



**Signature Report**

**March 13, 2007**

**Motion 12479**

**Proposed No.** 2007-0061.2

**Sponsors** Gossett

1                   A MOTION related to the Health Reform Initiative cost-  
2                   benefit analysis plan for the entire Health Reform Initiative.  
3  
4

5                   WHEREAS, the goals of the King County Health Reform Initiative are to  
6                   improve the long-term health of King County's employees and their families and reduce  
7                   the rate of growth in King County's health care costs by one-third over the period of 2007  
8                   - 2009, and

9                   WHEREAS, two key programs of the internal effort of the Health Reform  
10                  Initiative are the county's health benefit program design for 2007-2009 (the Healthy  
11                  Incentives<sup>SM</sup> program) and the education and outreach program that creates a supportive  
12                  environment to help employees and their dependents improve their health, and

13                  WHEREAS, before launching the Healthy Incentives<sup>SM</sup> program the county  
14                  developed a business case to estimate the expected cost-benefit of various interventions,  
15                  and

16                  WHEREAS, the council through Motion 12131 approved the business case and  
17                  requested the executive to provide by August 15, 2005, an evaluation program design

18 prepared by a consultant to assess the effectiveness of each of the internal Health Reform  
19 Initiative programs and strategies, and

20 WHEREAS, the evaluation design report presented to the council in September  
21 2005 committed to the production of an annual measurement and evaluation report in  
22 August of each of the five years of the program starting with August 2006 for 2005 data,  
23 and

24 WHEREAS, the King County Health Reform Initiative Check-Up: Report on the  
25 Peer Review Panel, transmitted to the council on October 24, 2006, is an independent  
26 analysis by five distinguished health care experts of the strategies, policies and programs  
27 implemented as part of the Health Reform Initiative, and

28 WHEREAS, the peer review panel made important observations and  
29 recommendations concerning measurement and evaluation which the Health Reform  
30 Initiative is already working to implement including:

31 A. Focusing on the Health Reform Initiative as a comprehensive set of strategies  
32 while continuing to measure the specific programs individually;

33 B. Developing a cost-benefit ledger that will recognize both quantifiable and  
34 non-quantifiable costs and benefits; and

35 C. Developing a set of "intermediate outcome measures" that indicate improved  
36 healthy behaviors such as physical activity, flu shots and tobacco cessation, and

37 WHEREAS, the council through Motion 12353 as a follow up of Ordinance  
38 15333 required the executive to transmit to the council by January 15, 2007, for approval  
39 by motion, a plan to conduct a cost-benefit analysis of the entire Health Reform Initiative,  
40 and

41 WHEREAS, the council through Motion 12353 required the executive to transmit  
42 to council by August 15 of each year for approval by motion the Health Reform Initiative  
43 measurement and evaluation report containing outcome measures that may be used to  
44 evaluate if King County employees are healthier as a result of Health Reform Initiative  
45 programs, and

46 WHEREAS, the council through Motion 12353 required each annual report to  
47 include an independent quality assurance review conducted by an external consultant, and

48 WHEREAS, the council through Motion 12353 required each annual report to be  
49 adequately reviewed by the Health Reform Initiative measurement and evaluation  
50 steering committee before each annual report is transmitted to the council, and

51 WHEREAS, a plan for conducting a cost-benefit analysis was developed to  
52 determine the extent to which individual programs and strategies and the initiative as a  
53 whole contribute to employee/dependent long-term improvements in health and slowing  
54 the projected increases in medical care costs;

55 NOW, THEREFORE, BE IT MOVED by the Council of King County:

56 The Health Reform Initiative plan for conducting a cost-benefit analysis,  
57 Attachment A to this motion, is hereby approved.

58 The King County Health Reform Initiative Key Performance Measures for the  
59 August 2007 Measurement and Evaluation Report for the 2006 Service Year, Attachment  
60 B to this motion, is hereby approved. The county executive is directed to include these

61 performance measures in the August 2007 Measurement and Evaluation Report for the  
62 2006 Service Year.  
63

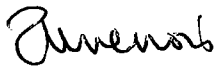
Motion 12479 was introduced on 1/29/2007 and passed by the Metropolitan King County Council on 3/12/2007, by the following vote:

Yes: 8 - Mr. Gossett, Ms. Patterson, Ms. Lambert, Mr. von Reichbauer, Mr. Ferguson, Mr. Phillips, Ms. Hague and Mr. Constantine  
No: 0  
Excused: 1 - Mr. Dunn

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

  
Larry Gossett, Chair

ATTEST:



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Anne Noris, Clerk of the Council

**Attachments** A. King County Health Reform Initiative--A Plan for Conducting the Cost-Benefit Analysis--Dated January 16, 2007, B. The King County Health Reform Initiative Key Performance Measures for the August 2007 Measurement and Evaluation Report for the 2006 Service Year, dated March 5, 2007

**King County Health Reform Initiative (HRI)  
Key Performance Measures  
for the August 2007 Measurement and Evaluation Report  
for the 2006 Service Year**

**March 5, 2007  
12479**

<b>Performance Measure (Key Indicator)</b>	<b>Cost, Health, Organization</b>	<b>Outcome</b>
<b>LEVEL I (Employee wellness programs)</b>		
1) Trend in King County's overall incurred medical and pharmacy costs compared to costs forecasted from 2002-2004 trends.	Cost	Reduced rate of increase in total health care claims costs over several years.
2) Year-to-year progress in achieving targeted reduction of one-third off trend in King County's medical and pharmacy costs per employee on a paid basis.	Cost	Achievement of target from Council adopted business case.
3) Cost-Benefit for each of six program interventions in business case <ul style="list-style-type: none"> <li>• Nurse Advice Line</li> <li>• Disease Management</li> <li>• Case Management</li> <li>• Provider Best Practice</li> <li>• Performance Provider Network</li> <li>• Wellness Assessment &amp; Individual Action Plan</li> </ul>	Cost	Positive return from HRI vendor programs
4) Wellness assessment--changes in risk profile of participants (i.e., low, moderate, and high risk).	Health	Reduced personal risks, maintenance of healthy behaviors
5) Individual action plans--changes in number and percent of participants in coaching reporting improved or eliminated one or more risks.	Health	Reduced personal risks, maintenance of healthy behaviors
6) Changes in reported body mass index (BMI) -- individual basis and/or total for all participants (Under, Normal, Overweight, Obese).	Health	Achieve recommended BMI to reduce long-term risks/improve health

7) Daily recommendations for a healthy diet.	Health	Adherence to recommended guidelines for good nutrition to reduce health risks.
8) Regular exercise—30 minutes of activity each day.	Health	Adherence to recommended guidelines for physical activity to reduce health risks.
<b>LEVEL II (Work place health promotion)</b>		
9) Cost-Benefit of Supportive Environment (Not Available for 2007 Report).	Cost	Reduced absences due to health and improved workforce productivity.
10) Increase in generic drug prescription fill rate.	Cost	Reduced cost for prescription drug program.
11) Number and total pounds lost through Weight Watchers at Work.	Health	Increased healthy behavior
12) Number and percent receiving flu shots.	Health	Prevention of illness and maintenance of productivity.
13) Usefulness and effectiveness of communication tools	Organization	Support to employees and partners to provide information and assistance about the HRI.
14) Resources available through King County to reduce personal health risks and maintain or increase healthy behaviors.	Organization	Awareness that resources are available to support health and healthy employees.
15) Employee agreement that supervisor supports improving health and maintaining healthy behaviors.	Organization	Support for health, healthy employees, and improved

		business results.
<b>LEVEL III (Puget Sound Health Alliance)</b>		
16) Leadership Dividends	Organization	Recognition of King County leadership working to reduce health care costs and to promote a healthy workplace environment.
17) Puget Sound Health Alliance Comparison Reports	Organization	Information to support consumers being actively involved in making wise health care choices.

12479

Attachment A

2007-061

# **King County Health Reform Initiative**

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## **A Plan for Conducting the Cost- Benefit Analysis**

Report Prepared by:  
Clegg & Associates, Inc.  
Calculated Risk, Inc.  
January 16, 2007





## Health Reform Initiative Measurement and Evaluation Committee

Chris Bushnell	King County Office of Management and Budget
Ruth Hultengren	King County Department of Executive Services Human Resources Division
Dave Lawson	King County Office of Management and Budget
Nick Maxwell	King County Office of Management and Budget
David Randall	King County Council Council Staff
Karleen Sakumoto	King County Health Reform Initiative
Kerry Schaefer	King County Department of Executive Services Human Resources Division
David Solet	King County Department of Public Health Epidemiology, Planning & Evaluation Division

**Consultants:**

**Clegg & Associates, Inc.**

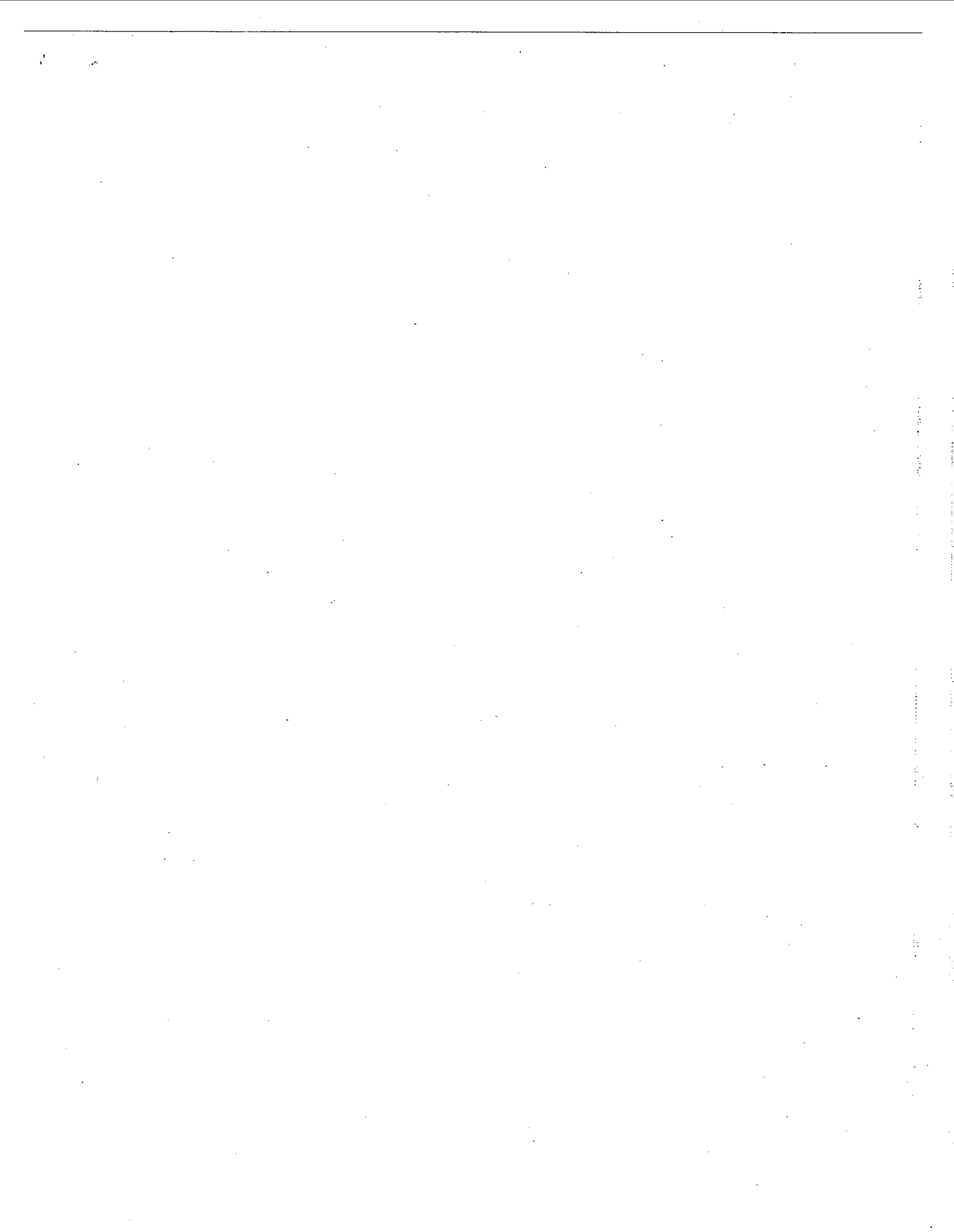
Judith Clegg  
Beka Smith  
Natalie Moe

**Calculated Risk, Inc.**

James Andrianos

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## Purpose

This report responds to a 2006 budget proviso and Metropolitan King County Council Motion 12353. The council in Motion 12353 requests that the executive carry out the following actions related to the evaluation of the Health Reform Initiative (HRI):

- **Cost-Benefit Analysis Plan:** Transmit for approval by motion a plan for conducting a cost-benefit analysis of the entire HRI to the council by January 15, 2007
- **Measures of Health Status:** Include outcome measures in the annual measurement and evaluation report that address the impact of the initiative on the health of county employees (an increased emphasis beginning in the August 2007 report)
- **Quality Review:** Ensure that the annual measurement and evaluation report is transmitted to the council for approval by motion by August 15 of each year and includes adequate quality assurance review by an external consultant and by the measurement and evaluation

The text of the motion follows, as well as descriptions of the methodologies and timing for each of the motion's components. Part One of this document outlines the plan for conducting the cost-benefit analysis, Part Two describes the different outcome measures over time that will track the impact of the HRI on reducing health care costs and improving employees' health, and Part Three lays out the process for ensuring adequate quality assurance review.

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## **Council Motion 12353**

**Adopted by the King County Council on September 25, 2006**

The executive shall transmit to the council by motion by January 15, 2007, a plan to conduct a cost-benefit analysis of the entire health reform initiative. The executive shall transmit to council by motion by August 15 of each year the health reform initiative measurement and evaluation report. The annual reports shall contain outcome measures that may be used to evaluate if King County employees are healthier as a result of health reform initiative programs. Each annual report shall include an independent quality assurance review conducted by an external consultant. And each annual report shall be adequately reviewed by the health reform initiative measurement and evaluation steering committee before each annual report is transmitted to the council.

## Background

The Health Reform Initiative (HRI) is a far-reaching initiative to improve the health of King County employees and their dependents, thereby achieving a slow-down in the rapid escalation of the county's employee and dependent-related health care costs. Begun in 2005, the HRI is a joint labor-management initiative that seeks to avoid shifting health care costs to employees and their dependents through design and implementation of innovative strategies to improve employee health, workplace support for health, and health care provider accountability.

### The Original Business Case

In 2005, the King County Council approved the King County Executive's business case (Motion 12131) for implementation of the HRI. The case described the overall HRI program, the anticipated program components, and the projected slow-down in the escalation of health care costs (savings off trend) likely to result.

The business case projected a total health care savings off trend of \$32.8M during 2005-09 as a result of the combined HRI programs. In addition, the business case called for an additional \$7.2M in savings to be negotiated with the Joint Labor Management Insurance Committee (JLMIC). Please see Appendix One to review the original business case projections for achieving the \$32.8M and the source of the \$7.2M in savings.

The business case included projections for the savings off trend each HRI program would produce. Estimating the costs and savings attributable to each individual program has always been part of the planned approach and this analysis will be performed. In addition to the program by program analysis, the analysis approach has since been upgraded to also focus attention on a "total value, total return" analysis that looks at costs and savings for the HRI program as a whole. The definition of "costs" and "savings" have been broadened to recognize organizational costs as well as financial costs and in addition to cost savings, the analysis approach now recognizes that the HRI seeks to benefit individuals' health and King County as an organization. This upgrade, based on the advice of a specially-convened expert panel (see pages 7 and 8 for more information about the panel), recognizes that the multiple

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HRI programs have interactive effects, that the contribution of each individual program to the overall savings is very difficult to measure, and that measuring changes in employee health is as important as financial savings.

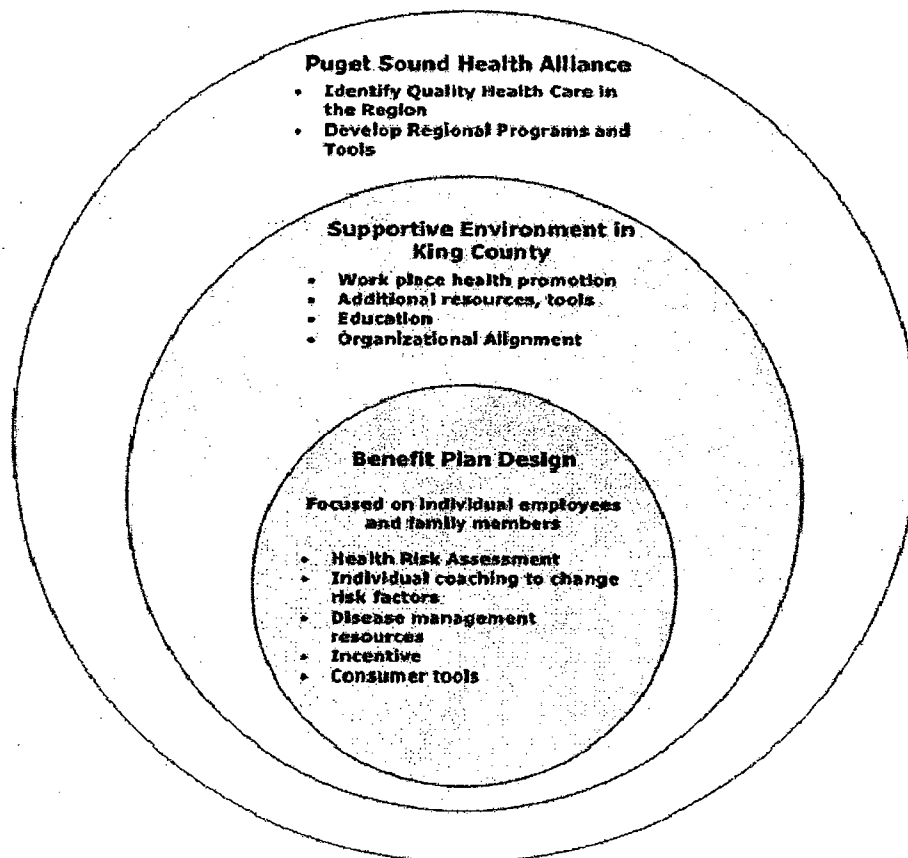
The aggregated program approach recommended by the panel will also more accurately reflect the current array of HRI strategies. For example, while the original business case recognized that efforts to create a workplace that supports improved employee and dependent health are critical to the HRI's long-term success, it did not include them in the analysis; instead it focused exclusively on the impacts of six vendor-supplied programs and the incentives designed to drive participation. Similarly, the Puget Sound Health Alliance, another key HRI strategy, was in the early stages of formation at the time the business case was in development and therefore was not included.

Looking ahead, it will be important to measure the costs and benefits of all the HRI's integrated strategies and to analyze and monitor whether the initial projections associated with the specific programs included in the original business case appear to be on track. To accomplish both of these goals, HRI staff will adopt a layered evaluation approach as described below on pages 7-8 and illustrated on page 9.

## HRI Strategies

The HRI comprises an integrated set of strategies organized into three major levels. In the diagram of HRI programs below, the core circle represents benefit plan components directly focused on individual employees and their families, such as wellness assessments, individual action plans, and benefit plan incentives. The second layer of strategies aims to make King County a supportive work environment for improved employee health, including strategies to promote exercise, healthy eating, and tobacco cessation. These two initiatives are supported by a third set of strategies (the outer layer of the diagram) targeting improved health care provider quality.

Figure 1:  
HRI Strategies





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## Measurement and Evaluation

Investment in an ambitious initiative like the HRI requires a strong commitment to ongoing evaluation and quality improvement. This commitment ensures that the initiative is implementing research-based interventions, carefully measuring their impact, and carrying out program improvements in response to the evaluation data.

This type of commitment has been an integral part of the HRI since its inception. For example:

- Executive and council staff worked together to create a measurement and evaluation design for the HRI (required by Council Motion 12131; the design report was presented to the council in September 2005)
- Implementation of the measurement and evaluation design began in fall of 2005 and continued throughout 2006
- The council in approving the 2006 budget request for the HRI included a proviso requesting a plan for conducting a cost-benefit analysis
- Executive staff submitted the first measurement and evaluation report to the council in August 2006 (Council approved the report in Motion 12353 in September 2006)
- Executive staff convened an expert panel in September 2006 to review the findings from the first measurement and evaluation report and assist the staff in identifying program improvements and refinements to the evaluation design (A report of the findings and conclusions of the peer review panel was sent to council members on October 24, 2006)
- During council review of the first measurement and evaluation report, the council requested that the executive prepare a plan describing how the cost-benefit of the HRI would be evaluated, beginning in the second year of the evaluation (this is that report)

Results of the cost-benefit analysis will be included in the measurement and evaluation report describing 2006 evaluation results; this report is due to the council in August of 2007.

# **Part One: A Plan for Conducting the Analysis of Cost-Benefit for the HRI**

## **The Original HRI Business Case**

The original HRI business case approved by the Metropolitan King County Council in Motion 12131 included estimates of the expected return on investment (ROI) for the county implementing six programs as part of a new and innovative benefit plan design for 2007-2009 period. Together these programs were projected to save \$32.8 million off of the county's escalating health care costs for county employees and their families. With an additional \$7.2 million savings that was to be negotiated with the county's unions, the total projected savings for 2005-2009 for the county's investment in these programs equaled \$40 million.

The original approach for measurement and evaluation of the HRI included a cost-benefit analysis of the six individual programs over the duration of the benefit plan period (2007-2009). The costs of the program interventions were to be analyzed against reductions in projected benefit claims costs for county employees and their spouses and domestic partners. Please see Appendix One to review the original business case projections for achieving savings from the six new programs.

The original approach for measuring and evaluating the HRI's second, but equally important goal of improving the long-term health of county employees was to report on changes in employee attitudes, behaviors, and health status. This information would be captured through the annual wellness assessment questionnaires and other surveys administered to target populations. The original business case did not assign costs or benefits to these health measures.

## The Expert Panel

HRI leadership convened an expert panel in September 2006 to examine the HRI's progress to date and assess why initial cost savings were below target. Panelists made several key points as they discussed how best to develop a fair, feasible, and comprehensive picture of the HRI's costs, benefits, and outcomes. While stressing that the initiative is in its early stages and that measurable results in employee health and county cost reductions will likely take years to develop, panelists recommended the following approaches to tracking whether the programs are likely to achieve their goal:

- Focus on the whole program. The high level of program integration in the HRI will make it difficult to separate costs and effects attributable to individual programs. (However, an analysis of the individual programs' impact on claims data will also continue to be performed in order to identify the need for potential revisions to keep the HRI on track.)
- Avoid reducing the evaluation of HRI programs to a single measure of cost-benefit. A single cost-benefit ratio will likely ignore the county costs and benefits that are difficult or impossible to quantify. Instead, panelists recommended the development of a cost-benefit ledger that will recognize both quantifiable and non-quantifiable costs and benefits.
- Use intermediate outcome measures to track changes in behavior that can lead to reductions in risk level. The county has many intermediate outcomes to select among, such as measuring increased exercise in relation to reducing heart disease, improved nutritional habits connected to reductions in Type II Diabetes, and other changes in behavior and participation linked to improved health.

The expert panel's report entitled *King County Health Reform Initiative Check-Up: Report on the Peer Review Panel* was transmitted to the council on October 24, 2006.

## Cost-Benefit Methodology

To respond to these recommendations while retaining the original business case approved by the council, county staff and consultants have developed a three-level plan for conducting the cost-benefit analysis, corresponding with the three layers of HRI strategies. (Please see page 9 for a chart depicting the three layers of the cost-benefit analysis).

In order to carefully examine the costs associated with each strategy, the methodology divides the HRI's costs into two categories: financial costs and organizational costs. For example, the vendor fee the county pays to purchase the Wellness Assessment is included as a financial cost to the organization. The time county management spends analyzing and making decisions on the HRI's future direction is reflected as an organizational cost. By including both types of costs in the analysis, the cost-benefit picture reflects a comprehensive picture of the HRI's overall cost to the county.

The methodology also divides the benefits into categories: financial benefits, health benefits, and organizational benefits. For example, the county achieves a financial benefit if its rate of spending for medical and pharmacy fall below the projected trend. A health benefit accrues if employees and their dependents become better able to manage chronic diseases and thereby have improved quality of life. An organizational benefit occurs when managers and supervisors are knowledgeable about the impacts of the workplace on health and take actions that support improved employee and dependent health.

This approach will enable the county to analyze the important impacts of the HRI program as a whole, while also looking carefully at the nature of the respective costs and benefits. This type of *ledger* approach, as recommended by the HRI expert panel, puts the focus on the achievement of the HRI's overall goals: improved employee and dependent health and the reduced escalation of health care costs.

A cost-benefit analysis of the individual program interventions included in the original HRI business case will be performed as planned. The results of this analysis can then be compared to the estimates of return on investment (ROI) contained in the original business case for the HRI. This analysis will support the consideration of new proposals and strategies to improve the success of the HRI.

## Overall Health Reform Initiative: Plan for 2007 Layered Cost-Benefit Analyses

Cost-Benefit Analysis <sup>^</sup>	Period Examined	BENEFITS <sup>‡</sup>				COSTS <sup>‡</sup>			Reporting Frequency	Comments
		Financial	Health	Organizational	Organizational	Financial	Organizational			
<b>I. Original HRI Business Case*</b>										
<ul style="list-style-type: none"> <li>a. Wellness Assessment &amp; Ind. Action Plan</li> <li>b. Nurse Line</li> <li>c. Disease Management</li> <li>d. Case Management</li> <li>e. Provider Best Practices</li> <li>f. Specialist Efficiency</li> </ul>	2005-2009	<ul style="list-style-type: none"> <li>• Less than expected member medical and pharmacy costs</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced or eliminated member risk factors</li> <li>• Improved member control of chronic conditions, health guidelines met</li> </ul>	<ul style="list-style-type: none"> <li>• Better informed, more involved health care consumers</li> </ul>	<ul style="list-style-type: none"> <li>• Wellness Assessment fees</li> <li>• Other vendor fees</li> <li>• Medication Therapy Mgmt Services costs</li> </ul>	<ul style="list-style-type: none"> <li>• County management and labor partnership commitment to design and implement policy decisions</li> </ul>	<ul style="list-style-type: none"> <li>• HRI Cumulative annual update beginning in August 2007</li> </ul>	<ul style="list-style-type: none"> <li>• The Business Case from Motion 12131 projected net savings of \$32.8m during 2005-2009, with another \$7.2m to be negotiated with the JLMIC.</li> </ul>		
<b>II. Supportive Environment</b>										
<ul style="list-style-type: none"> <li>a. Organizational Alignment</li> <li>b. Eat Smart</li> <li>c. Move More</li> <li>d. Quit Tobacco</li> <li>e. Web-based tools and education</li> <li>f. Choose a Health Provider</li> <li>g. Generics First</li> <li>h. Enhanced Productivity</li> </ul>	2005-2009	<ul style="list-style-type: none"> <li>• Estimated value of overall productivity improvements (reduced absenteeism due to illness, decreased presenteeism)</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement in low/medium/high Wellness Assessment results</li> <li>• Improved key aspects of member population risk profile (BMI, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased effectiveness of communications to support change model</li> <li>• Mgmt. and suptr. support of healthy workplace environment</li> </ul>	<ul style="list-style-type: none"> <li>• HRI Staffing and O&amp;M (excl Baseline Admin Costs)</li> <li>• Health Matters newsletter</li> </ul>	<ul style="list-style-type: none"> <li>• County management and labor partnership commitment to design and implement policy decisions</li> </ul>	<ul style="list-style-type: none"> <li>• HRI Cumulative annual update beginning in August 2007</li> </ul>	<ul style="list-style-type: none"> <li>• Productivity-related measurements are under development and may appear in the August 2008 report.</li> </ul>		
<b>III. Puget Sound Health Alliance</b>										
<ul style="list-style-type: none"> <li>a. Improved care quality</li> <li>b. Reduced variation in costs</li> <li>c. Establishment of regional tools, protocols</li> </ul>	2006 - ?	<ul style="list-style-type: none"> <li>• Improved treatment cost expectations</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in appropriate preventive care</li> <li>• Increase in evidence-based treatment</li> <li>• Decrease in avoidable adverse events</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of quality and efficiency at the regional level</li> <li>• Development of appropriate external comparison/benchmarks</li> </ul>	<ul style="list-style-type: none"> <li>• Alliance dues</li> <li>• Database funds</li> </ul>	<ul style="list-style-type: none"> <li>• County management and labor partnership commitment to design and implement policy decisions</li> </ul>	<ul style="list-style-type: none"> <li>• To be coordinated with Alliance</li> </ul>	<ul style="list-style-type: none"> <li>• An appropriate study period for evaluating an ongoing entity such as the Alliance has not yet been determined.</li> </ul>		

<sup>‡</sup> Featured Benefits and Costs are those expected to be measurable and reportable for the August 2007 analyses.

<sup>^</sup> BROS conducted a cost analysis for the BHIP Web portal enrollment system, comparing one-time information technology investment with a staff-intensive, paper-based system.

\* The 2005 HRI Business Case forecasted savings of \$18.5m during 2007-2009 from program (a), and of \$14.3m during 2005-2009 from programs (b)-(f), for a total savings of \$32.8m. Program (g) to be added in 2007.

### **Level I: Original Business Case Programs**

The first level of analysis measures quantifiable and non-quantifiable costs and benefits for programs included in the original business case. The original business case focuses on benefit plan design, including the wellness assessment, individual action plans, nurse line, disease and case management, provider best practices, and specialist efficiency. Measured costs in this level will include fees for the wellness assessment and from other vendors, as well as time committed by management and labor leaders to design and implement the programs. Measured benefits will include decreased medical and pharmacy costs compared to expected increases in costs without intervention, reduced or eliminated risk factors among county employees and their dependents, and improved control of chronic conditions. The measured costs and benefits in the green and red boxes in this level will be totaled and compared in order to track whether progress is being made toward the savings projected in the original business case. This data will be included in the August 2007 report (covering service year 2006) and will be updated annually.

### **Level II: Programs to Develop a Supportive Environment for Health**

The second level measures costs and benefits for supportive environment programs. The measures for this level focus on the estimated value of improved productivity of the workforce, e.g., reduced absences due to illness and reduced *presenteeism* (where employees are present at work but a health condition prevents them from working effectively). Costs include staffing for non-baseline positions, the newsletter, and management time. Beginning with the August 2007 report (covering service year 2006), this data will be compiled and updated annually.

### **Level III: Programs to Improve Health Care Provider Quality and Accountability**

The third level of analysis examines the Puget Sound Health Alliance. The Alliance is currently in the process of implementing its initial phase of actions to influence the quality of care provided in our region. Therefore, the August 2007 measurement and evaluation report will not include any information specific to the Alliance. It is anticipated that the Alliance will be in a position to provide data describing its results during the 2008 service year. This would lead to the inclusion of the Alliance-related information beginning with the HRI's August 2009 report.

## Timeline for Cost-Benefit Analysis

Strategy Level	Service Year Covered	Report to Council
I. Original Business Case	2006	August 2007
	2007	August 2008
	2008	August 2009
	2009	August 2010
II.. Supportive Environment	2006	August 2007
	2007	August 2008
	2008	August 2009
	2009	August 2010
III. Puget Sound Health Alliance	2008	August 2009
	2009	August 2010

As occurred during 2006, HRI staff will work with the measurement and evaluation committee to identify additional methods for effectively measuring the cost-benefit of the HRI. For example, the August 2007 report will incorporate a number of indicators that were not part of the August 2006 report, including:

- Awareness of health issues, resources, and provider utilization
- Employee and dependent actions and engagement in HRI programs
- Reduced or eliminated member risk factors
- Improved control of chronic conditions

During 2007, HRI staff and the measurement and evaluation committee will refine additional indicators for incorporation in the August 2008 and 2009 reports, including:

- Decreased absences due to illness
- Decreased presenteeism
- Value of improved productivity

Also during 2007 and 2008, HRI staff will work with Puget Sound Health Alliance leadership to identify the indicators for inclusion in the 2009 and 2010 measurement and evaluation reports. These indicators are likely to, but will not necessarily, include the following:

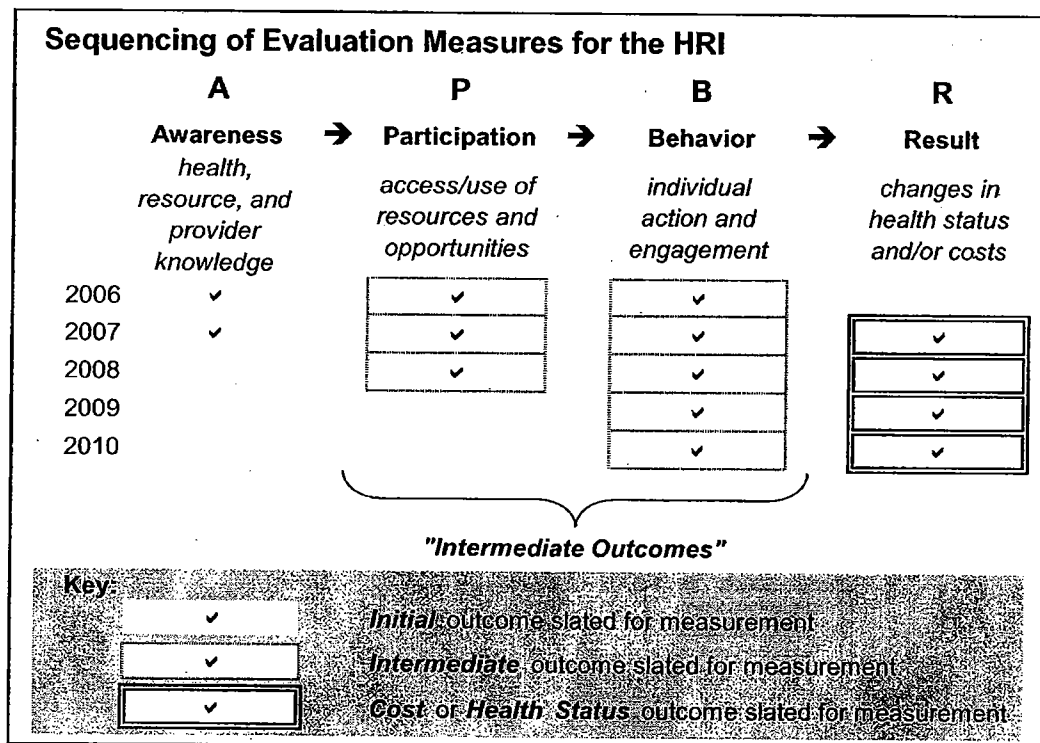
- Participation and subscription rates
- Increased provider use of evidence-based treatment and appropriate preventive care
- Decreased avoidable adverse events by providers

As occurs with Level One and Level Two indicators, Level Three indicators describing the Alliance's results will begin with measurements concerning awareness, followed by data that describes participation, behavior changes, and ultimately results. For example, indicators on the viability of the organization, such as membership, will precede measurable results in decreased avoidable adverse events. As with health improvement among employees and dependents, the Alliance's focus on changing health care provider practices takes time and focused strategies to achieve. The Level III cost benefit analysis of the Puget Sound Health Alliance is distinct from the report that the Alliance will submit in May, which will track the Alliance's initial activities and programs, including its progress on developing public comparison reports. For up to date information on the Alliance's progress, visit [www.pugetsoundhealthalliance.org](http://www.pugetsoundhealthalliance.org).



## Part Two: Health Measurement Strategies and Sequence

Measurement and evaluation of the HRI will rely on different types of indicators over the lifespan of the initiative. The measurement and evaluation schedule corresponds with the initiative's underlying logic model and theory that improvements in health begin with awareness, progress with participation resulting in behavior changes, and finally result in health, financial, and organizational improvements.



Improvements in long-term health status often do not occur immediately, even with changes in behavior linked by evidence to decreased risks, such as smoking cessation. Reporting on intermediate outcomes, including indicators that assess participation and behavior, will meet the council's request for information on changes in employee and dependent health during the early years of the initiative, until measurable results can be expected and reported.

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The August 2007 report (describing service year 2006) will focus on initial and intermediate outcomes in Level I programs, which are the programs included in the original business case. These outcomes will include:

- Awareness of health issues, resources, and provider utilization
- Participation in HRI programs
- Use of HRI resources and opportunities
- Employee and dependent actions and engagement

The behavior and participation measures will also address the expert panel's recommendation to measure intermediate outcomes. While changes in employee behavior, such as increased exercise, are not health outcomes in themselves, they are linked by evidence to health improvements that will be measured in subsequent years.

Over time, as HRI strategies begin to produce measurable results, the measurement focus will shift away from initial outcomes, such as awareness, and toward results in health and cost reduction. The county will continue to measure intermediate outcomes, particularly those linked to behavior.

## Part Three: Implementation and Quality Review

The cost-benefit analysis for Levels I and II will be performed by staff in the Economic Analysis and Forecasting Section of the Office of Management and Budget (OMB). The HRI Program Director and HRI staff will work with OMB to establish the deliverables and deadlines for this work. HRI staff will prepare the annual measurement and evaluation report summarizing the results for submission to council. The Program Director will be responsible for presenting preliminary results of the cost-benefit analysis to key stakeholder groups, including the HRI Policy Committee and the Joint Labor Management Insurance Committee (known as the JLMIC, which is the committee of labor representatives that has actively partnered with the executive on key strategies included in the HRI).

The HRI Program Director and staff will coordinate with the Puget Sound Health Alliance regarding the identification of measures, the timeline, and how the cost-benefit analysis for Level III will be conducted. Progress will be reported in the annual measurement and evaluation report.

As described in the HRI measurement and evaluation design (required by Council Motion 12131; design report presented to the council in September 2005), HRI staff will work closely with the measurement and evaluation steering committee to implement the evaluation design. The committee is an interdisciplinary team with council, executive, and health department staff that has provided valuable advice and oversight during development of this plan of analysis. The committee's role will include quarterly meetings of the steering committee, review of the August measurement and evaluation report transmitted to the council each year, and participation in expert panels and other efforts to continually improve the evaluation design.

In addition, HRI staff will engage an independent external consultant with evaluation expertise. For the August 2006 report (describing service year 2005 results), this review was conducted by Dr. Carolyn Watts, a professor at the University of Washington.

# Appendix One

## Projected Business Case Costs and Savings

The business case projected a total health care savings off trend of \$32.8M during 2005-09 as a result of the combined HRI programs. In addition, the business case called for an additional \$7.2M in savings to be negotiated with the Joint Labor Management Insurance Committee (JLMIC). The chart on this page shows how the business case projected HRI costs and benefits. Descriptions of the listed programs follow on the next page.

Costs & Savings/Revenue Projections in the Business Case  
(updated information in italics)

Program	Costs: 2005-2009 as Projected in the HRI Business Case	Net Savings: 2005-2009 as Projected in the Business Case
Disease Management	\$1,133,860	\$3,481,658
Enhanced Case Management	\$994,614	\$2,212,034
Nurse Line	\$426,579	\$853,157
MedQuery	\$1,060,921	\$6,569,229
Aexcel Networks	\$1,053,197	\$2,573,783
Wellness Assessment & Lifestyle Coaching	\$1,110,000	\$1,665,000
Trend Reduction	\$0	\$9,729,819
Enrollment Shift <sup>1</sup>	\$0	\$10,936,099
<i>Benefits Access Fee<sup>2</sup></i>	\$0	<i>\$4,950,000</i>
<i>ER Copay<sup>2</sup></i>	\$0	<i>\$2,250,000</i>
Total:	\$5,779,171	\$45,220,779
	Total Net Savings <sup>3</sup>	\$39,441,608

Note: The table includes all costs, savings, and revenues of five pilot programs, wellness assessment, trend reduction, and enrollment shift from tables 8 through 15 of the HRI business case.

<sup>1</sup> The original business case assumed a 30% nonparticipation rate in the wellness assessment, resulting in a one-time savings from changes in out of pocket expense levels. In fact, the nonparticipation rate was 11%.

<sup>2</sup> Benefits Access Fee and ER Copay revenues and savings were estimated by Mercer in 2005 in support of JLMIC negotiations to fill an apparent \$7.2M gap between HRI projected net savings and \$40M. This negotiation is beyond the cost-benefit/ROI/net savings projected in the original business case.

<sup>3</sup> When summed with revenues from the benefits access fee and ER copay, business case net savings do not sum to \$40M due to rounding.

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## Appendix Two

### HRI Program Descriptions

#### Nurse Advice Line (Informed Health Line®)

The Informed Health Line is available to members 24 hours a day, 7 days a week via a toll-free telephone number. Registered nurses guide callers through a decision model to help the caller determine whether their condition can be treated at home, requires a provider office visit, or requires immediate attention in an urgent care center or hospital emergency room.

#### Disease Management

The disease management program directs focused support and resources toward members with chronic heart failure, coronary artery disease and diabetes in order to improve health status and quality of life. It provides education for both the member and provider. Educational services for the member include written materials and telephone coaching calls to help the member identify and address health risk factors associated with their chronic condition. The frequency and intensity of these education services is based on the member's individual level of risk. Members in the highest risk group (Level 5) have at least a 20 percent chance of experiencing an acute exacerbation of their conditions within the upcoming year, and are at least 10 times as likely to have a sudden onset of complications in the next year compared with members at Level 1.

#### Case Management (Enhanced Member Outreach<sup>SM</sup>)

A standard part of the services that KingCare purchases from our medical claims administrator is a review of cases and some interventions to avoid unnecessary claims. The Enhanced Member Outreach (EMO) program supplements Aetna's standard case management program by identifying members who are at greater risk because they are going into the hospital, getting ready to leave the hospital, or have a claims history that indicates presence of an uncontrolled chronic condition or other risk factors. This is done through the use of additional clinical resources from medical, pharmacy, and lab results data. Specially trained EMO nurses call these members to encourage them to work closely with their health care providers and follow their treatment plans.

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### **Provider Best Practice (MedQuery®)**

MedQuery uses claims history, current medical claims, pharmacy, laboratory, physician encounter reports and patient demographics along with evidence-based treatment recommendations to find possible errors, gaps, omissions (eg certain accepted treatment regimens may be absent) or co-missions in care (eg drug-to-drug or drug-to-disease interactions.) When MedQuery identifies a member whose data indicates that there may be an opportunity to improve care, outreach is made to the treating physician based on the apparent urgency of the situation.

### **Performance provider network (Aexcel®)**

The Performance provider network comprises Aexcel-designated specialists, participating primary care providers, and hospitals and physicians in non-Aexcel-designated specialties. The overall cost of care delivered within Aexcel-designated specialties is evaluated based on certain measures of volume, clinical performance and cost-efficiency measures.

### **Wellness Assessment & Individual Action Plan**

To those ends, in 2005 the county and the Joint Labor Management Insurance Committee negotiated the Healthy Incentives<sup>SM</sup> benefits package that includes 1) programs for disease management, expanded case management, nurse advice line, provider best practice care considerations, and high performance specialist network and 2) an expanded range of program offerings that include individual wellness assessments and targeted follow up through individual action plans to encourage changes to healthier behavior.

The official time period for the Healthy Incentives<sup>SM</sup> plan is 2007 – 2009; however the county and the unions agreed to a phased-in approach that started two years before the “official” program. In 2005, the county added several programs to its self-insured plan including a 24/7 Nurse Advice Line, disease management programs, and an active outreach program for members who are about to undergo an inpatient hospital stay, are getting ready to come home from an inpatient stay, or have medical indications that they may experience a high risk event in the next 12 month.

In 2006, the program started to focus on both “healthy” and “at risk” employees and their spouse/domestic partners. All benefit-eligible employees and their spouses/domestic partners are eligible to take a wellness assessment that focuses on health behaviors such as nutrition, physical activity, perception of stress, use of tobacco and alcohol, safety habits (such as wearing seat belts when traveling in an automobile) and health consumer habits (such as getting age and gender-appropriate screenings.) This wellness assessment measures the member’s level of risk<sup>1</sup>, openness to making behavior change in each area, and the member’s confidence in his/her ability to make a change.

Participation in the wellness assessment and individual action plans is voluntary, however there are financial incentives attached to participation. Members who take the assessment and participate in an individual action plan in 2006 will be eligible for the gold out-of-pocket expense level in the health plan in 2007. Members who take the wellness assessment but do not participate in an individual action plan will be eligible for the silver level, and members who do not take the wellness assessment will only be eligible for the bronze out-of-pocket expense level. The benefits covered by each out-of-pocket expense level are the same; the only difference is the amount the member pays for services. (Please note: King County pays the entire health plan premium for the employee and family.) Tables 1 and 2 illustrate *some* of the differences in out-of-pocket expenses for the county’s two health plan choices:

**Table 1:  
Sample KingCare<sup>SM</sup> Out-of-Pocket Expenses**

<b>KingCare<sup>SM</sup> Preferred Provider Organization</b>			
	<i>Gold</i>	<i>Silver</i>	<i>Bronze</i>
Annual deductible	\$100 individual/ \$300 family	\$300 individual/ \$900 family	\$500 individual/ \$1,500 family
Co-insurance (in-network)	10% (King County pays the other 90%)	20% (King County pays the other 80%)	20% (King County pays the other 80%)

<sup>1</sup> High risk is defined as self-reporting any current tobacco use or three or more of the following conditions: high blood pressure, high cholesterol, physical activity less than 3 times per week, poor nutrition, high stress/poor well-being, high alcohol use or a body mass index greater than 26. Moderate risk is defined as self-reporting two of these factors, and low risk is defined as reporting zero or one risk factor.

**Table 2:  
Sample Group Health Out-of-Pocket Expenses**

<b>Group Health Cooperative Health Maintenance Organization</b>			
	<i>Gold</i>	<i>Silver</i>	<i>Bronze</i>
Office visit co-pay	\$20	\$35	\$50
Hospital co-pay	\$200 per stay	\$400 per stay	\$600 per stay

Figure 1 illustrates the process for earning eligibility for lower out-of-pocket expenses:

**Figure 1: How the Healthy Incentives<sup>SM</sup> Program Works**

