate and effective setting.</li> </ul>	Aetna and Anthem
<b>Utilization Management for Discharge Planning</b>	<ul style="list-style-type: none"> <li>• Begin when vendor receives notice of the hospital admission.</li> <li>• Work with the facility to determine the plan participant's discharge needs.</li> <li>• Develop a transition plan from one level of care to the next.</li> </ul>	Aetna and Anthem
<b>Utilization Management for Advanced Diagnostic Imaging Services</b>	<ul style="list-style-type: none"> <li>• Provide a comprehensive approach to both quality and utilization management for high tech radiology services – MRI/MRA and CT/CCTA.</li> <li>• Require referring physician and the facility to share responsibility for obtaining preauthorization.</li> </ul>	Aetna and Anthem