

## **Programs and Procedures for Chronic and High Cost Conditions**

### *Related to the Early Retiree Reinsurance Program*

HealthPartners Disease and Case Management programs are targeted to those who have been identified with a chronic disease or condition and/or who are experiencing complex medical or behavioral health situations. The goal of these programs is to help members optimize their condition by helping them stay out of the hospital, ensuring medication adherence, making sure they use resources appropriately and empowering them to practice self-management. Ultimately, this leads to a reduction of preventable complications and a reduction in total cost of care.

HealthPartners measures the Return on Investment (ROI) for each of its Disease and Case Management programs. The ROI methodologies used by HealthPartners are scientifically designed and produce reliable, valid measurements that are coupled with program outcomes metrics. HealthPartners takes a rigorous approach to ROI calculations, which includes:

1. Following the Disease Management Association of America (DMAA) Outcomes Guidelines that were issued in December 2009.
2. A designated committee of organizational experts to evaluate the validity of the ROI measurement, including built in objectivity and independence that includes several rounds of review and independent validation.
3. External validation through certification for all conditions for which certifications are available. HealthPartners programs are certified in Savings Measurement from the Disease Management Purchasing Consortium (DMPC) for using plausibility indicators as part of savings measurement for common chronic diseases.

For purposes of the Early Retiree Reinsurance Program, each of the following conditions could result in claims in excess of \$15,000 in a plan year, in the absence of the applicable Disease Management or Case Management program. HealthPartners reviewed actual case episodes of an appropriate sample of cases for the Disease Management conditions listed below. Based on this review, the following conditions are likely to exceed the \$15,000 threshold in the average case, if left unmanaged:

- Heart Disease
- COPD
- Diabetes

For the remaining conditions of Asthma and Depression, there is anecdotal evidence in our historical claims data base that each condition could exceed \$15,000 if left unmanaged. Similar data exists for the complex cases covered in HealthPartners Case Management programs.

## HealthPartners Disease Management Program Savings

Disease Management Program	Financial Impact (ROI)	Utilization of Services
<p><b>Asthma</b></p> <p>Members learn to detect early warning signs of an asthma attack, about the importance of medications and methods to identify and avoid triggers. High-risk participants receive personalized support via telephone from registered nurses.</p>	<p>4.0 : 1</p>	<ul style="list-style-type: none"> <li>▪ 58% reduction in all-cause hospital admissions after being in the program for greater than 6 months/1,000 participants per year</li> <li>▪ 55% reduction in all-cause emergency department (ED) visits after being in the program for greater than 6 months/1,000 participants per year</li> </ul>
<p><b>Chronic Obstructive Pulmonary Disease</b></p> <p>Helps participants manage symptoms. High-risk participants receive a respiratory nursing assessment and daily biometric symptom monitoring. All participants receive education on how to manage symptoms and personalized action plans.</p>	<p>1.6 : 1</p>	<ul style="list-style-type: none"> <li>▪ 37% reduction in all-cause hospital admits after being in the program for greater than 6 months/1,000 participants per year</li> <li>▪ 24% reductions in all-cause ED visits after being in the program for greater than 6 months/1,000 participants per year</li> </ul>

Disease Management Program	Financial Impact (ROI)	Utilization of Services
<p><b>Coronary Artery Disease</b></p> <p>Members receive specific treatment recommendations to optimize therapy along with targeted educational mailings with lab testing reminders and self-management tools.</p>	<p>10.2 : 1</p>	<ul style="list-style-type: none"> <li>▪ 2% reduction in all cause hospital admissions for participants in the program/1,000 participants per year</li> <li>▪ 2% reduction in all cause ED visits for participants in the program/1,000 participants per year</li> </ul>
<p><b>Depression</b></p> <p>Members have access to online interactive resources, monthly newsletters and refill reminders. Telephone outreach is provided to every member that is hospitalized for depression treatment to support prompt access to outpatient aftercare resources and services.</p>	<p>2.2 : 1</p>	<ul style="list-style-type: none"> <li>▪ Top 10% in the nation for antidepressant adherence for the past 7 years</li> <li>▪ Adherent members had a 47% lower rate of ED visits for mental health in the year following the program</li> </ul>
<p><b>Diabetes</b></p> <p>Includes education on the basics of diabetes management; eating well, monitoring blood glucose, reducing the risk of diabetes complications, the role of medications and living a healthy lifestyle.</p>	<p>7.6 : 1</p>	<ul style="list-style-type: none"> <li>▪ 8% reduction in all cause hospital admissions for participants in the program/1,000 participants per year</li> <li>▪ 6% reduction in all cause ED visits for participants in the program/1,000 participants per year</li> </ul>

Disease Management Program	Financial Impact (ROI)	Utilization of Services
<b>Heart Failure</b>  Includes specialized cardiac nursing assessment and daily biometric monitoring for high-risk participants. All participants receive telephonic assessment and targeted educational information based on individual health needs.	5.3 : 1	<ul style="list-style-type: none"> <li>▪ 33% reduction in all-cause admits for participants in the program longer than 6 months/1,000 participants per year</li> <li>▪ 29% reduction in all-cause ED visits for participants in the program longer than 6 months/1,000 participants per year</li> </ul>
<b>Rare &amp; Chronic Diseases</b>  These specialized case and disease management programs result in better care, better patient outcomes, cost savings and greater patient satisfaction.	3.2 : 1	<ul style="list-style-type: none"> <li>▪ 25% decrease in PMPM after one-year of program participation; an additional 25% decrease after two years of program participation</li> <li>▪ 20% decrease in hospital admission rates after one-year of program participation; an additional 30% decrease after two years of program participation</li> </ul>

### Disease Management ROI Methodology

Asthma, CAD, COPD, Depression, Diabetes, Heart Failure and Rare & Chronic Diseases savings are calculated by measuring the total cost of care for members with each condition over time. Expected costs are calculated by disease (what costs would have been expected if the disease management program were not in place), controlling for general medical use and price inflation, member benefit design changes and changes in patient case mix. The actual costs are compared to the expected costs to determine gross savings. Program costs are identified. Emergency Department visits and inpatient admissions are also monitored by disease as indicators to validate financial outcomes.

*ROI calculation:* Gross Savings / Program costs.

## HealthPartners Case Management Program Savings

Case Management Program	Financial Impact (ROI)	Utilization of Services
<b>Complex Medical Case Management</b>  Members at high risk for hospitalization receive an initial assessment by a case manager, followed by telephonic outreach to provide health coaching and health education to support self-management.	3.5 : 1	<ul style="list-style-type: none"> <li>Medical/Surgical average length of stay is below the National Average and is in fact below the 10<sup>th</sup> percentile</li> <li>Medical/Surgical days/1000 is below the National Average</li> <li>ED visits/1000 is below the National Average and the lowest among our competitors</li> </ul>
<b>Inpatient Medical Case Management</b>  Nurses provide support for discharge/transition planning when needed, and facilitating continuity of care including step-down units, skilled nursing care, home care and hospice.	4.9 : 1	
<b>Behavioral Health Case Management</b>  Identifies and assists members at high risk for mental health or chemical dependency hospitalization. Care coordination and self-management education helps minimize likelihood of crisis.	7.6 : 1	<ul style="list-style-type: none"> <li>13% decrease in inpatient behavioral health (BH) admissions</li> <li>13% decrease in BH length of stay 30% decrease in BH PMPM for program participants</li> <li>28% decrease in admissions/1000 for program participants</li> <li>32% increase in outpatient visits for program participants due to increased care plan adherence</li> </ul>

## Case Management ROI Methodology

- *Inpatient Case Management* - savings are calculated by measuring for a length of stay reduction by type of admission (DRG) per facility that is case managed across the plan's commercial population. The length of stays were evaluated before the program was in place, adjusted for national trends leveraging the HCUP Nationwide Inpatient Sample (AHRQ), and then compared to the most recent 12 months of actual claims experience to compute days avoided due to case management. Expected costs for additional/fewer inpatient days were calculated using the effective conversion factor/per diem according to the actual payment methodology for that type of admission and that facility. Expected costs were then summed to provide savings on a per member, per month basis.
- *Complex Case Management* - savings are calculated using a matched population analysis, comparing the total cost of care for complex members pre and post program implementation. Using identical high risk identification algorithms as the measurement period, a baseline of probable case management candidates was established. For each member identified in the measurement period a match was made to the baseline population on a number of factors; age, gender, product, actual utilization history prior to identification and expected resource use (ACG). For each matched pair, 12 months of claims experience post-identification were accumulated in order to understand expenses with and without a case management program. Actual observed health plan trends by type of service were applied to the baseline group to bring all dollar values to current. Costs over each 12 month period were then summed within each group and a comparison was made to calculate savings on a PMPM basis across the Commercial population.
- *Behavioral Health Case Management* – savings are calculated using a matched population analysis, comparing the cost of behavioral health care for complex behavioral health member's pre and post program implementation. Using identical high risk identification algorithms as the measurement period, a baseline of probable behavioral health case management candidates was established. For each member identified in the measurement period, a match was made by disease to the baseline population. For each matched pair, 12 months claims experience post identification were accumulated in order to understand expenses with and without a case management program. Costs over each 12-month period were then summed within each group and a comparison was made to calculate savings on a PMPM basis across the plan's commercial population. In addition, behavioral health emergency department visits, therapy visits, medicine costs for behavioral health medicines were measured across the two comparison populations by disease.

## HealthPartners Specialty Disease Management Program Savings

Specialty Disease Management Program	Financial Impact (ROI)	Outcomes
<b>Cancer</b>  This program uses a comprehensive, whole person approach to make sure members are surrounded by support on a continuum from preventive initiatives to end-of-life care.	1.3 : 1	<ul style="list-style-type: none"> <li>35% of program participants have written advanced directives</li> <li>100% of program participants have completed a depression screening and received appropriate referrals</li> <li>30% of enrolled members participated in shared decision making on topics such as treatment options, hospice care and surgery</li> </ul>
<b>Healthy Pregnancy</b>  HealthPartners Healthy Pregnancy program identifies women at risk for a difficult pregnancy in order to provide them personal support and connect them to the resources they need. This program helps prevent pregnancy complications.	2.4 : 1	<ul style="list-style-type: none"> <li>The rate of premature births is 10% lower for program participants than the March of Dimes rate for Minnesota</li> <li>Antepartum admission rate of 3.6%</li> <li>Postpartum admission rate of 0.7%</li> <li>19% relative decrease in neonatal intensive care (NICU) average length of stay for newborns compared to 2008 Average length of stay for newborns is 2.54 days)</li> </ul>
<b>Low Back Pain</b>  Participants benefit from education, decision support tools and tailored phone coaching, as well as from an integrated connection to behavioral health, pharmacy, case management and disease management resources resulting in better health and productivity.	N/A	<ul style="list-style-type: none"> <li>73% of program participants report reduced impairment (combination of absenteeism and presenteeism) at the completion of the program</li> <li>37% of program participants report improved work productivity at the completion of the program</li> </ul>