Washington State Health Care Authority

Report to the Legislature

Healthy Worksite Initiative
Interim Report

Washington Wellness

Engrossed Second Substitute Senate Bill 5930
Chapter 259, Laws of 2007
Section 41

December 2008

Prepared by:
Washington Wellness staff

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Legislation

This report is submitted in compliance with Section 41 of Engrossed Second Substitute Senate Bill (E2SSB) 5930, legislation adopted to implement recommendations of the Blue Ribbon Commission on Health Care Costs and Access. E2SSB 5930 was enacted as chapter 259, Laws of 2007. Section 41 of the legislation, codified as RCW 41.05.541, directs the Health Care Authority (HCA) through the state employee health program, Washington Wellness, to implement a state employee health demonstration project which HCA named the "Healthy Worksite Initiative" (HWI). HCA is to submit reports on the HWI demonstration project to the Legislature in December 2008 and December 2010.

HCA was directed to select state agencies to participate in the demonstration project. Agency selection criteria included, as a minimum, the demonstration of: (1) a high rate of health risk assessment completion, (2) an existing infrastructure capable of implementing an employee health program, and (3) senior management support. The maximum number of employees to be included in the project for the selected agencies was capped at 8,000.

The legislation mandates HWI to measure a minimum set of outcomes to include an increase in the appropriate use of preventive health services and the reduction of:

- Risk factors related to diabetes.
- High blood pressure.
- High cholesterol.
- Tobacco consumption.
- Population that is overweight or obese.
- Risk factors related to absenteeism.

E2SSB 5930, Section 41, requires the HWI agency demonstration project to include at least five elements:

- Outreach efforts targeted at the largest percentage of employees possible.
- Awareness-building information that promotes health.
- Motivational opportunities that encourage employees to improve their health.
- Behavior change opportunities that demonstrate and support behavior change.
- Tools to improve employee health care decisions.

The legislation directs the agencies to initiate and maintain employee health programs using best practices in the field of health promotion and to have a wellness staff directly accountable to senior management. The agency programs may offer employees incentives such as cash for completing a health risk assessment and free preventive screenings.

HCA was appropriated $600,000 for implementing the HWI project for the 2007-09 Biennium. HCA decided to distribute all of the funds to the participating agencies. The cost of project development and management will be a function of the

Washington Wellness budget. The statute authorizing the state employee health demonstration project expires June 30, 2011.

Pursuant to legislative requests, HCA presented project status to the Senate Health & Long-Term Care Committee in September 2007 and September 2008.

Overview

The Washington Wellness business model is designed to positively impact the health of the employee population by working through the employer (agency). HWI is testing a hypothesis: if the agency develops a "Healthy Work Culture," it will have significant impact on employee health and productivity.

The initiative is focusing on the role of the agency and the agency's ability to impact the seven measures mandated in the legislation. HWI was directed by the Governor and Legislature to provide Washington Wellness the opportunity to fully define the agency role in improving the health of the employee population.

Recognition

The HWI process and interventions are based on literature from employee wellness programs in the private sector.[1-3] HWI has received two significant recognitions that demonstrate use of a model and strategies valued in the health industry.

The Institute for Health and Productivity Management honored HWI with their annual award for innovation in Value-based Health Benefits in October 2008. It is the first time this award has been given to a public sector employer.

> *Washington Wellness, a state program designed to improve the health of state employees, has received a leadership award for Value-Based Health from the Institute for Health and Productivity Management (IHPM). The IHPM specifically cited Washington Wellness' Healthy Worksite Initiative, a demonstration project designed to identify health risks in an employee population, then develop programs at work to help employees improve their health. Early identification and treatment of health risks is a major focus for the project. "Washington Wellness joins the distinguished ranks of last year's IHPM award winners - Intel, Proctor & Gamble, Marriott, and Cerner - as a leader at the expanding value-based movement that is transforming health benefits and programs from costs into investments in their human capital," said Sean Sullivan, President of IHPM.*

The Institute for Healthcare Improvement (IHI) accepted HWI for presentation at its annual National Quality Forum in December 2008, in Nashville, TN. IHI is one of the

leading organizations for quality improvement in health care, lead by Don Berwick, co-author of the Institute of Medicine's, "To Err is Human," and "Crossing the Quality Chasm."

Agency Selection and Funding

Seven agencies were selected by a competitive RFP process. The agencies vary in size and culture, with approximately 7,000 total employees.

The competitive participation process ensures that the agencies selected were the "early adopters" and would be capable and willing to engage in the innovative and difficult work of changing culture, environment, and policies. Each of these agencies deserves recognition for its achievements in employee wellness and its participation in this project. The participating agencies are:

- Department of Health
- Department of Financial Institutions
- Department of Natural Resources (subset)
- Department of Social and Health Services (subset)
- Employment Security Department
- Higher Education Coordinating Board
- Office of the Attorney General

The $600,000 allocated for HWI was distributed among the agencies using this formula:

- Each agency receives $40 per employee (number of employees at time of RFP application) per calendar year (2008 and 2009).
- Each agency receives $15 per discrete employee per calendar year who completes the Health Survey and onsite Health Screening.

Partners

Washington Wellness has three major partners for the HWI project: The Institute for Health and Productivity Management (IHPM), CSI Solutions, and the University of Washington (UW).

IHPM, through its Value-based Health Initiative, provides essential assistance to the project at no cost. The mission of IHPM is to identify and spread best practices in the health and productivity field. HWI was selected as one of IHPM's national "field studies." Results from this project will be distributed through the IHPM network of employers and publications.

IHPM provides a website, secure messaging, a Health Survey, and project consultation as well as data management, integration, and analysis. The most widely

used productivity measure, the Work Limitations Questionnaire (WLQ), is a part of the Health Survey. Additionally, IHPM provides access to innovative health improvement interventions that are being tested with the employee population to determine how well they work in a state government setting.

CSI Solutions is experienced in working with the quality improvement process chosen for the project; the IHI Breakthrough Series, called the "Collaborative" model. CSI Solutions' principles were used as a guide in our application of the Collaborative process and are additionally assisting with evaluation of the Collaborative.

The UW is the overall evaluator for Washington Wellness and for HWI. The team from the Health Promotion Research Center has been involved in the design of data collection tools and the structure of the evaluation. The attached current interim evaluation of HWI was compiled by the UW team (see Attachment B).

Achieving a Healthy Work Culture

HWI is developing an agency model that will use the measures in the enabling legislation to demonstrate agency improvement. The project will measure the impact of agency-based interventions on metabolic and behavioral outcomes.

The vision is that HWI will result in a process model for developing a "Healthy Work Culture" that can be used throughout all state agencies. HWI is first addressing the following questions:

- What is a "Healthy Work Culture"?
- How do agencies make sustainable changes to achieve a "Healthy Work Culture"?

Our approach combines the use of a model "Change Package" and IHI's Collaborative to accomplish agency culture change. The "Change Package" can be viewed as a blueprint for agency action. This model has been used extensively in the health care setting, but applied for the first time by HWI in an employer setting.

A Collaborative is "structured innovation." It is *how* agencies make the changes to achieve a "Healthy Work Culture." As agencies test methods to assist employees in health improvement, especially in the areas of environment and policy, the successful changes are captured by the Collaborative process and contribute to the development of an integrated model. This process encourages and supports the innovation required by each agency to structure change within its own unique culture.

A goal of the Collaborative model is to be transferable and sustainable, not just in the seven participating agencies, but through communication and education throughout the state system of unique employers (agencies).

A more detailed description and visual models of the Collaborative process can be found in the accompanying interim evaluation from the UW (Attachment B).

Population Assessment

Data integration is essential for a broad and accurate assessment of a population. HWI offered an online Health Survey and onsite Health Risk Screening. The data was integrated consistent with federal Health Insurance Portability and Accountability Act (HIPAA) regulations by IHPM.

Approximately 30% of the HWI employee population completed both the Health Survey and the onsite screening. It is apparent that the 30% that took advantage of this convenient screening were not taking advantage of the rich benefits for preventive care offered by Public Employees Benefits Board (PEBB) enrollment.

The onsite Health Risk Screening collects information on these clinical and physical measurements:

- Fasting Blood Glucose (FBG)
- Lipids - cholesterol, Low Density Lipoprotein (LDL), High Density Lipoprotein (HDL), triglycerides
- Blood Pressure (BP)
- Waist Circumference
- Weight
- Body Mass Index (BMI)

The table at the end of this section is a segment of the results from the initial assessment in May and June of 2008. The term “At Risk” describes those onsite Health Screening results that fall outside of established clinical or physical measurement guidelines, or are individual responses from the Health Survey. The term “Newly Identified” refers to those people at risk who didn’t report the risk when responding to the Health Survey.

A significant segment of the population is at risk for diabetes, hypertension, or heart disease and a large percentage of people are not aware of their risk.

The complete results of the integrated Survey/Screening data are contained in the UW interim evaluation.

The population assessment will be repeated three more times, in November/December 2008, May/June 2009, and November/December 2009. These additional assessments will likely increase the percentage of participants and will provide an opportunity to assess effectiveness of multiple agency-centered interventions. HWI will follow the initial group of participants and report a population measure of all participants over the four assessments.

Condition	Total # At Risk	# Previously Known	# Newly Identified	% At Risk Newly Identified	% of Total Participants Newly Identified
Elevated FBG	432	135	297	68.75%	19.95%
Elevated BP	1,037	267	770	74.25%	51.23%
Elevated Triglycerides	475	79	396	83.37%	26.47%
Low HDL	572	117	455	79.55%	30.46%
Waist Circumference	768	432	336	43.75%	22.89%
High LDL	842	176	666	79.10%	44.82%
High Total Cholesterol	550	146	404	73.45%	27.19%

Health Improvement

In developing the parameters of a "Healthy Work Culture," HWI is evaluating which health improvement interventions are best accomplished at an agency level, and how the agencies can successfully implement these interventions. Some initial observations include:

- Onsite Health Screening integrated with a Health Survey appears to be a successful intervention in itself. Anecdotal reports show that some participants took action to address the health risks identified by the Health Survey/Screening. Questions have been added to the follow-up Health Survey to assess the action taken by participants.
- Each participant was provided with a secure webpage to view his or her results. The page will be updated with each screening to give the employee a trend of his or her screening results. Additionally, secure messaging by IHPM was used to alert participants of appropriate action to take regarding risks and programs offered by their agencies.
- A nutrition and physical activity program designed to accomplish metabolic changes, or risk reduction, was offered through the agencies. Fifty percent of the employees who completed the Health Survey/Screening participated in this program, "Changes That Last a Lifetime." Metabolic results will be available following the second round of onsite Health Screening in November/December 2008.
- Policy changes were made by agencies to offer healthy food for meetings.
- Each agency engaged employees in various agency-specific activities. These interventions were captured as part of the Collaborative measurement process.
- Employees were encouraged to take advantage of benefits offered by their health plans, including: Free and Clear smoking cessation, disease management, and preventive care screenings (MAM, PAP, colon cancer).
- Additional programs will be offered to agencies during the January/June 2009 time period.

Current Status of Project

The HWI teams continue to test interventions and policy changes, sharing these activities by use of a Virtual Office provided by our consultants at CSI Solutions. Teams also participate in monthly phone conferences and scheduled face-to-face Learning Sessions. These activities will continue through June 2009.

Three additional rounds of Health Survey/Screening are planned to provide data for the three additional population assessments: November/December 2008, May/June 2009, and November/December 2009.

Healthy Quarters, a program designed to assist employees to accomplish behavior change of their choice, will be offered to employees in two participating agencies in 2009. Additional programs for specific condition risks are in discussion.

In an effort to more fully understand the Work Limitations Questionnaire productivity measure, incorporated in the Health Survey, Washington Wellness has engaged the primary author of the tool, Debra Lerner, PhD from Tufts University. Dr. Lerner will provide two phone training/discussion sessions. One session is for the HWI teams, the other is targeted specifically for the agency Senior Leaders.

Preliminary Observations

Early observations that have prompted discussion and will continue to be tested include:

- Onsite Health Screening is a valuable tool and an appropriate agency-based activity. It is sustainable only if paid for by the health plans. Uniform Medical Plan and Group Health are recognized for supporting this project through payment of the Health Screenings for their enrollees.
- Integrated data is more powerful. A potential addition to the existing data set is an analysis of adherence to chronic illness maintenance drugs. Based on literature reports, up to 50% of employed populations may not continue adherence to maintenance drugs after six months. The low adherence rate results in poor health outcomes and wasted expenditures on medications.
- The time commitment for agency HWI team members is significant. Two agencies have access to a full-time wellness employee or paid consultants. This appears to be a valuable component of those two participating agencies. HWI will continue to monitor the value of this commitment.
- Incentives are essential in larger agencies to drive participation. The agencies that offered cash incentives for participation in the Health Survey/Screening had higher participation, especially among men.
- The link between health of the employee population and agency operational performance appears to need strengthening at the Senior Leader level. It is anticipated that the WLQ can provide measurement of the link.

- The computer is an important tool for employee health assessment and behavior change. Computer usage by employees for health improvement continues in testing phases across the participating agencies for both policy and access issues.

Vision for Sustainability

A pilot project is only valuable if it leads to change in a system that is measurable.

The analysis and observations to date indicate that the HWI project will provide the following outcomes:

- A "blueprint" for the process at an agency to develop a "Healthy Work Culture."
- An "agency designation" that can be used statewide to recognize agency success in developing a "Healthy Work Culture."
- A set of agency-based interventions and polices that contribute to measurable improvement in employee health and productivity.
- Testing of a validated health-related productivity measurement tool, the Work Limitations Questionnaire.

Washington Wellness is considering and testing several ideas that may result in sustainability of the results of the HWI. These include:

- Developing a "Healthy Work Culture" agency designation based on the "Change Package" results from HWI. This designation could potentially be used as a guideline for agency environment and policy change and recognition of agency achievement.
- Developing a model to integrate "employee health" into the management strategy and accountability of the agencies.
- Integrating agency-based health strategy with health plan benefits. A comprehensive plan to integrate incentives with appropriate use of benefits to reduce population risk is a common strategy in the private sector.
- Integrating the lessons learned from HWI into the PEBB benefits strategy in the form of Value-based Health Benefits.

References

[1]Okie, Susan, M.D. *The Employer as Health Coach.* NEJM Oct. 2007, pp. 1465-1469.

[2]Chapman, Larry. *Meta-Evaluation of Worksite Health Promotion Economic Return Studies: 2005 Update.* The Art of Health Promotion July/August 2005 published by the American Journal of Health Promotion, Inc.

[3]Benefits Roundtable. *Engaging Line and Local Management in Supporting Wellness: Lessons from Member Practices and Tools.* Teleconference Materials from September 26, 2007.

Attachment A

Press Release: Award from Institute for Health and Productivity Management

(see following page)

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Award presented to program for healthier state employees

Healthy Worksite Initiative honored by Institute for Health and Productivity Management

OLYMPIA – Washington Wellness, a state program designed to improve the health of state employees, has received a leadership award for Value-Based Health from the Institute for Health and Productivity Management (IHPM). The IHPM specifically cited Washington Wellness' Healthy Worksite Initiative, a demonstration project designed to identify health risks in an employee population, then develop programs at work to help employees improve their health. Early identification and treatment of health risks is a major focus for the project.

Washington Wellness is a program administered by the Washington State Health Care Authority (HCA) and the Washington State Department of Health (DOH).

Employees in the participating state agencies began the initiative by taking health risk assessments and onsite screening to identify health risks in the workforce. The results will be used to guide policy and environmental changes designed to help workers make better choices about their health. The health risk screening will be repeated to measure workforce health improvements.

"We feel there is a correlation between strong organizations and a healthier workforce," said HCA Administrator Steve Hill. "We hope to determine how the health of employees impacts the workplace in our report to the Legislature in December 2010."

"Preventing health problems is much better than treating them. The health risk assessments showed us some ways we can help our employees," said Secretary of Health Mary Selecky. "We're using that information to make changes so it's easier for staff to make healthier choices."

The initiative involves employees from seven state agencies including the Department of Financial Institutions; the Department of Health; the Department of Natural Resources; the Department of Social and Health Services; the Employment Security Department; the Higher Education Coordinating Board; and the Office of the Attorney General.
"Washington Wellness joins the distinguished ranks of last year's IHPM award winners – Intel, Proctor & Gamble, Marriott, and Cerner – as a leader at the expanding value-based movement that is transforming health benefits and programs from costs into investments in their human capital," said Sean Sullivan, President of IHPM.

The IHPM is a global enterprise created in 1997. Their mission is to define and promote value, instead of cost, as the basis for health management and benefit plan design.

# # #

Attachment B

University of Washington Healthy Worksite Initiative: Interim Evaluation

(see following page)

Healthy Worksite Initiative: Interim Evaluation

University of Washington
Health Promotion Research Center

November 18, 2008

Interim Evaluation prepared by:
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Healthy Worksite Initiative – Interim Evaluation
EXECUTIVE SUMMARY

Introduction

The Healthy Worksite Initiative (HWI) is a 30 month legislatively-mandated demonstration project that began in July 2007. This report is intended to serve as a companion piece to the Washington Wellness's HWI Interim Report to the Legislature.

HWI is lead by the Health Care Authority and involves 7 **Washington State agencies**:

- Office of the Attorney General (AGO).
- Department of Financial Institutions (DFI)
- Department of Health (DOH)
- Department of Natural Resources (DNR)
- Department of Social & Health Services (DSHS)
- Employment Security Department (ESD)
- Higher Education Coordinating Board (HECB),

All of the employees at these agencies participate in HWI with exception of DNR and DSHS who have included only a subset of their employees.

Agencies work independently and together through the HWI collaborative to develop and refine interventions that influence health behaviors and lifestyle choices. The overall goal of the initiative is to improve employee health and productivity, and eventually positively impact the rising cost health care.

Specific **outcome measures** for HWI defined by the enabling legislation include:

- Reduction in % of population that is overweight or obese
- Reduction in risk factors related diabetes
- Reduction in high cholesterol
- Reduction in high blood pressure
- Reduction in risk factors related to absenteeism
- Reduction in tobacco consumption
- Increase in appropriate use of preventive health services

These outcomes are tracked using Health Surveys and Health Risk Screenings. Additional data is obtained from the Department of Personnel and from medical claims. This report presents results of all the baseline measures collected for the collaborative as a whole and for each participating agency. It also provides examples of many environmental and policy changes agencies have initiated and begins to identify some of the successes. In our final report we will compare baseline results to those collected at the end of the initiative in June 2009, and identify a menu of successful interventions.

Intervention Model

HWI uses the Collaborative **Breakthrough Series (BTS) model** developed by the Institute for Healthcare Improvement (IHI). This model calls for:

- Developing a "Change Package**"** to guide change within participating organizations,
- Convening teams for learning sessions followed by individual action periods, and
- Using rapid change cycles for continuous learning and improvement.

HWI's Change Package, was developed by national experts convened by Washington Wellness in 2007. Representatives from health care delivery, purchasing, worksite wellness, and labor, participated in this process. The resulting model calls for activity in at least 6 areas to improve the worksite culture of wellness:

- Understand your population
- Engage employees and families
- Internal work environment
- Information and measurement
- Wellness interventions
- Community linkages

The basic idea is to generate small changes in several key areas simultaneously; test them; then improve, expand or drop them based on experiential data (your own and others); and repeat the process until successful. In this way, effective, comprehensive, and sustainable change can be made in a short period of time.

The **main components** of the HWI model are:

- Onsite Health Risk Screening and Health Survey every six months
- Individual, environment, and policy interventions
- Focus on changes that the agency can make to improve employee health

As part of this initiative, HWI teams have:

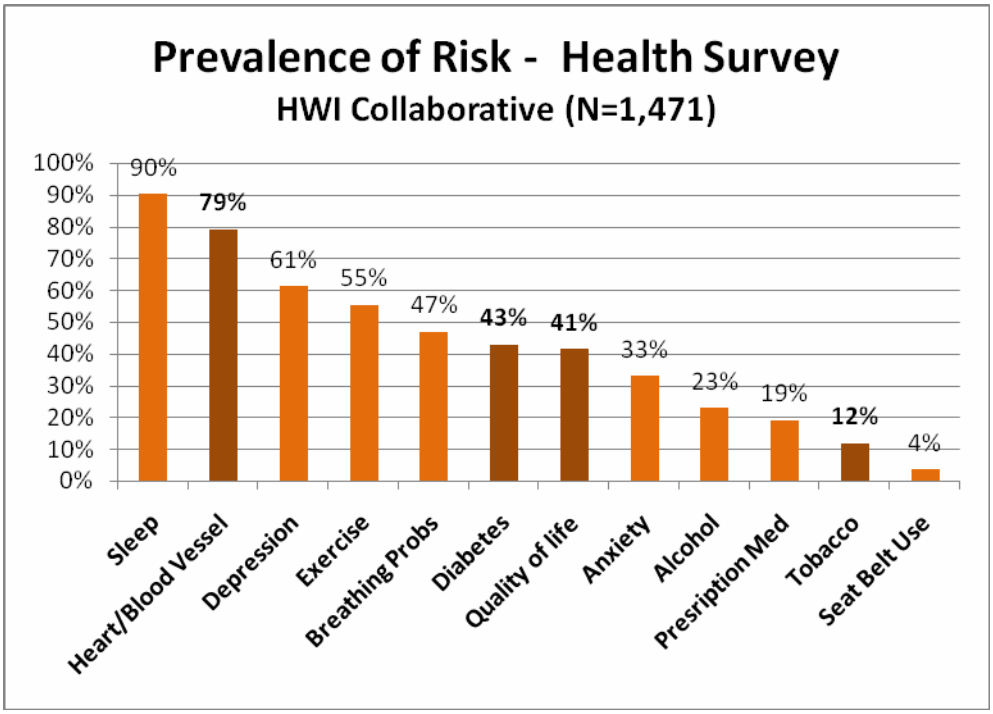
- Collected and used data about their employees to plan strategies and interventions.
- Promoted screenings, policy changes, facility improvements, wellness programs, and health plan preventive benefits.
- Developed websites, newsletters, bulletin boards, letters and emails to communicate health and HWI program information.
- Created or improved Wellness Committees.
- Conducted numerous informal evaluations and surveys to assess the effectiveness of interventions attempted.
- Made partnerships in the community to leverage existing resources and be able to expand their offerings for employees.

	Examples of interventions
Individual	• Changes that Last a Lifetime • Healthy Quarters • LiveWell Disease Management Program • Physical Activity Classes & Challenges • Healthy potlucks and recipe contests • Educational nutrition events • Brown Bag Lunches
Policy	• Wellness Policy • Catering Policies • Vending Machine policies • Campus wide tobacco free
Environmental	• Stairwell notices • Bike racks • Blood pressure cuffs • Weight scales • Walking maps

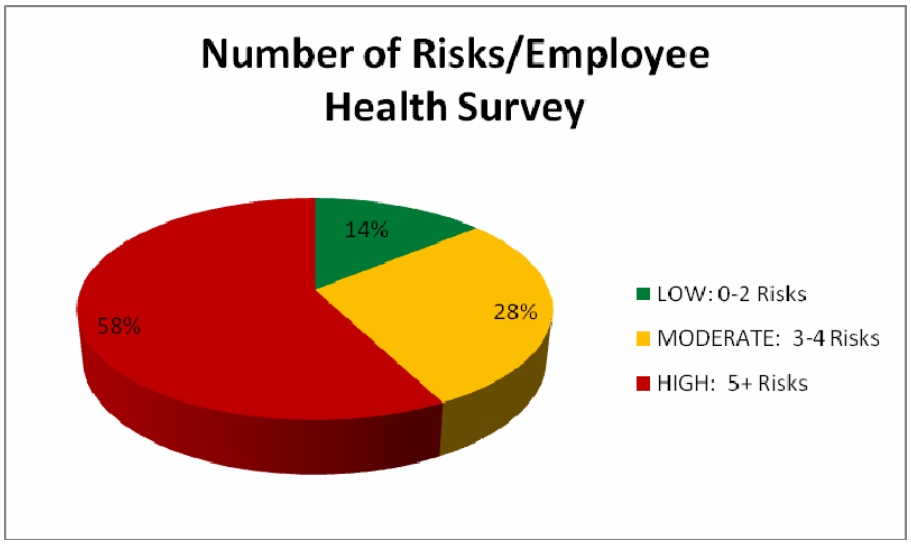
Baseline Results

About a quarter (27%) of all employees in the collaborative participated in the first round of screenings – including both the Health Survey and the Health Risk Screenings.

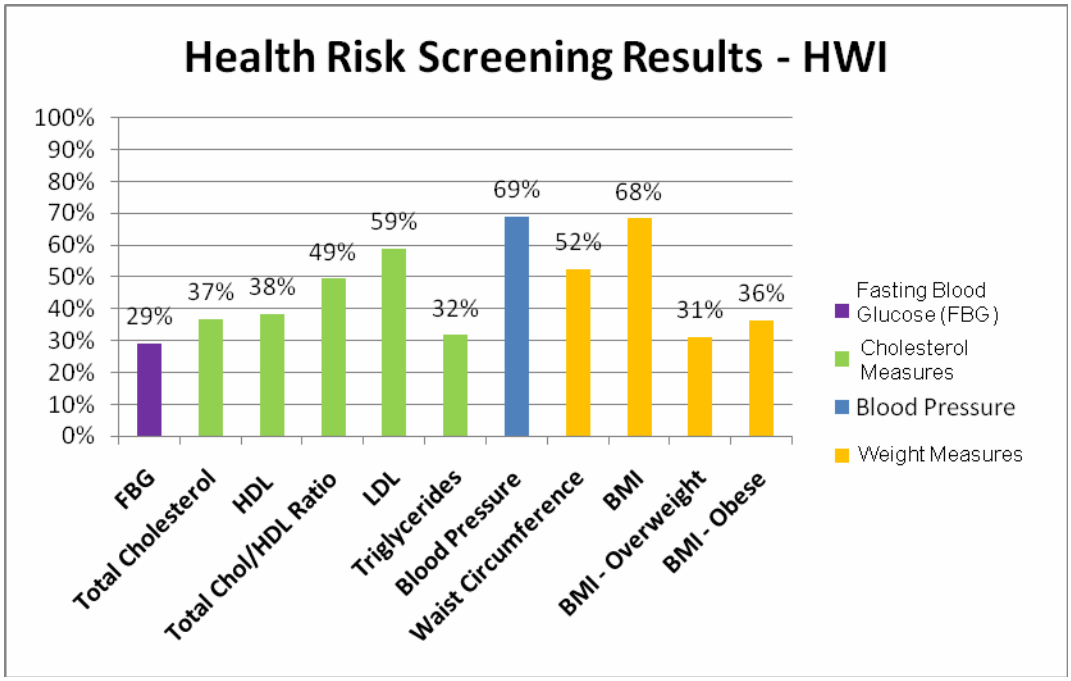
The Health Survey used for this initiative was developed by the Institute for Health and Productivity Management (IHPM) specifically for HWI. It is a self-reported questionnaire that identifies 12 areas of risk and casts a broad net for identifying individuals at risk in these areas. Looking at collaborative employees, sleep and heart/blood vessel problems were the most frequently identified risk areas while tobacco and seat belt use were least often identified.



The graph below shows the number of health risks per person as identified by the Health Survey. 0-2 risks are considered low risk, 3-4 risks moderate, and 5+ risks high. Only 14% of employees participating in the screenings were in the low risk category, while 86% had more than 2 health risks identified.

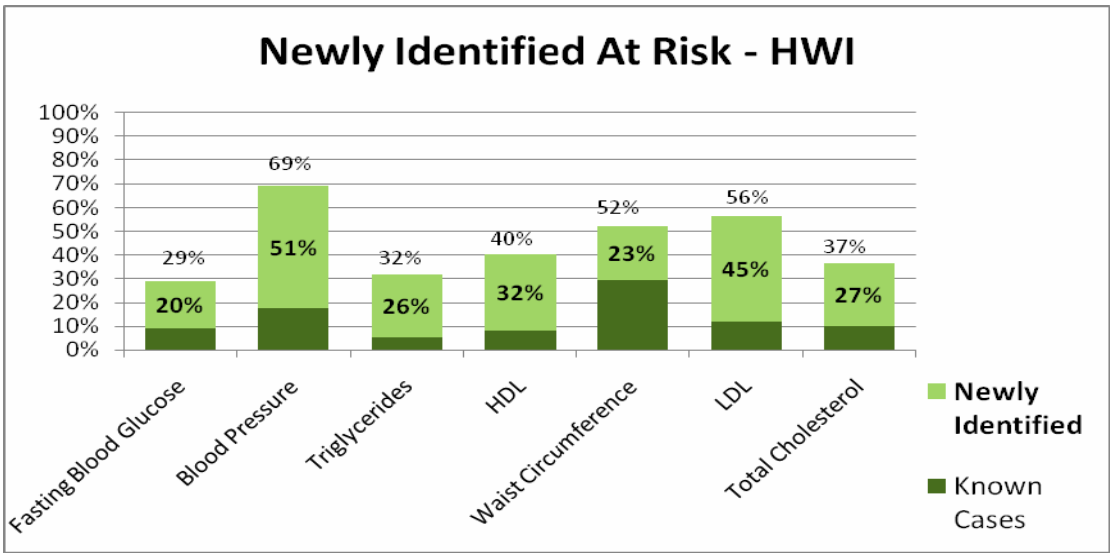


The Health Risk Screenings were conducted at the worksites to collect employee lab and physical measurements. A large proportion of those screened, 69% had high blood pressure readings, and 68% had weight problems as defined by BMI calculations (BMI is a body mass index that takes into consideration an individual's height and weight). The prevalence of lipid problems ranged from a low of 32% with elevated triglycerides to a high of 59% with elevated Low Density Lipoprotein (LDL).



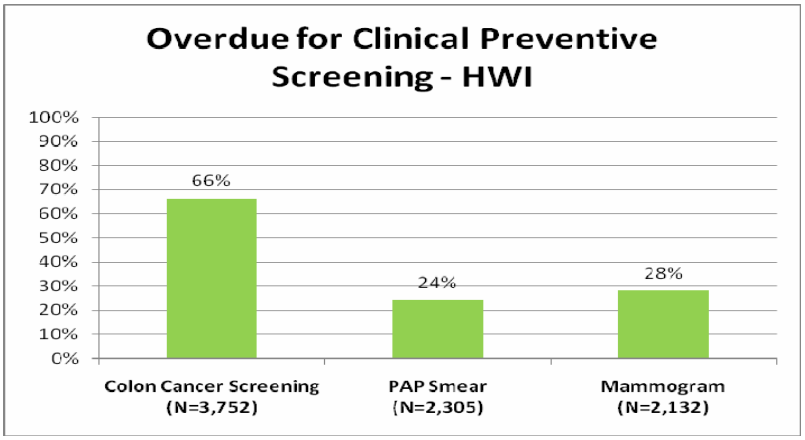
Combining results from the Health Survey with those from the Health Risk Screenings, we are able to identify individuals who did not know they were at risk. These individuals immediately benefit from HWI by becoming aware of a health problem they didn't know

they had. The next graph shows that the largest proportion of employees newly identified as at risk - had a high blood pressure reading, followed by elevated LDL, and a low HDL.



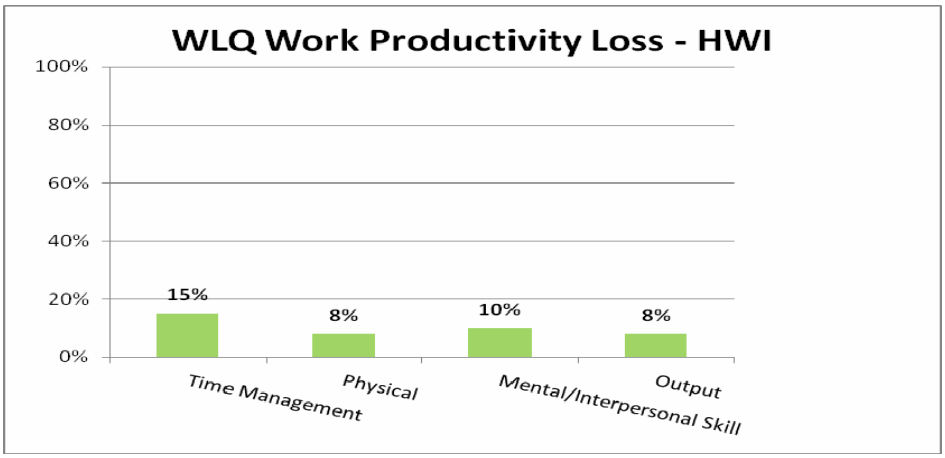
Another important measure is employees' use of preventive clinical screenings. Three screenings will serve as proxy for this behavior: colon cancer screening (every two years for adults 50+), pap smears (recommended every three years for all women between the ages of 22 and 64) and mammograms (recommended every two years for all women ages 40+).

As indicated by the chart below, the majority of adults – 66% are not following the recommended guidelines for colon cancer screenings, 28 % of women are overdue for a mammogram, and 24% are due for a pap smear.



Two other important measures of health and productivity are presenteeism and absenteeism.

Presenteeism is the degree to which employees are present and able to perform the duties/requirements of their job. The inverse of presenteeism is known as work productivity loss. We are using the Work Limitations Questionnaire (WLQ) to measure this loss. WLQ measures loss of productivity along 4 dimensions as shown in the next graph. Between 8-15% of HWI employees are not able to perform some aspect of their job due to illness and/or life distractions.



Unfortunately we do not have a good measure for absenteeism. The data available does not distinguish between sick time taken because an employee is sick, going to the doctor for a preventive screening, or taking care of a sick dependent.

Summary and Conclusions

The seven participating state agencies have made considerable progress in implementing worksite and individual level interventions that have the potential to greatly improve employee health and productivity.

Baseline risk assessments show that State employees who participated in the HWI screenings have a number of health behaviors and risk factors in need of improvement. Follow-up data, collected in 2009, will show whether agency interventions positively impacted employees health behaviors and risk factors.

HWI offers a unique opportunity for Washington State to become a leader in rapid, comprehensive, and sustainable reform to improve employees' health and productivity. If the pilot project proves successful in terms of outcome and process measures, Washington State's HWI will become a model for state governments throughout the nation.

HEALTHY WORKSITE INITIATIVE (HWI) INTERIM EVALUATION

I. Introduction

The Healthy Worksite Initiative (HWI) is a demonstration project involving teams from seven Washington State agencies, that are testing and refining a model designed to improve the health status of their workforce. The model, if effective, could be employed by all Washington state agencies to build and sustain a worksite culture that supports employees' health. Over time this healthier and more productive workforce is expected to positively impact the healthcare cost trend and health-related lost productivity.

HWI is 30 month project that began July 2007 and will end December 2009. The project is currently about two thirds of the way through. The University of Washington, in partnership with HWI's two consultants CSI Solutions and Institute for Health and Productivity Management (IHPM), will be evaluating the collaborative component of this initiative. This Interim Evaluation Report assesses collaborative progress to date. It is intended to serve as the detailed companion piece to the Washington Wellness's Healthy Worksite Initiative Interim Report to the legislature.

II. Background

The Problem

It is now commonly accepted that lifestyle habits, such as a poor diet and lack of physical activity, contribute to the development of conditions like obesity, hypertension, and lipid disorders, which if not addressed lead to the development of chronic disease(s) like heart disease and diabetes.

Employees who are less healthy, or have multiple health risks, tend to have higher health care costs, more absenteeism, and be less productive on the job than their healthier peers. And with the percent of employees in this less healthy category continuing to grow it is clear that Washington State, as a large employer, would benefit greatly from taking action.

Over the last several years Washington State, like most large employers, offered some worksite wellness programs to employees and responded to worsening employee health and increased costs primarily by making changes to medical benefits. However, employee health continued to worsen and costs to increase.

The Solution

In January 2006, the Governor recognizing the need to promote prevention and wellness, and the importance of taking a leadership role, made an Executive Order directing the Administrator of the Health Care Authority (HCA) and the Secretary of Health from Department of Health (DOH) to launch Washington Wellness statewide.

The target audience of Washington Wellness is State employees, retirees and dependents. The underlying belief is that as the largest employer in the State, improving the health and vitality of State employees would positively impact both job performance and the cost trend of health plan benefits.

"Government must play a leadership role in promoting prevention and wellness. I believe Washington State is especially well-suited to serving as a model, promoting healthy behavior among our own employees and retirees. In so doing, we not only improve the health of state employees and retirees, themselves, but also enhance their ability to serve state citizens."

- Governor Gregoire (Vision statement)

Each state agency and higher education institution appointed a Wellness Coordinator to lead the health and productivity management program in his/her agency/organization. The primary focus of this initial effort was to implement a Health Risk Assessment (HRA) for state employees. An annual HRA would allow the State to create a population-based report of risk factors in the workforce. This information could be used to help plan health promotion activities for targeted populations and evaluate effectiveness of interventions over time.

Washington Wellness coordinators received no additional funding or FTEs to do this work and had no menu of proven interventions and recommended workplace changes for achieving the desired sustainable improvement in employee health.

In 2007, the legislature furthered the Governor's initiative by placing into statute Engrossed Second Substitute Senate Bill 5930 (E2SSB 5930,section 41/chapter 41.05 RCW) http://www.leg.wa.gov/pub/BillInfo/2007-08/Pdf/Bills/Session%20Law%202007/5930-2.SL.pdf which directs Washington Wellness to pilot and evaluate interventions in four or more State agencies involving up to 8,000 employees. The Legislature defined a specific set of outcome measures and allocated funding to support this effort. This pilot project was called the "Healthy Worksite Initiative", or "HWI".

The Governor and the legislature acted on the growing evidence that worksite environment, policies, and program interventions can have a strong impact on employees' health and productivity - not surprising given that employees spend more than half of their waking hours 5 days a week at work.

They also understand that merely offering "worksite wellness" programs is not enough. A clear business case can be made for offering health promotion programs and tools to encourage employees to manage their own health as part of a larger effort to improve the worksite health culture and overall productivity management.

This new approach is expected to help the State: maximize health-related capabilities of the workforce, improve morale, reduce absenteeism, improve recruitment and retention of skilled employees, integrate employee health into management strategies, and eventually impact the rising cost trend of health benefits. Expected benefits for employees include: improved health and vitality for work and life ,and increased ability to cope with stress and change.

III. INITIATIVE DESCRIPTION

The Healthy Worksite Initiative is a comprehensive systems change approach for making sustainable improvements to employees' health and productivity. This section describes the initiative by covering the following components:

- Partners
- The Model
- Funding
- Timeline

HWI Partners

Planning Group

The Planning Group provides direction and guidance to the HWI project staff. This group is composed of representatives from:

- Institute for Health and Productivity Management (IHPM) – Consultants/vendor http://www.ihpm.org/
- CSI Solutions– Consultants http://www.spreadinnovation.com/csi/html/home.aspx
- University of Washington (Evaluators)
- King County's Health Reform Initiative (A model program)
- HWI participating agencies leads (two)
- Department of Health (Technical expert),
- Washington Federation of State Employees (WFSE) (union),
- Public Employees Benefits Board (PEBB)

Participating Agencies

Seven agencies participate in HWI:

- Department of Financial Institutions (DFI)
- Department of Health (DOH)
- Department of Natural Resources (DNR)
- Department of Social & Health Services (DSHS)
- Employment Security Department (ESD)
- Higher Education Coordinating Board (HECB)
- Office of the Attorney General (AGO)

These agencies responded to a request for proposal to become a Healthy Worksite Initiative agency. They were selected on the basis of meeting the legislative criteria for participation:

- Senior Management support with up to 0.5 FTE commitment for HWI.
- Capability to implement best practice employee health programs
- Significant work to promote Health Risk Assessment completion by employees.
- Ability to form an HWI team
- Capability of documenting number of participating employees

The Model and its Application

The Model: Collaborative Breakthrough Series (BTS) Model

HWI uses three evidenced-based strategies. First, the agency changes necessary to move towards a healthy work culture are presented in a "Change Package". Secondly, Institute for Healthcare Improvement's (IHI) Collaborative Breakthrough Series (BTS) model is the learning process that provides agencies with the "how" of making changes. And the third strategy is a quality improvement method, the "Model for Improvement".

BTS is used to spread and adapt best practices across multiple organizations. BTS Collaboratives have achieved dramatic results in many areas of health care. HWI is the first application of this model to improve worksite health and productivity.

A BTS Collaborative is composed of organizations that seek the same desired change. This model creates a structure for participating organizations to learn from each other and from experts in the field, and to act based upon what they learn to make system level changes within their own organization. These collaborative are short-term, usually between 6-15 months.

Typically, each participating organization sends three members from different areas and levels of its organization to attend three face to face meetings over the course of the collaborative. These meetings are called "learning sessions" (LS).

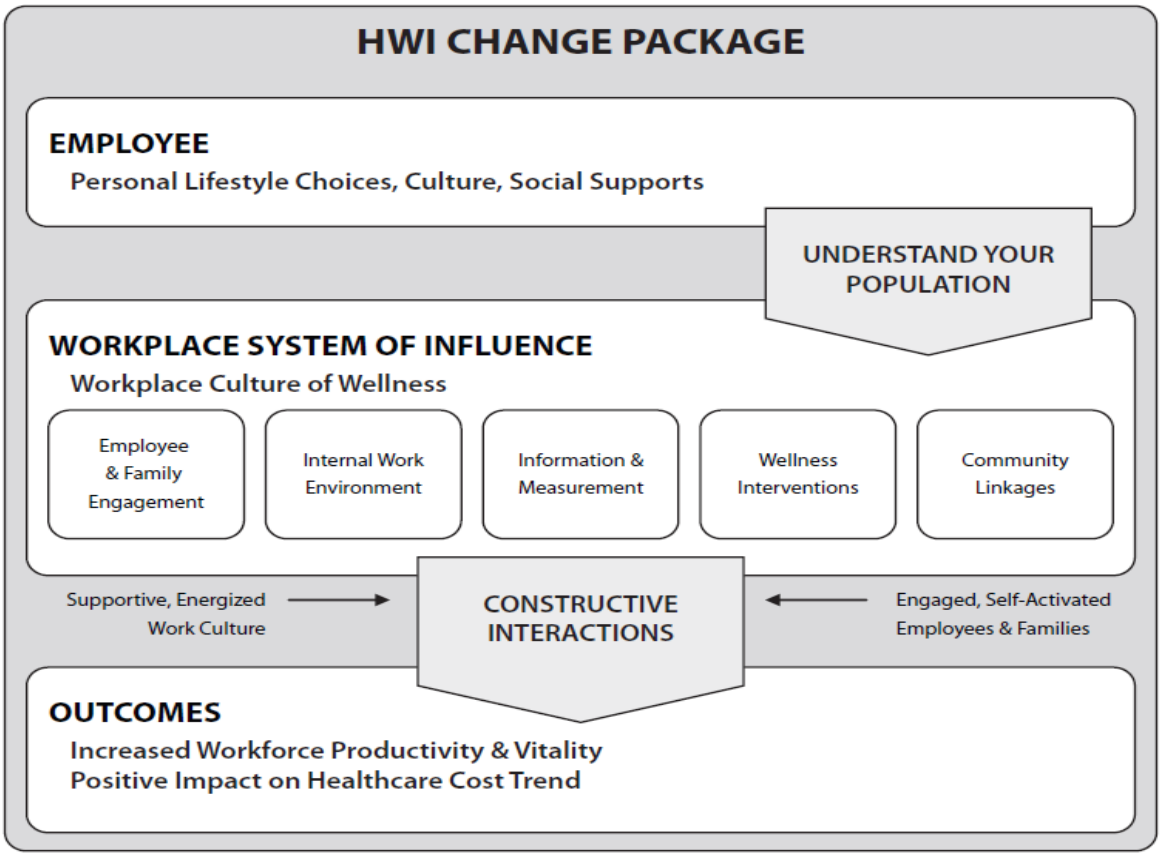
The first LS focuses on the Change Package and the Model for Improvement. The Change Package offers tools, suggestions, and measures to help guide the desired change within organizations. It's a collection of high level evidence-based areas for organizations to work in to help bring about the desired change. Working within each and all of these areas is necessary for bringing about the desired change. The Model for Improvement guides the teams through rapid cycle changes—testing ideas on a small scale and short time frame.. Subsequent LSs allow teams to learn from each other as they report on successes, barriers, and lessons learned during general sessions, workshops, poster presentations, and informal dialogue and exchange.

Between LS are action periods. During these periods the LS team and additional team members test what was learned within their own organization. Teams submit monthly progress report and are supported by monthly conference calls, periodic site visits and a virtual list-serve for web-based discussions and the sharing of materials and resources.

HWI Application

In 2007, Washington Wellness convened a panel of worksite health and productivity management experts to produce the content for a change package Washington State could use for HWI. Six high-level activity areas were identified each with a few key ideas for change, and some concrete examples. Working in

each and all of these areas was determined to be critical for making the worksite improvements that will positively impact the health of employees.



Each HWI participating agency forms a team that spearheads the initiative within their agency as well as participates in the collaborative process. Typically this team is comprised of a senior, peer, and day-to day leader along with a few other staff members.

Agency teams use the change package to guide activities with their organization. All of these actions are designed to support employees making healthier choices and to improve the worksite's health culture. The change package guides them to:

- Use demographic, survey and health screening data to identify health risks, interests and needs in their workforce
- Review and revise or develop health related policies
- Scan the physical environment and make improvements
- Initiate and test system changes and interventions
- Partner with other organizations concerned with health and productivity
- Use information and measurement to plan interventions and measure progress

Teams come together on a monthly basis. Meetings are held - in person every three months and through teleconference calls on other months. For the Learning Sessions **(defined on the previous page)**, every team prepares a Story Board or a "Poster" to share information about their program. One or two agencies are on the agenda to present their work in a particular area of interest to all members. And there are roundtable and less formal updates as well.

Teams also participate in a knowledge management system/list serve/virtual office that facilitates asking questions, sharing materials and lessons learned. The Collaborative provides all participating agencies

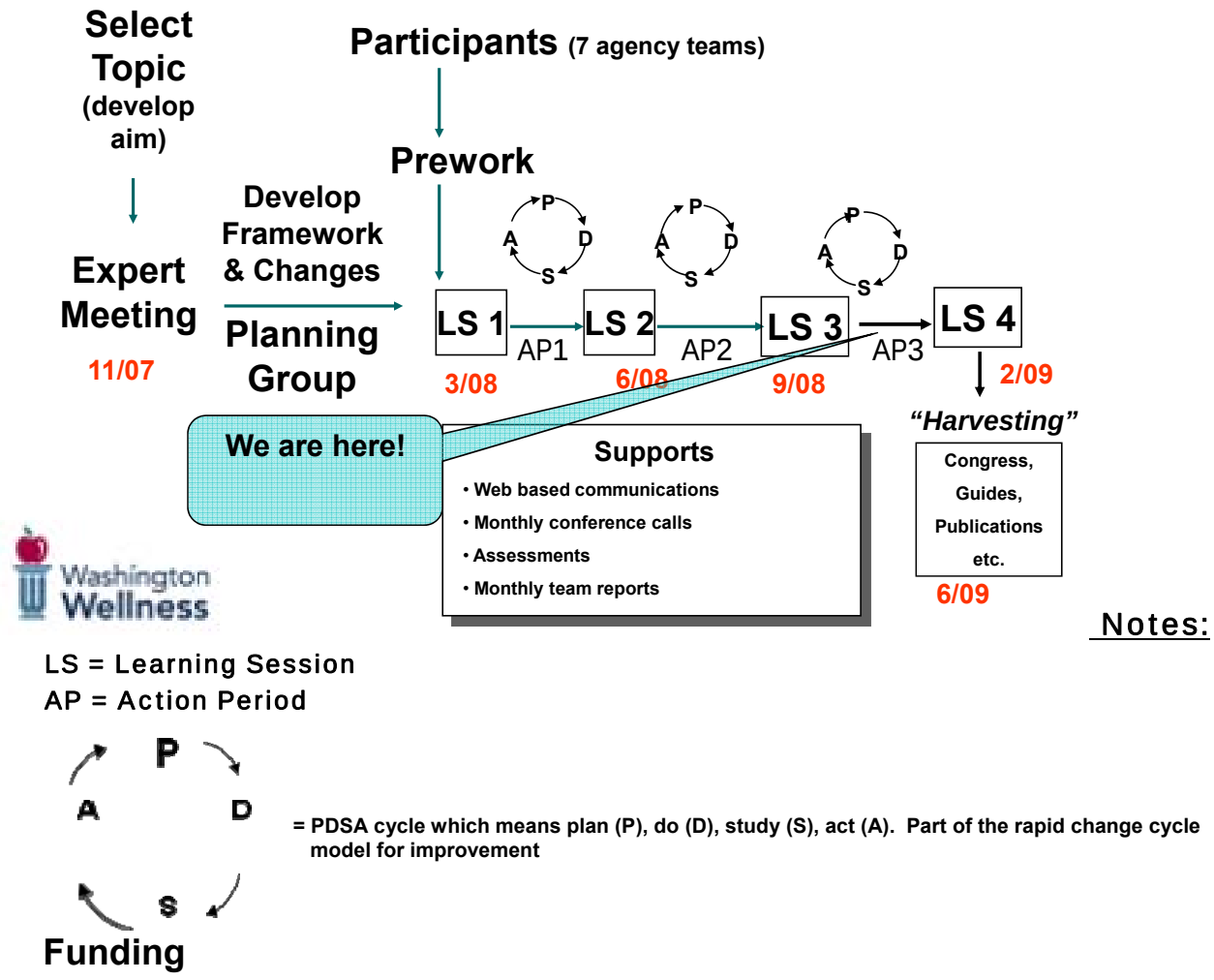
with a structured support system. By working together through the Collaborative, agencies help each other successfully achieve their common goals.

HWI agency employees are offered the opportunity to participate in the HWI Health Survey and the Health Risk (lab and physical measures) Screenings every 6 months, a total of four times, during the HWI. Agency teams are responsible for promoting the survey and screenings within their own agency. The first round of screening results establishes the baseline health risks for this initiative. The screenings will be repeated to measure workforce health improvements, which will be presented in the final report.

HWI leadership brought the teams proven interventions that could be readily adopted by agencies at no cost. Each agency also selected and implemented their own interventions, resulting in a wide variety of activities being tested and shared. All activities are documented to facilitate easy adoption of successful strategies by other agencies in the spread phase of this project.

Other states have attempted reforms to improve employee health and productivity but they have been more limited in their size/scale and scope, have not included the formation of an infrastructure to ensure sustainability, and have not been attempted in such a short time period. By adopting BTS, Washington State is embedding a practice of responsive change to improve and maintain employee health and productivity for years to come.

HWI Collaborative



Notes:

LS = Learning Session
AP = Action Period

= PDSA cycle which means plan (P), do (D), study (S), act (A). Part of the rapid change cycle model for improvement

Funding

Total cost of this project is about $1.05 million, or $527,500 a year.

The Washington State Legislature, recognizing that agencies needed funding to successfully implement the desired worksite wellness changes, allocated $600,000 for HWI over the biennium. Funds have been distributed for the first year and the renewal is supposed to be automatic.

In addition to funding from the legislature, the Health Care Authority (HCA) is contributing 1.5 FTE in staff time, adding approximately $200,000 in value, and the Institute for Health and Productivity Management (IHPM) is contributing in-kind resources valued at about $250,000. IHPM contributing resources include a website for employees in the collaborative, a HIPAA compliant data repository and screening analyses, a Health Risks Assessment survey, consultation on this survey and health screenings, and free vendor products (for example Changes that Last a Lifetime and Healthy Quarters).

Table 1. Estimated Funding and In-Kind Contributions

Sources	Type	7/07-6/09
WA State Legislature	Dollars	$600,000
Health Care Authority	Staff time	$120,000
	Dollars	$114,350
Institute for Health & Productivity Management (IHPM)	In-kind resources estimated	$255,000
TOTAL		$1,055,000

Participating agencies are also pitching into this effort with their own additional funding for staffing, and some interventions and promotional materials.

Timeline

This timeline begins with the Passage of E2SSB 5930 sect. 41. It officially began in July 2007. It is a 30 month project with 3 distinct phases: design, collaboration, and evaluation/spread. We are currently in the collaborative phase, about two thirds of the way through the project.

Design Phase: July 2007- Dec 2007	
Jul 2007	E2SSB 5930 Section 41 goes into effect and HWI is created
Dec 2007	HCA selects model and expert panel refines model
Collaborative Phase: Jan 2008 – Jun 2009	
Jan 2008	Agencies selected and agency teams formed
Mar 08	Collaborative Learning Session #1 (Kick Off)
May 2008	Collaborative Learning Session #2
May-Jun 2008	Health Survey & Health Risk Screenings- #1 (Baseline)
Sep 2008	Collaborative Learning Session #3
Nov-Dec 2008	Health Survey & Health Risk Screenings - #2
Dec 2008	Interim Report to Legislature
May-Jun 2009	Health Survey & Health Risk Screenings #3
Feb 2009	Collaborative Learning Session #4
Jun 2009	Collaborative Harvesting Session – lessons learned & model refined
Jun 2009	Collaborative Ends
Evaluation & Spread Phase (Jul 2009 – Dec 2010)	
Oct–Nov 2009	Health Survey & Health Risk Screenings - # 4 –Final
Dec 2009	Official end of pilot phase of HWI
Dec 2009	Dissemination and spread of change package
Jan 2010	Recruit agencies for HWI Collaborative II
Mar 2010	Collaborative II Learning Session #1 (Kick off)
Jun 2010	Evaluation complete
Dec 2010	Final Report to legislature
Jun 2011	E2SSB 5930 Section 41 expires

Note: This timeline does not include the following monthly recurring events:

- Planning group teleconference
- Agency teams teleconference
- Agencies submission of their monthly reports

IV. Goals and Expected Outcomes

Goal

The overall goal of HWI is to develop and refine interventions in the workplace that influence health behaviors and lifestyle choices resulting in improved employee health status and productivity, and eventually positively impacting the trend of rising health-related costs.

Expected Outcomes

Successful achievement of this goal, along with a list of recommended interventions, is expected to result in the following:

1. Reduction in percent overweight/ obesity*
2. Reduction of (modifiable) risk factors related to diabetes*
3. Reduction in "at risk" cholesterol levels*
4. Reduction in "at risk" blood pressure *
5. Reduction in tobacco consumption *
6. Increase appropriate use of preventive health services*
7. Reduction in risks that contribute to absenteeism
8. Improvement in overall employee health status
9. Identify agency policy, environment, and program changes that create a "culture of wellness" to support employees improving their health choices and behaviors.

The asterisks (*) identify measures defined by the authorizing legislation.

V. Measures and Data Sources

The table below identifies the measures and data sources we will use to assess outcomes.

Table 2. Specific Measures and their Data Source

Outcome	Measures	Source
Overweight/ Obese	Body Mass Index (BMI) which takes into account height and weight. **BMI > 25 kg/m2**	Health Risk Screening
Diabetes	Fasting Blood Glucose **(FBG) level: > 100 mg/dl** Other Modifiable Risk Factors: Hypertension (S ≥ 120 and/or D ≥ 80 mm/Hg) Overweight/Obese (BMI > 25 km/2) Exercise (≤ 15 minutes 2 days a week) HDL < 35 Triglycerides > 250	Health Risk Screening & Health Survey
Cholesterol	Total cholesterol ≥ 200 mg/dL Triglycerides ≥ 150 mg/dL , Total cholesterol/HDL Ratio > 3.5 LDL ≥ 100 mg/dL HDL: Men < 40, Women < 50 mg/dL	Health Risk Screening
Blood Pressure	Blood Pressure - Systolic and Diastolic **Systolic < 90 or ≥ 120 mm/Hg and/or** **Diastolic < 60 or ≥ 80 mm/Hg**	Health Risk Screening
Tobacco	Tobacco Consumption – currently smoke **cigarettes, cigars or pipe or use chewing tobacco**	Health Survey
Use of Preventive Services	**Colon cancer screenings** - (fecal occult blood test (FOBT), flexible sigmoidoscopy, and/ or colonoscopy) every 2 years for all adults age 50 and over **Mammograms** – every 3 years for women ages 22-64 **PAP smears** – every 2 years for women ages 40 **Tobacco Cessation Program** (Free & Clear) – all adults	Claims Data
Health Status	At risk in **less than 2 health risks** categories	Health Survey
Culture of Wellness	Documented process for collecting & using population data Tracked and identified successful promotion efforts Have an effective Wellness Committee Secured commitment from Senior Leadership Have Policies & Procedures that encourage wellness Initiated and tested multiple new programs with at least one being sustainable Made community links to enhance wellness efforts	Agency Monthly Reports, Poster Sessions, Learning Sessions, & Team Teleconferences

	Tracked program participation rates and evaluated effectiveness of programs	
Absenteeism	Reduction in sick leave and presenteeism	DOP, WLQ

The rest of this section discusses each data source in detail and identifies additional data that will be collected.

Data Source #1: HWI Health Survey and Health Risk Screening Aggregate Reports

HWI leadership sponsors the HWI Health Survey and Health Risk Screening. Our partner, the Institute for Health and Productivity Management (IHPM) collects and analyzes the data to prepare personalized Health Survey and Health Risk Screening reports as well as aggregate reports for HWI leadership, agency teams, and initiative evaluators.

The Health Survey questionnaires are available on-line and can be taken anytime over a 6 week period. Health Risk Screenings are clinically recorded lab and physical measurements taken at participating agency worksites at prescheduled dates/times. HWI employees are invited and actively encouraged to participate in both the survey and the screenings. These are offered to employees at no cost, four times over the course of the initiative.

The health risk assessment used for this project called the "Comprehensive Personal Health Survey", was developed by the State of Washington and IHPM, specifically for this initiative. It is referred to in this report as "Health Survey". Survey responses go directly to IHPM, and Health Risk Screening data is sent to IHPM from Maxim Healthcare Services who administers the screenings.

Health Survey

(self-reported)

- Alcohol use
- Blood pressure
- Body weight
- Breathing problems
- Depression
- **Diabetes**
- Lipid levels
- Physical activity levels
- Prescription medication
- Seat belt use
- Sleep problems
- **Tobacco use**
- Quality of Life
- **Work Limitations** *(aka Presenteeism)*

Health Risk Screening

Finger-Stick Blood Test

- **Fasting glucose**
- **Cholesterol**, which includes:
  - High Density Lipoprotein (HDL)
  - Low Density Lipoprotein (LDL)
  - Total Cholesterol
  - Total Cholesterol/HDL Ratio
  - Triglycerides

Physical Measurements

- **Blood Pressure**
- **Body Mass Index (BMI)**
- **Waist Circumference**

While all of these indicators are modifiable/improvable with behavior change, the items **bolded and underlined** are those selected by the legislature and HWI Leadership for measurement.

Data Source #2: Monthly Reports, Site Visits, Meetings & Poster Sessions

Monthly Reports and Site Visits

Participating agencies submit monthly electronic reports to Collaborative Leadership. The reports are used to monitor progress, document successes, and identify areas where additional activity and technical assistance is needed.

The reports identify:

- Strategies for each of the change package areas
- Activities engaged in over the past month in each change package area
- Challenges faced
- Successes accomplished
- Focus for the next month

Supporting documentation is embedded or sent as an attachment.

Site visits by HWI's Program Manager are conducted periodically with each agency team. Visiting teams on their own turf offers HWI Leadership the opportunity to: see more of the interventions/facility/promotions/health education materials; better understand how the process is going; discuss some of the agency's unique issues in more depth; determine how the collaborative may better be able to support them in their efforts; and include a senior level executive in the discussion.

Teleconferences, Learning Sessions & Accompanying Posters

Every month representatives from all seven agency teams meet as "the collaborative". Most months this is done in the form of an hour-long teleconference call. Every three months, it is done in person for a day-long "Learning Session" in Olympia. As of December 2008, the collaborative has had 7 teleconferences and 3 Learning Sessions.

For the Learning Sessions, each agency prepares a poster that displays and briefly explains how HWI is working in their agency and what they have been working on since the last Learning Session. Typically each agency's lead and two other wellness committee members attend these sessions.

HWI Leadership develops the agenda which includes presentations by exemplary agencies on a particular topic/area of activity, as well as presentations by HWI consultants, experts in the health promotion field, representatives from local government wellness initiatives, and vendors of health intervention programs. There is also always time set aside for informal sharing and formal planning.

After each Learning session, HWI Leadership asks participants to evaluate the session. The average overall score has been 4 out of 5 or very good. Members find it energizing and helpful to hear what other agencies are doing and to share their own experiences. They seem to appreciate being involved in such cutting edge work.

Data Source #3: Claims Data

Adopting a healthy lifestyle and habits includes following recommended preventive clinical services guidelines. HWI leadership identified four preventive services to use as a proxy measure for appropriate use of preventive services. These include:

- Colon cancer screening test(s)
- PAP smears
- Mammograms
- Free & Clear Tobacco Cessation Program

The recommendation for these services is as follows: colon cancer screening once every two years for all adults age 50 and older, pap smear every three years for all women age 18 and older, a mammogram every two years for women age 45 and older, and tobacco cessation program for anyone who uses tobacco. Uniform Medical Plan (UMP) claims data, which includes the majority of Washington state employees, are used to assess HWI employees' use of these preventive services.

VI. Population Description

Employees in the HWI

Washington State has about 95 agencies (including numerous commissions and boards) employing 69,650 employees as well as a number of higher education institutions employing an additional 108,000 employees. All together the state employs more than 175,000 full time equivalent employees.

HWI includes 7,298 employees from 7 agencies, representing about 8% of agency population and 3% of total State employee population. The agencies were selected through a request for proposal process. Criteria for agency selection, as well as the cap on the number of employees who could participate, was defined in the enabling legislation.

The HWI population (i.e. employees), are offered the opportunity to participate in the HWI screenings and programs, and work in an environment and culture that HWI is actively trying to change. These are the employees impacted by the change package.

The collaborative population includes: 100% of employees at AGO, DFI, DOH, ESD, and HECB, 42% of employees at DNR and 8% of employees at DSHS. The proportion of employees participating from each agency is large enough to allow us to generalize from the study sample to the full agency for all agencies except DSHS. While DSHS's HWI employees represent only a small percent of the agency total, they represent 100% of two divisions: Economic Services Administration (ESA) and Health and Recovery Services Administration (HRSA), so useful generalizations can be made for them as well.

Table 3. Size of the Collaborative Population

	Agency		HWI	
	No. of Employees	No. of physical sites	No. of Employees	% of Agency Employees
AGO	1,339	17	1,339	*100%*
DFI	195	1	195	*100%*
DNR	1,481	19	618	*42%*
DOH	1,511	6	1,511	*100%*
DSHS	19,038	2	1,590	*8%*
ESD	1,949	53	1,949	*100%*
HECB	96	1	96	*100%*
TOTAL	25,609	97	7,298	*28%*

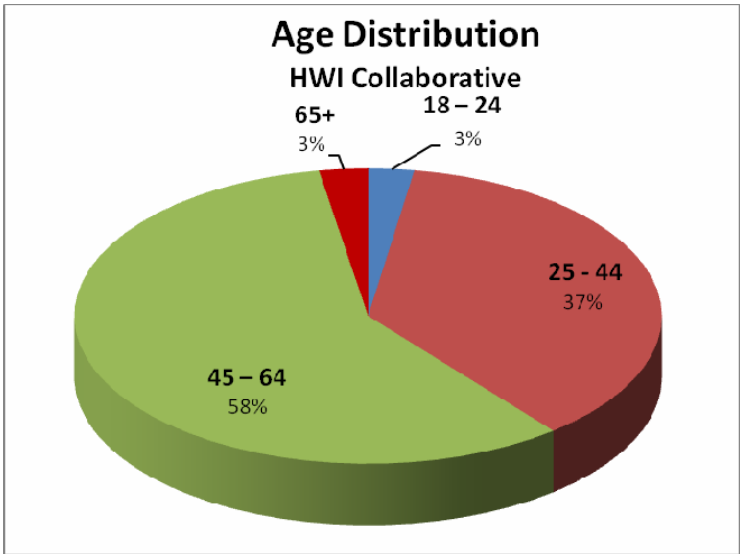
Sources: Agency reports and for DSHS from http://lbloom.net/index07.html .
* DSHS – included 100% of its employees from two divisions – ESA & HRSA, so while results are not generalizable to the entire agency they are for those divisions.

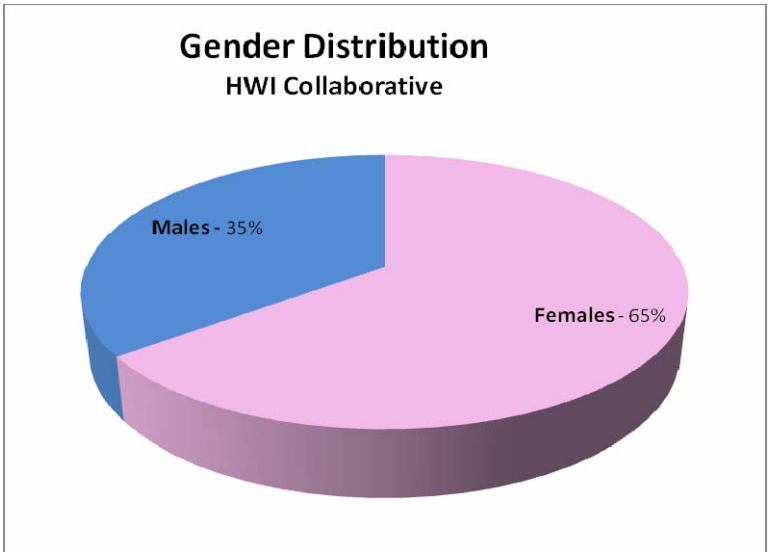
The number of employees from each agency ranges from about 96 at HECB (making up 1% of the collaborative) to 1,949 at ESD (constituting 26% of the collaborative). The number of geographic sites/ offices per agency included in the sample also ranges considerably from 1 (HECB, DFI) to 53 (ESD).

Most employees in the collaborative (95%) are between the ages of 25-64, with the majority (58%) being 45-65. Females make up 65% of the collaborative. Compared to State Agency October 2008 data, the collaborative has more females (65% vs 50%) but a similar age distribution. They both have the majority of employees in the 45-64 age category (58% in the collaborative vs 54% in State agencies).

Table 4. Basic Demographics of HWI Collaborative compared to State Employees as a Whole

	AGO N=1339	DFI N=195	DNR N=618	DOH N=1511	DSHS N=1590	ESD N=1949	HECB N=96	ALL HWI N=7298		STATE AGENCIES N= 69,650
18 – 24 yrs	2%	8%	3%	3%	3%	1%	7%	**184**	***3%***	*4%*
25 – 44 yrs	46%	48%	36%	36%	37%	28%	44%	**2674**	***37%***	*39%*
45 – 64 yrs	50%	42%	59%	58%	58%	66%	48%	**4244**	***58%***	*54%*
65+ years	2%	3%	3%	3%	2%	4%	1%	**196**	***3%***	*3%*
Males	31%	41%	58%	34%	32%	34%	31%	**2578**	***35%***	*50%*
Females	69%	59%	42%	66%	68%	66%	69%	**4720**	***65%***	*50%*





Employees Participating in Screenings

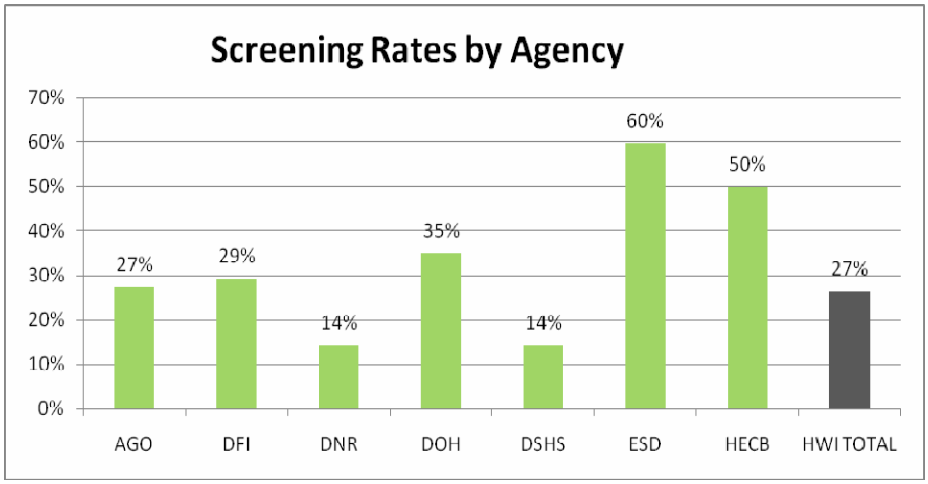
Most of the results presented in this report come from the HWI employees who participated in the health screenings. Overall 27% of the collaborative employees who were invited participated in the first round of screenings. There will be three more screenings offered. HWI's goal is to screen at least 40% of employees in the collaborative.

All but one HWI agency, ESD, offered all employees, the opportunity to participate in the screenings. ESD invited only a subset of its HWI employees (about 16% or 313 employees) to participate in the screenings for logistical reasons. All ESD employees who work in the Seattle and Spokane telecenters, believed to be among the hardest to reach, were invited to the screenings. Of those invited, 60% participated.

Table 5. Percent of Employees Participating in Screenings

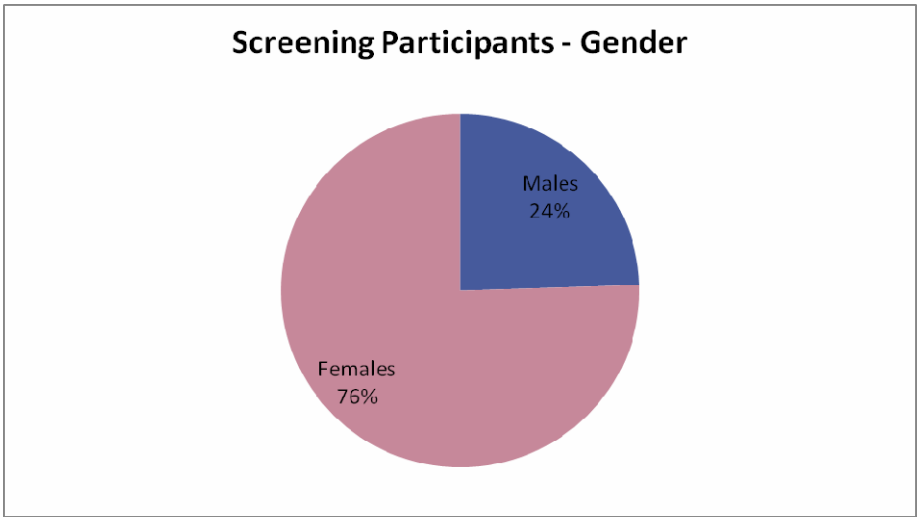
	Screenings		
	No. of Employees	% of Collaborative *	% of Agency
AGO	367	27%	27%
DFI	57	29%	29%
DNR	89	14%	6%
DOH	528	35%	35%
DSHS	227	14%	1%
ESD	187	60%	10%
HECB	48	50%	50%
TOTAL	1503	27%	6%

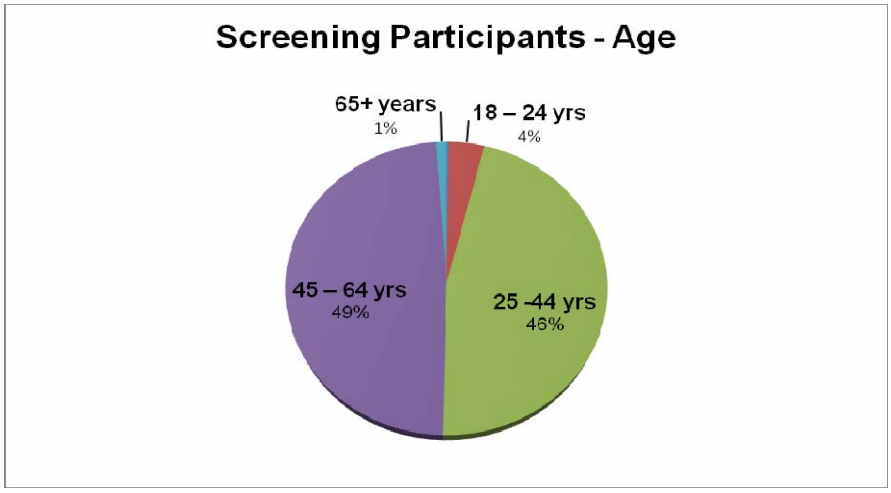
Sources: No. of Employees - http://lbloom.net/index07.html and agency reports.
* In the collaborative and eligible for/invited to screenings

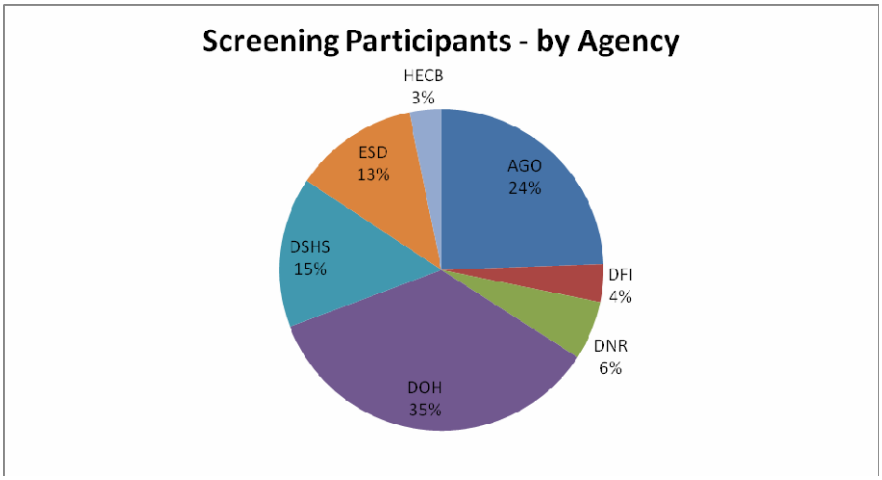


A larger proportion of women, and employees in the 25-44 age range, participated in the screenings. Women constituted 76% of those screened compared to 65% in the total HWI population, and employees

aged 25-44 constituted 46% of those screened but only 37% of those in the total HWI population. The average age of screening participants was 44.







VII. RESULTS

This section presents detailed results from the:

- HWI Change Package
- Health Survey and Screenings
- Other Measures *(i.e. absenteeism, presenteeism and use of clinical preventive health services)*

. In our final report, we will compare these baseline results to those obtained at the end of the project. For the change package, there are no baseline measures, just a report on progress. Since we are 18 months through this 30 month project, we do not expect to have reached the process measures/goals of the change package, but rather to have made significant progress towards achieving them.

RESULTS: CHANGE PACKAGE MODEL

This section presents results from each change package activity area, providing some specific examples of what agencies have done or are doing and highlighting some successful efforts. The six key activity areas of the change package are:

- **Understand your population**
- **Engage employees and families**
- **Internal work environment**
- **Information and measurement**
- **Wellness interventions**
- **Community linkages**

Documenting activities, materials, and resources within each of the change model area is one of the expected outcomes of HWI. Documented successes will be used to spread the innovations to other state agencies.

1. Understanding Your Population

This area of the Change Package emphasizes the need to meet people where they are. Understanding key characteristics of the employee population will assure that the correct information and support is provided in the most appropriate way. Teams are encouraged to use a variety of information: employee questionnaires, surveys and health screenings.

Employee Population Description

All seven agencies have identified data sources, and collected, synthesized and reported key demographic data for use in their wellness planning. All agencies have assigned this task to a particular member of their Wellness Committee who is to repeat the process at least once a year.

Process to use Health Survey/Health Risk Screening Data (aka Biometric)

All seven agencies are using the Health Survey and Health Risk Screening data to help plan their strategies and wellness interventions. Most teams are using the aggregate reports prepared for them by IHPM, but one agency (DOH) has gone so far as to obtain de-identified individual data in order to be able to conduct more in depth analyses. All the teams understand how this process should work, and have identified priority areas based on the data.

Understanding Your Population: Data Sources and Types	

Department of Personnel	• Demographics
	  • Age
	  • Sex
	  • Ethnicity/Race
	• Employee Classification
	  • FT-PT status
	  • Office/Field staff
	• Absenteeism
	  • Sick leave

Health Survey & Health Risk Screening Reports	• Health Risks (type and number of) • Presenteeism
Employee Surveys	• Wellness interests, ideas and perceived needs • Preferred dates/times and locations

2. Employee and Family Engagement

Ultimately, health behaviors are individual choices. While healthy behaviors are encouraged, it is important to emphasize that employees have the locus of control. However, encouraging individuals and families to reflect on their behaviors and share ideas on how to improve behaviors and pursue a healthier lifestyle can be a catalyst for change. This includes connecting employees to existing resources and helping employees optimize how they use their Health Plan benefits. This area of the Change Package encourages using strategies that work to engage employees and families in improving their health.

Engaging Employees in Decision Making for Wellness Activities

To engage employees, agencies:

- Developed communication plans to promote health and engage employees and their families. A few agencies even integrated this work into the agency's overall communication plan. (AGO, DNR, DOH, ESD).
- Recruited employees to participate on wellness committee or one of its subcommittees
- Surveyed employees regarding incentives and barriers to the health screenings (AGO, DOH)
- Surveyed employees for ideas, wants and needs (HECB, DNR, DFI) and one agency (DFI) asked for input from family members.
- Surveyed employees after interventions to assess satisfaction and effectiveness and help determine if the intervention should be offered again and if so, how
- Made presentations at staff meetings, and/or brought issues/questions for group discussion.
- Set up feedback/suggestion boxes and encouraged employees to provide input for the wellness committee (HECB)

Promoting Participation in Health Survey & Health Risk Screenings

A wide variety of promotion efforts were undertaken by participating agencies to promote HWIs Health Survey & Health Risk Screening and other programs including:

- Incentives
- Letter/email from Agency Administrator
- Flyers
- Posters
- All staff emails from Wellness Leader
- Personal Notes
- Notices and articles in newsletter
- Postings on bulletin boards and/or intranet sites
- Presentations to staff
- Sharing screening results and stories with staff

Offering incentives was encouraged by HWI leadership and expert speakers. The incentives used varied by agency and are described in the following table.

Screening Incentives

	Refreshments	*Individual Prize/Reward*	*Drawing/Lottery*
AGO	• Snacks	• HWI water bottle	
DFI	• Breakfast	• *TBD*	• *TBD*
DNR	• *TBD*	• *TBD*	• *TBD*
DOH	• Breakfast	• $50 VISA Cash cards	• Mountain bike drawing
DSHS	• A 5 star snack-pack from Uptown Organics	• Pedometer • Water bottle	• Gas Grill • 2 mountain bikes • Ipod shuffles
ESD	• Snacks	• $50 cash/gift card • Competition between telecenters	• Drawings twice a month for $100 (ESD) – post screening
HECB	• Refreshments/meal	• a CD/DVD/Book of choice (up to $20 value)	• $400 value weekend vacation

Engaging Employees

Health and Benefit Education Examples		
Group Activities	• Scheduled health & productivity information meetings	DOH
	• Scheduled a series of speakers to address topics of interest	AGO
	• Shared wellness tips at staff meetings	DSHS
	• Scheduled Brown Bag Lunches around topics of interest including day hikes, stress management, fiscal fitness, and nutrition	DFI, DOH HECB
	• Established a "training academy"	HECB
Displays	• Purchased several multi-paneled nutrition education boards, visual demonstrations of body fat, salt contained in popular foods etc	AGO
	• Used bulletin boards to promote wellness	DSHS
	• Developed displays to share with staff the four areas of concern	HECB
Materials/ Resources	• Purchased computer health tracking games/challenges (e.g. Colorful choices; Route 66)	AGO
	• Purchased a Health Newsletter (*Hope Health, Top Health*)	AGO, HECB
	• Dedicated a section of their agency's newsletter to health	HECB
	• Used agency intranet/website to educate employees about health	DSHS,DOH
	• Encouraged screening participants to meet with their doctor to go over the results and informed them about benefits available from their health plan.	ALL
	• Advertised EAP (HECB)	HECB
	• Distributed flyers for Fruit/Veggie of the month, educating staff about the items nutritional value/importance	HECB
Special Campaigns	• Began fruit & vegetable campaign. Feature a different one each month, educate about its nutritional values, offer the opportunity to sample, and provide recipes. Recent features include jicama and Asian pear.	HECB, DFI

Engaging Employees and Families - An example from the AGO

- Participation in the health risk screenings portion of HWI is important because:
  - 30-50% of people with elevated cholesterol, blood sugar and/or blood pressure are not aware of their increased risk
  - test results provide a basis for personal health maintenance or improvement
- Health Risk Assessments, surveys and on-site Health Risk Screenings are free
- Health is important to your work productivity
- Diabetes, heart attacks and strokes are easier to avoid than to cure or cope with
- Maintaining good health is cheaper than paying medical bills
- Good health improves your ability to truly be there for your friends, family and yourself
- Good health helps you live a longer and happier life.

Planting Seeds of Good Health.

3. Maintain an Internal Work Environment that Fosters Wellness

The work experience itself can play an important role in influencing behavior. Worksites can also support employees' use of available community resources and Health Plan benefits. Participating teams were expected to have or create Wellness Committees to review, design and implement policy and environmental changes supportive of employee wellness.

Obtaining Management Support for Employee Wellness

In 2007, as part of the RFP process for participation in HWI, Senior leaders signed a letter of support for their agency's participation. In addition several agencies' Administrators or Deputy Administrators have authored emails to staff encouraging their participation in HWI activities.

Developing and Maintaining an Effective Wellness Committee Structure

All seven agencies have established a wellness committee. Some have defined roles and responsibilities (AGO, DOH) and others are in process of developing them (DSHS).

Examples of developing and/or maintaining wellness infrastructure include:

- Met with senior management to present refine intervention ideas (DOH, DNR)
- Presented HWI activities to agencies advisory board (DOH)
- Made presentations throughout the agency regarding health & productivity (ESD)
- Developed a criteria tool to help committee prioritize ideas/plans (ESD)
- Required commitment from wellness committee members or asked them to step down (AGO)
- Expanding the committee and breaking it up into various subgroups (DOH)
- Incorporated the committee into existing committees and revamping accordingly (DOH)
- Trying to include wellness committee responsibilities in job objectives/performance plans (AGO)

DOH Health and Productivity Infrastructure

DOH's Health and Productivity Committee has a multilayered structure designed to help move health into an overall management strategy. The agency's director and policy department encourage and support a comprehensive systems approach to promoting heath and productivity in the workplace. Short and Long term (5+ years) goals have been identified. Data has been accumulated from various sources including L&I and findings are formally shared with senior leaders.

Promotion of Preventive Benefits Available through Health Plans

To promote the use of preventive benefits, all agencies have:

- Made health plan links and/or contact information available to employees.
- Advised employees identified as at risk from the Health Risk Screenings to follow up with their physician to confirm test results and/or to discuss the results as well as behavioral and other treatment options.
- Promoted getting flu shots or actually offering them on site.

In addition, DSHS posts notices on its website and in its newsletter twice a year about preventive benefits and HECB developed a bathroom stall flyer to remind staff to: review their immunization status, have their blood pressure checked, and for particular ages and genders to get a mammogram, a Pap smear, a diabetes test, colon cancer and testicular screenings. They flyer advised employees to go to their doctors for these tests and to regularly monitor depression,

exercise, diet/nutrition, alcohol, drug use, tobacco use, oral health, skin health, sexual practice/planning, and injury/accident prevention. A few agencies also promoted EAP services.

In the last 6 months of the collaborative, we expect to see more activity in this area. HWI leadership will assist agencies by creating a matrix of the preventive benefits available from each participating PEBB health plan, and preparing a calendar of nationally recognized healthy months/weeks agencies can schedule around to leverage awareness and promotion of preventive benefits.

Creating or Adjusting Policies/Procedures to Encourage Wellness

Examples of Policy Changes		
Wellness Policy	Reviewed and revised (if necessary) their existing wellness policy, or formulated a new one.	AGO, DOH,DSHS, ESD,HECB
Healthy Catering Policy	Adopted *Energize your meetings* as their catering policy, others have adopted the guidelines for key meetings but have not made it a policy change.	AGO, DFI, DOH, DSHS, ESD, HECB
Healthy Vending Policy	Adopted a new vending policy called *Fit Picks*. As a result, vending machines at these agencies are now stocked with some healthy options and appropriate signage has been posted.	AGO, DFI, DOH, DSHS, HECB
Tobacco Policy	Instituted a tobacco free campus policy and moved designated smoking area across campus	DOH
Breastfeeding Policy	Provided private space for/time off from work	DOH
Stress Reduction Policy	In development	DOH
Staff Time Policy	Encouraged employees to take breaks and lunch away from their worksite and to use their staff time or flex time to participate in HWI screenings and programs.	AGO, HECB
Performance Evaluations & Professional Development	Worked to include wellness responsibilities in employee's professional development plan. The agency's strategic plan supports this policy adoption. Seven staff members have already attended the Healthy Worksite Summit for training.	AGO

Facility Additions/Modifications

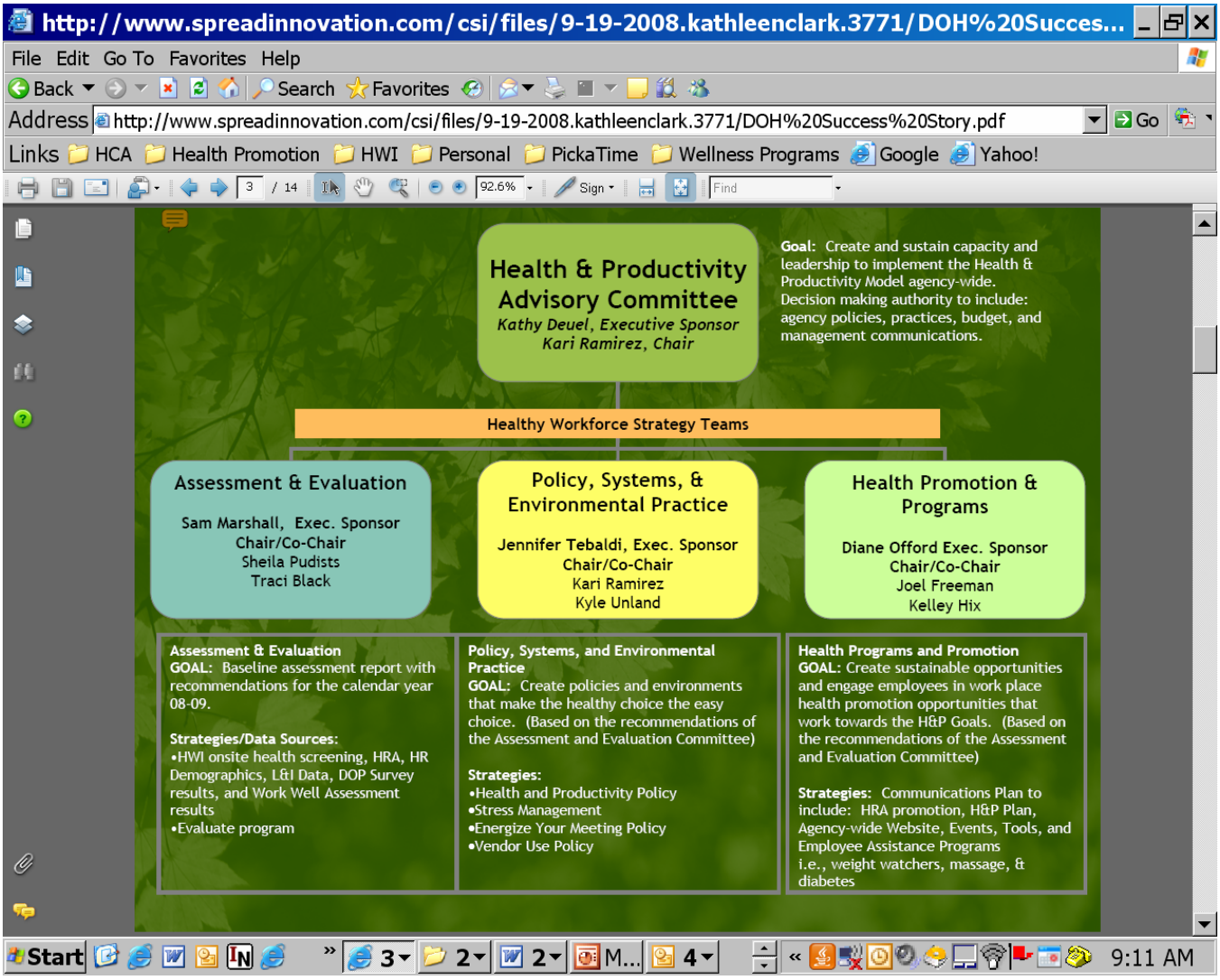
Participating agencies are:

- Dedicating Building Bulletin Boards to wellness (DSHS)
- Designating a room specifically for Health and Productivity (DOH)
- Providing bottled or filtered water (AGO)
- Having bikes & helmets available for check-out (DSHS)
- Installing bike racks (AGO, DOH)
- Developing and/or making area walking maps readily available (AGO, HECB)
- Offering blood pressure monitors/cuffs at the worksite (AGO, DSHS, DOH)
- Providing weight scales and tape measures at the worksite (AGO, DSHS)
- Putting up notices by elevators encouraging stairwell use
- Adding showers

DSHS Bikes On-Site Program

DSHS has two bikes, helmets and locks available for check-out during work hours. Employees simply request a bike for a particular day/time or just drop by and see what's available, sign a consent/waiver form and ride away. Employees have used the bikes to go to local meetings, take breaks, or ride trails during lunch. An agency employee donated the bikes and performs regular maintenance. This program has proven very popular with employees.

Internal Work Environment – Example from DOH



4. Use Information and Measurement

With limited resources, employers must focus on what works. This area of the change package encourages teams to develop systems for collecting and using information to assure that what they are doing is efficient and effective and will benefit employees and their health choices. Sharing "best practices" is also encouraged to optimize the benefits for all.

Health Survey, Health Screening, and employee survey data drives programmatic change

All agencies used their screening and survey data to identify and prioritize interventions. Most of the agencies had similar interests – they wanted employees to increase their level of physical activity and consumption of fruits and vegetables, and reduce their stress. This would in turn positively impact weight, diabetes, blood pressure, lipid levels, and make chronic diseases more manageable.

Evaluate each Intervention implemented

Agency teams are instructed to evaluate each new intervention. Evaluations are to include the expected outcome of the intervention, a feedback questionnaire to be completed by intervention participants, a count of the number of people participating, an assessment of the feasibility of repeating the intervention and/or its sustainability. It appears that all agencies are tracking participation, and many are asking participants to complete evaluation forms, but we have not had access to this data to see how wide spread the practice is. Two agencies are doing more in-depth evaluations: DOH is evaluating all of their events and AGO is evaluating their physical activity challenge.

Improved ability for measuring of Absenteeism and Presenteeism

Thanks to HWI's Health Survey's incorporation of the Work Limitations Questionnaire (WLQ), all agencies improved their ability to measure presenteeism. Absenteeism remains a problem area, due to the way it is currently recorded for GMAP and consequently will probably not be used as a measure for this evaluation.

5. Employ Effective Wellness Interventions

A number of workplace interventions have been studied and proven effective. This area of the change package encourages using these proven interventions along with employee input to create a menu of effective interventions that meet your specific employee needs.

Test at least 3 new wellness programs, 1 of which is sustainable

A wide variety of new wellness programs/interventions were initiated and tested during the first 12 months of the initiative. Some interventions were introduced by HWI leadership, while others were introduced at the agency level and may or may not have spread to other agencies. The table below shows programs implemented that address overall health and those that focus on a single risk area.

Programs Addressing Overall Health/ Multiple Risk Factors		
Changes that Last a Lifetime (CTLL)	IHPM brought this program http://ctll.com/Home.aspx to the attention of HWI leadership who offered it free to employees who participated in the Health Survey and Health Risk Screening. The program runs for 6 months. The first three months include a kick-off meeting, one or two brown bag lunches, daily customized email messages, as well as on-line behavior tracking and journaling. Participants are given a gym bag, a copy of Body for Life, a Body for Life Success Journal, a pedometer, and health education materials from national associations on diabetes, blood pressure etc. The program guides participants to make appropriate food choices, portion sizes, and to engage in specific types of physical activity for set periods of time. The second half of the program has no group component. After 6 months participants gather to celebrate their effort/accomplishments A few sites had CTLL kiosks where participants from any agency could be weighed and have their information tracked. Program Videos/DVDs were available for employees at remote sites. The initial response from employees has been large and enthusiastic. Out of the 1413 employees eligible to participate, 627 or about 47% enrolled in this program. A few employees thanked their HWI teams for providing the program and credited the program for really turning their lives around.	AGO DFI DOH DSHS ESD HECB
LiveWell – Chronic Disease Self Management (CDSM)	LiveWell is part of Thurston County's Public Health and Social Services WorkWell program. The program is funded by a grant from the US Department of Health and Human Services and is based on Stanford University's CDSM workshop series designed for diabetics. Thurston County's program however, is designed to help anyone with a chronic disease and is available to any employer group in the county that can guarantee a minimum of 12 participants. The focus is on three interrelated risk factors: nutrition, physical activity, and tobacco use. Each workshop runs for six weeks and is lead by two trained leaders. Participants are offered tools and support to increase their self efficacy to live better and prevent disease complications.	DSHS ESD DOH

	They gather for a series of "lecturettes" and group discussions and in the process build a network of lay health advisors that continue helping employees. The program is highly participatory The program requires 2 ½ hours a week for 6 weeks. Agencies are strongly encouraged to offer time off from work to participate or at least allow flex time.	
Healthy Quarters	Healthy Quarters™ employee health improvement system (HQ) http://www.healthyquarters.net/home.html is a new, exciting, and evolving integrated health learning system brought to HWI from IHPM. Conceived in 2006, based on 20 years of research and experience of The Change Companies ®, HQ offers a behavioral change model for the worksite. The system empowers employees to take control of their own health and offers tools to help. The focus is on the small decisions individuals make every day that added together have a large impact on wellness. The system uses knowledge and techniques from Prochaska's Nine Processes of Change model, Miller & Rollnick's Motivational Interviewing, Cognitive Behavioral Strategies, and Interactive Journaling®. Each quarter or season, Healthy Quarters has a particular focus; Winter is "Move More" followed by "Stress Less" in Spring, "Healthy Relationships" in summer and "Eat Smart" in Fall. Each quarter builds off the previous one and reinforces lessons learned and changes implemented. Healthy Quarters provides videos and speech material for kick-off sessions before each quarter, as well as posters, flyers, calendars, journals and website content tailored/specific for each theme. They also provide a list of recommended intervention programs and offer access to an implementation coach. Healthy Quarters is designed to reach employees at whatever stage they are at and work with them to bring about positive/desired changes. As a result it has experienced an 80% participation rate compared to the more usual 10% per program. While this program is offered at no cost, it will require an estimated 20% of an FTE to administer.	All agencies in process of running through their leadership
Governor's Bowl	An annual event held every Fall, as part of the Healthiest State in the Nation campaign. It's web-based program sponsored by the Washington Health Foundation (WHF) to encourage residents to increase positive health behaviors over a period of 6 weeks. Participants and teams earn points based on their exercise, nutrition, and health practices (weight loss, oral health, tobacco cessation etc). WHF offers weekly prices to champions. Agencies also provide their own incentives. For example AGO, is offering winning teams (small, medium and large) a 5 star healthy banquet, and other prizes.	AGO DSHS ESD
Dash to the Market	Run to the farmer's market	DSHS

Year–long Wellness Cup Challenge	A year long program from July 2007 through June 2008. Offices on the east side competed with offices on the west side of the state, as well as individuals against each other. Employees received one point for participating in a qualifying wellness event (e.g. a brown bag on nutrition, walktober fest). The area with the most points per participating employee won a big silver "cup" filled with items that promote wellness. Individual champions and liaisons won special prizes as well ($35, and MP3 players).	AGO
10 months to a Healthy Life Style	AGO is pilot testing this program with small group for 10 weeks before possible expansion the program to the whole office.	AGO
Programs Focusing on One Risk Factor		
Physical Activity	• Physical activity challenges – month long (each participant received a Frisbee)	DFI, DNR
	• Biggest Mover walking challenge	HECB
	• Kickboxing class	DSHS
	• Poker Walks – walk around the block over lunch hour trying to accumulate a winning poker hand. Refreshments at end.	DFI
	• Walktober Festival- pedometer incentive	AGO
	• Get fit on Route 66 – on line tracking program	AGO
	• 10,000 steps a day	AGO
Nutrition	• Healthy Dessert competition and recipe sharing at agency picnic ($25 gift certificate for winners in different fat content categories)	AGO
	• Six-week nutrition challenge with fruit/vegetable tracking "Strive for 5". Winner received a cookbook.	DFI
	• Colorful Choices- an on-line 20 day healthy eating program. Drawing for T-shirt, cookbook, yoga mat, and $50 farmers market gift cards.	AGO
	• Healthy Potluck	DFI, ESD
	• Program Manager's Taste Test – managers were blindfolded and had to guess fruit or veggie they were eating. Winner received a cookbook.	DFI
	• Meet a new fruit or veggie (monthly) – get to sample the item, and receive information on its nutritional value and recipes.	DFI, HECB
Weight	• Developing on-site weight management	ESD
	• Weight 4 me – an on-line program available at agency library	AGO
	• Offer weight watchers type program	DOH, DSHS, AGO
Other	• Yoga classes	DSHS, HECB
	• Chair-side massages	HECB
	• Blood pressure checks	HECB
	• Groovy Bingo, Feel like a mission, the 70s program & other on line offerings	AGO
	• Diabetes Support Group – twice a month at DOH	AGO, DOH, ESD

6. Leverage Community Linkages

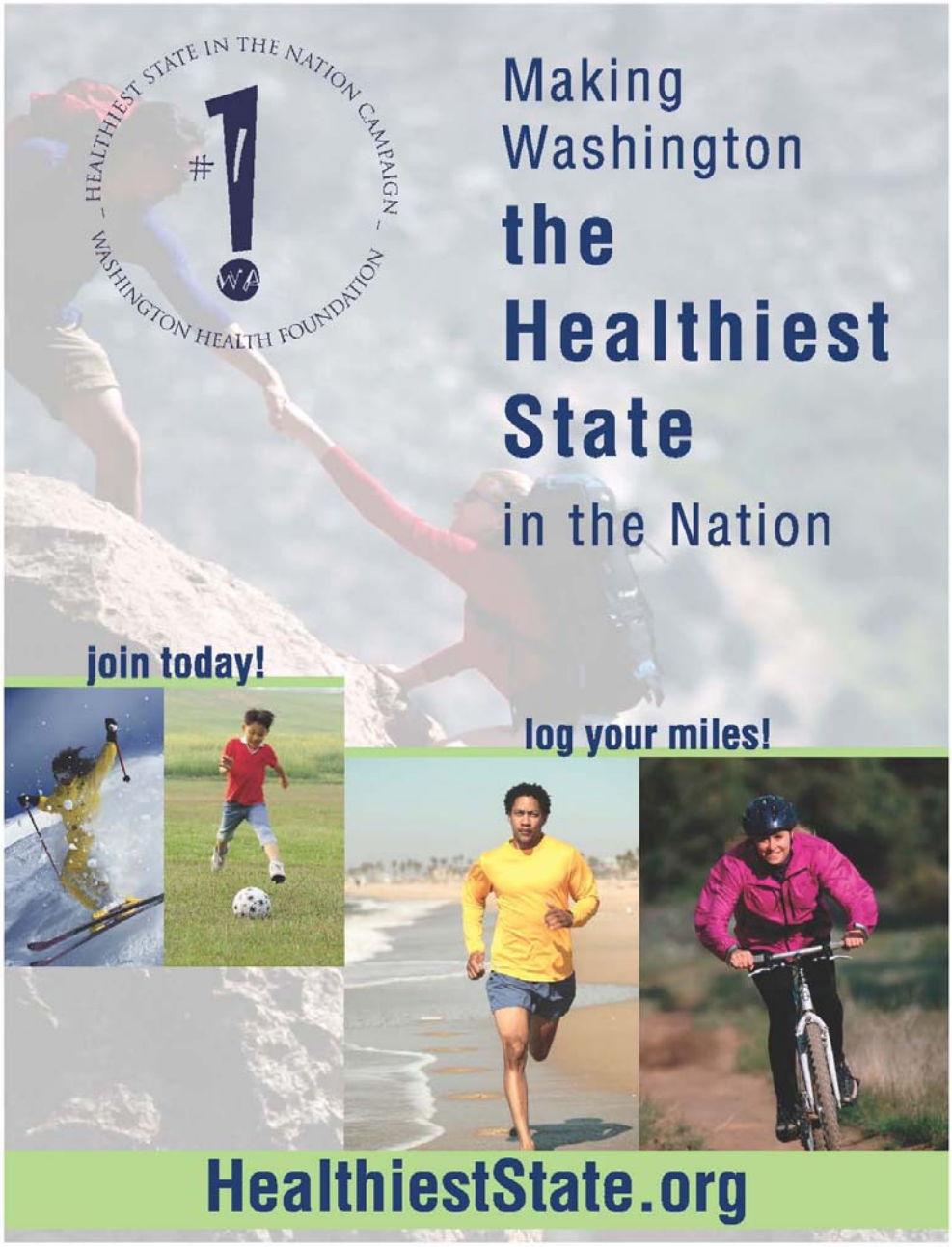
Employers have the ability to influence others in their community. Encouraging community activities that promote wellness, raising awareness about certain health issues and advocating for policies that support wellness can be powerful additions to workplace wellness initiatives. Employers can provide links to community resources and programs that provide further support to employee health.

Examples of Community Linkages

With whom?	What type?
Other State Agencies/Programs	• Coordinating with DOH for a diabetes support group (AGO) • Coordinating with DOH and ESD on flex schedules (AGO) • Working with Department of Services for the Blind to implement healthy vending program • EAP information in all kitchens (HECB) • Linking with DIS for emergency preparedness info (HECB)
Local Government	• Using resources from Thurston County Public Health and Social Services Living Well, Work Well and Steps programs (DSHS, DOH, ESD) • Learning from King County- model program • Partnering with Lacey Parks. Encouraged use of a family Friendly" icon next to existing events and considered modifications to other events. Suggested a kickball and whiffle ball leagues "kickoff" tournament BBQ in the summer of '09 as part of a possible new Family Friendly recreation Initiative (AGO)
Community	• Family Bike ride in the park • YMCA – agency run (HECB) • Promoting Tumwater's farmer's market (DFI) • Puget Sound Blood Bank for donations (HECB) • Oly yoga for weekly yoga classes (HECB) • Talk and Chop at Farmer's Market (DOH)
Health Care Providers	• Investigated doing a study with Dr Bowers on lighting and vitamin D. Instead may instead try full spectrum lighting to address SADD issues (AGO) • Coordinating community project with hospital residency (AGO)
Non Profit Organizations	• Governor's Bowl – annual 6 week physical activity challenge sponsored by the Washington Health Foundation http://www.whf.org/HSIN/GovHealthBowl.aspx • Puget Sound Health Alliance
Other	• WSECU – for fiscally fit brown bag (HECB) • International Children's Festival (DOH) • Wildland Fire Fighting–provide healthy food to public & incident personnel (DNR)

Community Linkages - Examples

Washington Health Foundation – Governor's Bowl



Tumwater Farmer's Market

Summary: Progress on Change Package Measures

Below is summary table of the measures used to assess agencies' performance and progress by change package activity area. Also presented are the goals for each measure and a numerical and narrative status indicator. The "Where we're at" column shows the percent of agencies that as on November 2008, have accomplished each particular goal, and the "Status" column rates the activity across all agencies as either: Needs Work, In Process, or Achieved.

Table 6. Summary of Progress on Change Package Measures

Change Concept & Indicator	GOAL	Where we're at*	Status
Understand Your Population			
Process to use Health Survey/Health Risk Screening data	100%	50%	In process
Employee Population description	100%	100%	√ Achieved
Employee & Family Engagement			
Agencies and documenting and sharing promotional efforts	100%	70%	In process
Internal Work Environment			
Have an effective Wellness Committee – uses continuous improvement processes	100%	100%	√ Achieved
Secured commitment from Senior Leadership	100%	70%	In process
Have policies and procedures in place that support wellness	100%	70%	In process
Effective Wellness interventions			
Initiated new wellness programs	≥ 3 / agency	100%	√ Achieved
Sustainable Program	≥ 1 / agency	TBD	In process
Information & Measurement			
Agencies are evaluating interventions	100%	30%	Needs work
Screening Rates	≥ 40%	28%	In process
Agencies are measuring & using Absenteeism/ Presenteeism data	100%	30%	Needs work
Community Linkages			
Making linkages to enhance wellness	≥ 1/ agency	100%	√ Achieved
OVERALL	- -	--	4 Goals Achieved 6 Goals In process 2 Goals Need work

'* Shows roughly the percent of agencies that have accomplished or are actively working on that particular goal. Technically 14% would mean one agency fully accomplished the goal, 29% two, 43% three, 57% four, 71% five, 86% six, and 100% all 7, but we are not being so technical or precise here, as these are for the most part subjective self reported measures. Numbers are estimated and rounded off for easier interpretation of results.

RESULTS: RISK FACTORS

This section presents baseline results from the health survey and screening. Most of the data comes from the Health Survey and Health Risk Screenings conducted in June 2008. In our final report we will compare these baseline results to the latest screening results available for each participant to assess if reductions have been achieved.

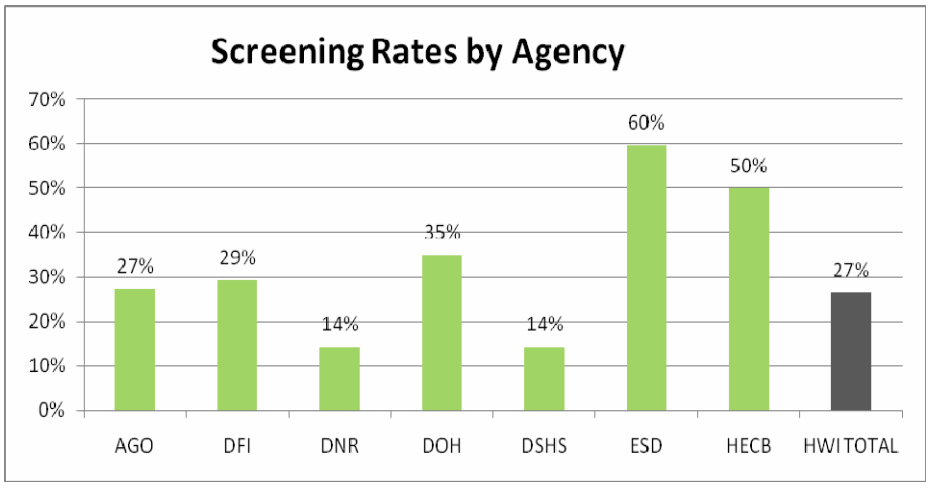
HWI uses IHPM's "at risk" definitions. These are broader, more inclusive than the "high risk" definition that many medical providers use to diagnose and treat patients. HWI casts a broader net of "at risk" because BMI, blood pressure, cholesterol, blood glucose, all tend to increase with age, so without active attention, we can expect these risk indicators to enter the "high" category over time. HWI wants to support healthy people staying healthy, and to intervene with employees before they become "high risk", and for those who already have chronic diseases, HWI wants to help them better manage their disease and health. It also alerts employees to conditions they may be at increased risk for simply because of their family history.

Levels and types of risks identified through the Health Survey are discussed first, followed by those gathered from the health risk screenings, and an identification of newly identified at risk individuals.

Screening Participation Rates

HWI aims to have 40% or more of employees in the HWI population participate in the screenings at least once A total of four Health Survey/Health Risk Screenings will be offered during the course of the initiative. It is important to have high screening rates because the data is immensely useful for strategizing to improve wellness.

Of the 5,662 eligible employees offered the health survey and screening, 27%, or 1,503 employees, participated in this first round of screenings. By June 2009, we expect to have more than 2,264 employees screened.



Participation rates vary from a low of 14% to a high of 60%. In our final report we will look more closely at factors associated with greater participation in the screenings.

RESULTS: Health Survey

This section shows employees' health risks as identified by the Health Survey. Results are shown for HWI as a whole and by individual agency. Employees were identified as "at risk" if their responses to a particular series of questions in the Health Survey met criteria indicating they are at increased risk for a particular health area.

Areas of Risk - Identified by Health Survey

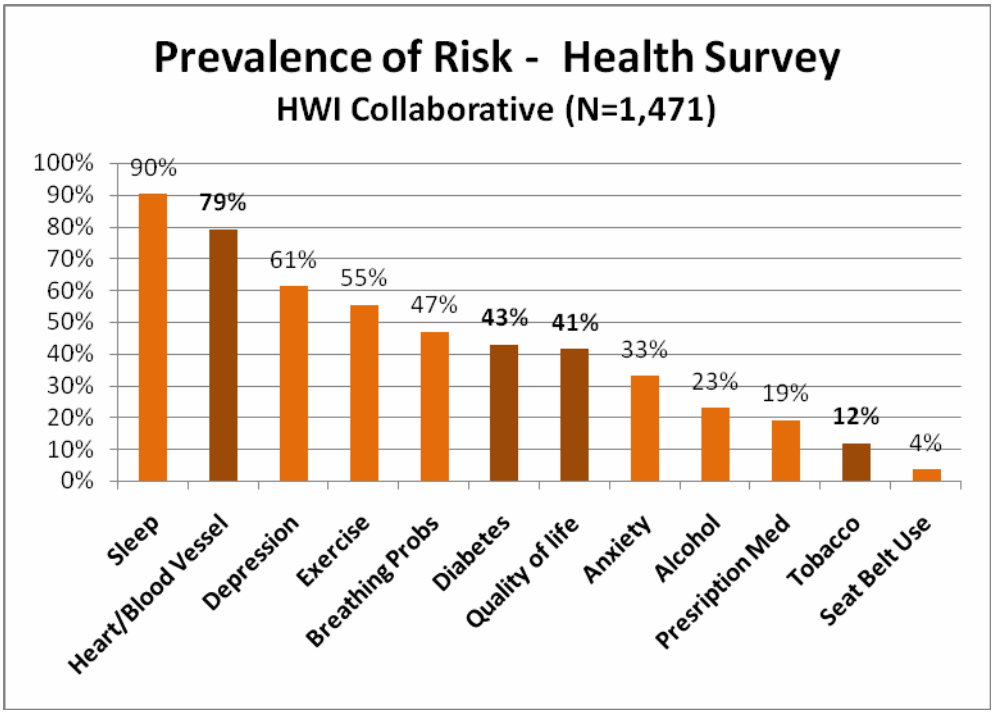
The Comprehensive Personal Health Survey (HWI's Health Survey) assesses risk in 12 areas. Based on an employee's responses to a particular set of questions in the Health Survey, she/he was identified as "at risk" or "not at risk" in each of these areas. The Legislature and HWI leadership are particularly interested in 3 of these areas: heart/blood vessel problems, diabetes, and tobacco use. These areas are bolded and underlined for emphasis.

Twelve Health Survey Risk Categories:

- Alcohol Use
- Anxiety
- Breathing Problems
- Depression
- **Diabetes**
- Exercise
- **Heart or Blood Vessel Problems**
- Prescription Medication Use
- Quality of Life
- Seat Belt Use
- Sleep Problems
- **Tobacco Use**

Overall, key baseline Health Survey results for HWI employees showed:

- 79% at risk for or have heart or blood vessel problems
- 33% at risk for or have diabetes
- 12% at risk due to tobacco consumption



Results were similar across genders, except for diabetes, exercise, and depression, prescription medication, and anxiety.

Table 7A. Percent Identified At Risk (from Health Survey) - The Collaborative

Risk Area	Goal	2008 Baseline – At Risk		
		Male (368)	Female (1,135)	ALL (1,471)
Sleep	Reduction	90%	90%	90%
Heart or Blood Vessel Problems	Reduction	77%	80%	**79%**
Depression	Reduction	53%	64%	61%
Exercise	Reduction	47%	58%	55%
Breathing Problems	Reduction	42%	48%	47%
Diabetes	Reduction	32%	46%	**43%**
Quality of Life	Reduction	37%	43%	**41%**
Anxiety	Reduction	26%	35%	33%
Alcohol	Reduction	20%	24%	23%
Prescription Medication	Reduction	12%	21%	19%
Tobacco	Reduction	11%	12%	**12%**
Seat Belt Use	Reduction	4%	3%	4%

Patterns of risk behaviors were similar across agencies. All agencies had sleep (etc. - no caps) as the most frequently identified problem area, followed by heart/blood vessel problems, depression, exercise, breathing problems, and diabetes. And seat belt use was the lowest risk area for all seven agencies. The other measures, quality of life, alcohol, anxiety, prescription medications, and tobacco use, varied in their importance ranking across the agencies.

The percent of employees at risk in each area differed among the agencies. Each agency used this population at-risk report to plan interventions that would reduce risk.

The table below shows the percent of employees at risk for each risk area.

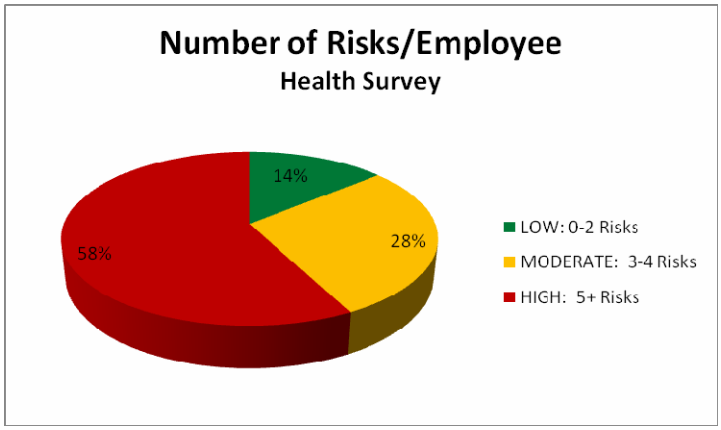
Table 7B. Percent Identified "At Risk" (from Health Survey) - By Agency

Risk Areas	2008 Baseline – At Risk							
	AGO (356)	DFI (57)	DNR (82)	DOH (515)	DSHS (227)	ESD (186)	HECB (48)	ALL (1,471)
Sleep	91%	96%	89%	89%	89%	94%	88%	90%
Heart /Blood Vessel Problems	78%	81%	68%	80%	84%	78%	79%	79%
Depression	59%	70%	57%	58%	68%	67%	56%	61%
Exercise	48%	60%	52%	56%	56%	66%	56%	55%
Breathing Problems	44%	49%	39%	43%	56%	55%	46%	47%
Diabetes	40%	37%	37%	43%	51%	42%	46%	43%
Quality of Life	39%	44%	33%	42%	47%	41%	42%	41%
Anxiety	31%	44%	27%	30%	41%	34%	29%	33%
Alcohol	30%	18%	17%	23%	18%	19%	25%	23%
Prescription Medication	19%	25%	10%	20%	20%	18%	21%	19%
Tobacco	9%	9%	16%	9%	14%	22%	4%	12%
Seat Belt Use	3%	5%	1%	3%	5%	5%	4%	4%

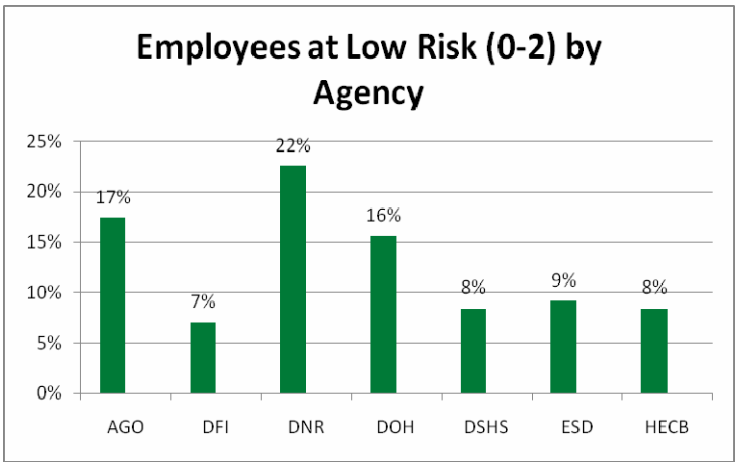
Number of Health Survey Risks per Individual

The Health Survey assess individuals risk in 12 areas, and then sums up the number of at risk areas identified per individual. In this section we group individuals based on the number of "at risk" areas they had into low risk (0-2 health risks), moderate risk (3-5 health risks) and high risk (5 or more health risks).

Of those who participated in the Health Survey, 86% had more than two health risks identified, leaving only 14% in the low risk category.



Looking at the data by agency, the percent with a low number of risks ranges from 7% at DFI to 22% at DNR, with an average of 14%. Agencies with a large percent of employees in the High Risk category (5+ risks) included ESD (69%) DSHS (68%) and DFI (63%).



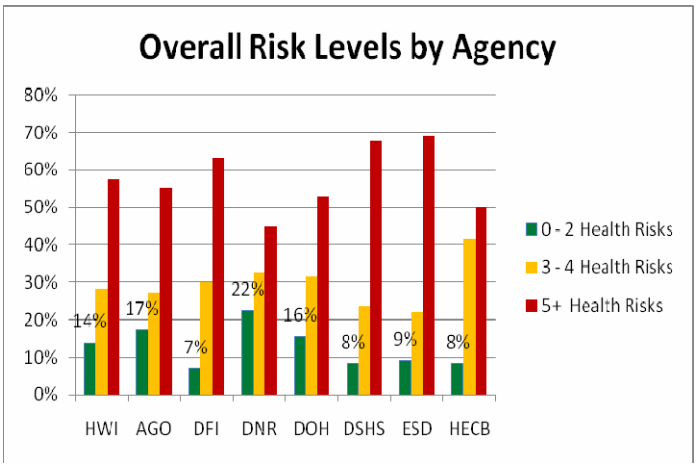


Table 8. Number of "At Risk" Areas per Employee (from Health Survey) – By Agency

Overall Risk/Number of Risk Categories	2008 Baseline							
	AGO	DFI	DNR	DOH	DSHS	ESD	HECB	ALL
Low Risk *(0-2)*	**17%**	**7%**	**22%**	**16%**	**8%**	**9%**	**8%**	**14%**
Moderate Risk *(3-4)*	27%	30%	33%	31%	24%	22%	42%	28%
High Risk *(≥ 5)*	55%	63%	45%	53%	68%	69%	50%	58%
Employees decreasing their # of risk factors by at least 1*	--	--	--	--	--	--	--	--

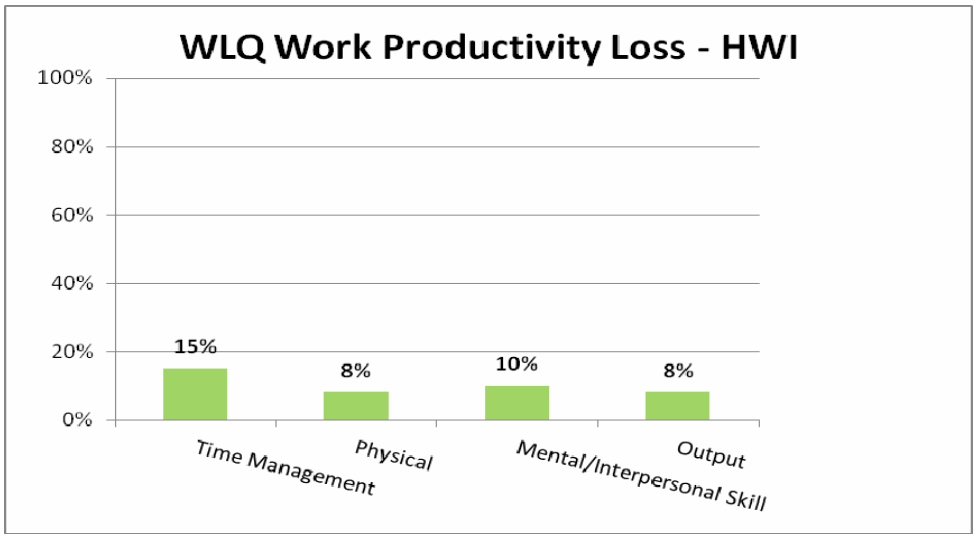
'* To be assessed in final report

Work Productivity Loss/ "Presenteeism"

Embedded in HWI's Health Survey is the Work Limitations Questionnaire (WLQ) which assesses employee's ability to be engaged and productive at work along 4 dimensions: time, physical, mental/interpersonal, and output. The inverse of this lost productivity is known as "presenteeism." The costs of presenteeism are hidden and pervasive and estimated to be up to 7 ½ times more costly to employers than absenteeism (http://ezinearticles.com/?Presenteeism:-The-Hidden-Costs-of-Business&id=40408).

The baseline WLQ measures are shown in the graph below. More information will be included in the final report as we learn more about this validated and widely used tool from Debra Lerner, PhD at Tufts University who developed this instrument, and measure changes over time.

WLQ WORK PRODUCTIVITY LOSS



RESULTS: Health Risk Screenings

Health Risk Screenings – Areas of Risk

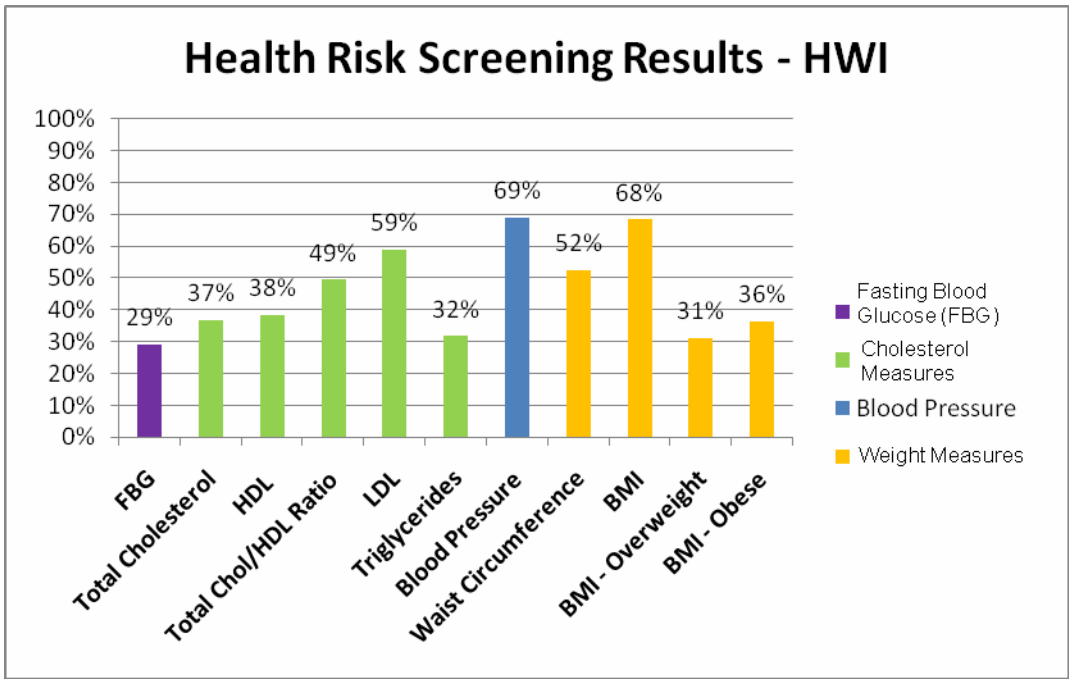
All employees who completed the Health Survey were invited to participate in the Health Risk Screenings. Of those completing the Health Risk Screenings:

- Over two thirds (68%) were overweight or obese (*defined as BMI > 25*)
- Almost 40% had a cholesterol/lipid level that put them at increased risk (*total cholesterol ≥ 200 mg/dL, HDL <40 mg/dL for men, or 50 mg/dL for women, LDL ≥ 100 mg/dL, total cholesterol/HDL Ratio > 3.4 and/or triglycerides ≥ 150 mg/dL).*
- Over two thirds (69%) had blood pressure levels that put them at risk (i.e. *Systolic Blood Pressure <90 or ≥ 120; and/or Diastolic Blood Pressure < 60 or ≥ 80).*
- Slightly less than a third (29%) had at risk fasting blood glucose levels (FBG < 65 or > 99 mg/dL). *(Note: Fasting blood glucose is commonly used as an indicator for diabetes. A higher FBG is a prerequisite for diabetes, but having a high FBG does not mean an individual has diabetes.)*

Table 9A. Baseline At Risk - Results from Health Risk Screenings

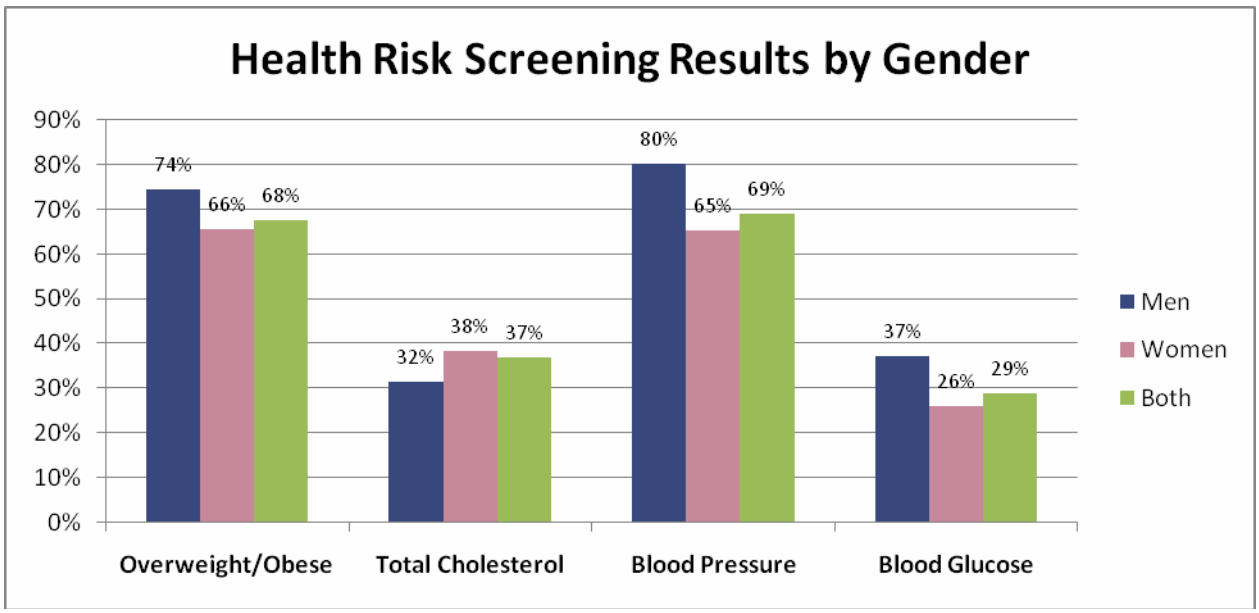
Individual Risk Factors	Goal	2008 Baseline Male	Female	ALL (N=1,503)
Weight: *BMI< 18.5 or > 25)*	**Reduction**	**75%**	**66%**	**68%**
Underweight: *BMI < 18.5*	--	0%	1%	1%
Overweight: *BMI >25 and ≤ 29.9*	--	42%	28%	31%
Obese: *BMI > 29.9*	--	32%	38%	36%
Overweight & Obese*: *BMI > 25*		74%	66%	68%
Waist Circumference		35%	58%	52%
Cholesterol *(pre-hyperlipidemia and high cholesterol). At least one of the following:*	**Reduction**			**TBD**
High Total Cholesterol*: ≥ 200mg/dL*	--	32%	38%	37%
Low HDL: *Men < 40; Women < 50 mg/dL;*	--	42%	37%	38%
High Total Chol/HDL Ratio*: > 3.5*	--	69%	44%	49%
High LDL*: ≥ 100 mg/dL*	--	59%	57%	59%
High Triglycerides: ≥ *150 mg/dL*	--	35%	31%	32%
Blood Pressure – *hypotensive, pre-hypertensive & hypertensive* Systolic *< 90 or ≥ 120 and/or* Diastolic *< 60 or ≥ 80*	**Reduction**	**80%**	**65%**	**69%**
Blood Glucose *– low or high Fasting Blood Glucose (FBG) (Prediabetes & Diabetes Indicator*)* FBG *<65 or > 99 mg/dL*	**Reduction**	**37%**	**26%**	**29%**

* WA 2006 Behavioral Risk Factor Survey (BRFS) – telephone survey of residents: Overweight & Obese: 61% (overweight 37%, obese 24%);



Gender differences were notable in fasting blood glucose levels (FBG), total cholesterol/HDL ratios, blood pressure, waist circumference, and BMI overweight (but not obese). Specifically:

- Men appear to be at higher risk for their fasting glucose levels, their total cholesterol/HDL ratios, their blood pressure, and for being overweight (but not obese).
- Women appear to be at higher risk due to total cholesterol levels, waist circumference, and obesity.



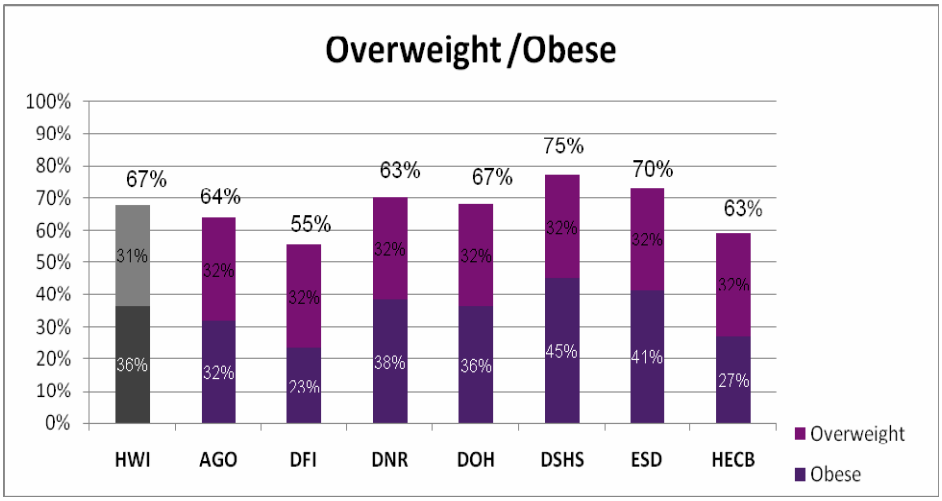
The table below shows results by agency. Patterns of risk factors were generally similar across the seven agencies.

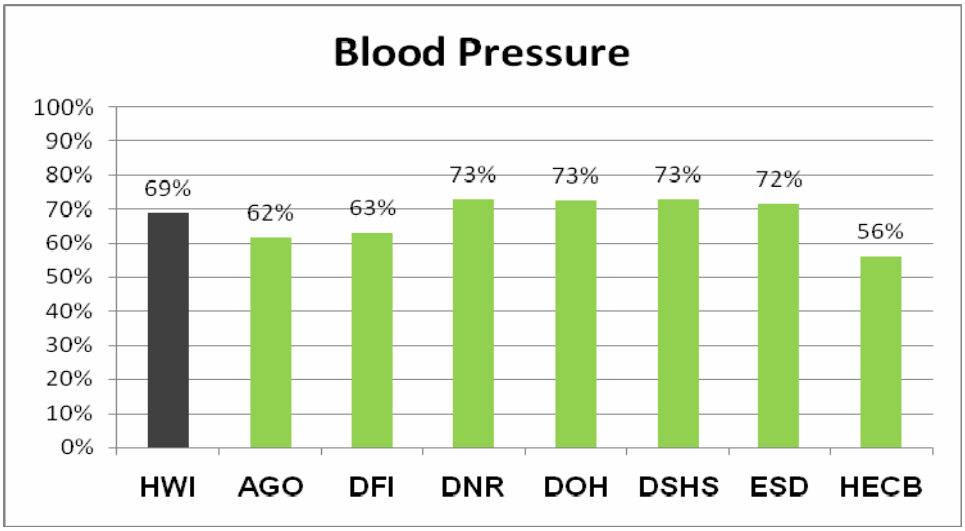
Table 9B. Baseline "At Risk" Results (from Health Risk Screenings) – By Agency

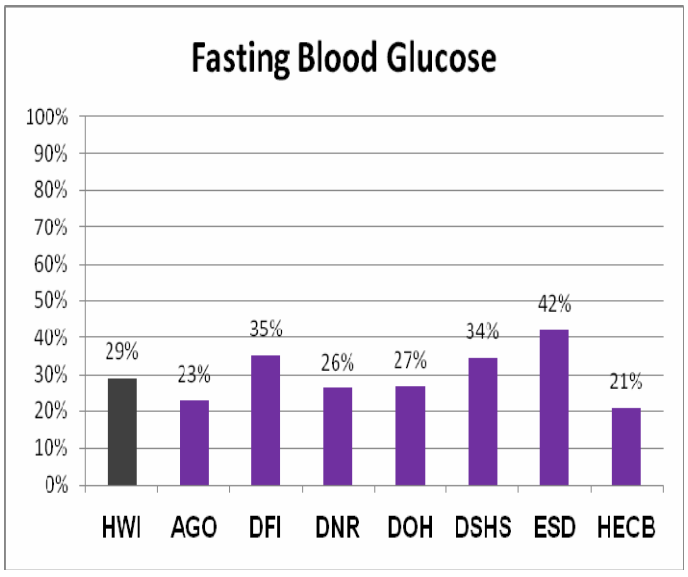
Individual Risk Factors	Baseline 2008 "At Risk"						
	AGO	DFI	DNR	DOH	DSHS	ESD	HECB
Weight: *BMI< 18.5 or > 25)*	**65%**	**55%**	**74%**	**68%**	**75%**	**70%**	**67%**
Underweight: *BMI < 18.5*	1%	1%	4%	0%	0%	0%	0%
Overweight: *BMI >25 and ≤ 29.9*	32%	32%	36%	31%	30%	28%	35%
Obese: *BMI > 29.9*	32%	23%	38%	36%	45%	41%	27%
Overweight & Obese*: *BMI > 25*	64%	67%	63%	67%	75%	70%	63%
Waist Circumference (?)	49%	40%	57%	54%	63%	45%	38%
Cholesterol *(pre-hyperlipidemia and high cholesterol*							
High Total Cholesterol*: ≥ 200mg/dL*	34%	44%	31%	36%	42%	40%	29%
Low HDL: *Men < 40; Women < 50 mg/dL;*	33%	33%	40%	39%	41%	46%	27%
High Total Chol/HDL Ratio*: > 3.5*	44%	42%	52%	50%	57%	58%	27%
High LDL*: ≥ 100 mg/dL*	56%	56%	59%	60%	63%	64%	42%
High Triglycerides: *≥ 150 mg/dL*	27%	32%	26%	33%	37%	39%	15%
Blood Pressure - *hypotensive, pre-hypertensive & hypertensive* Systolic *< 90 or ≥ 120 and/or* Diastolic *< 60 or ≥ 80*	**62%**	**63%**	**73%**	**73%**	**73%**	**72%**	**56%**
Blood Glucose – *low Fasting Blood Glucose (FBG), diabetes and pre-diabetes.* FBG *<65 or > 99 mg/dL*	**23%**	**35%**	**26%**	**27%**	**34%**	**42%**	**21%**

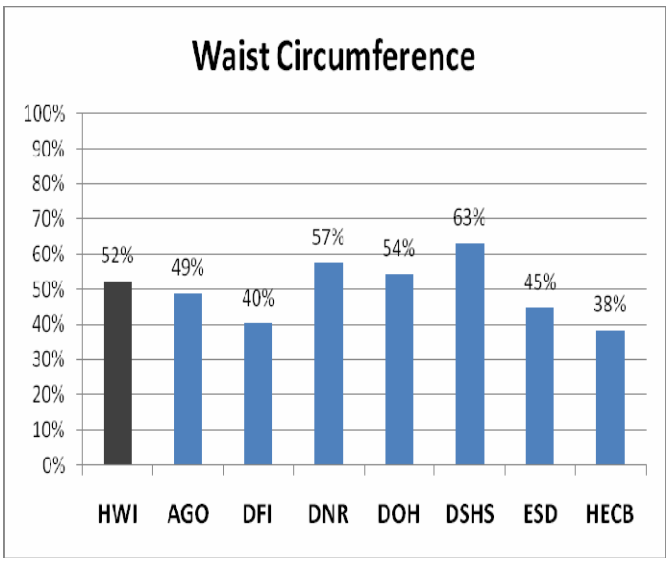
***** WA 2006 Behavioral Risk Factor Survey (BRFS) – telephone survey of residents: Overweight & Obese: 61% (overweight 37%, obese 24%);

HEALTH RISK SCREENING RESULTS: WEIGHT, GLUCOSE, BLOOD PRESSURE

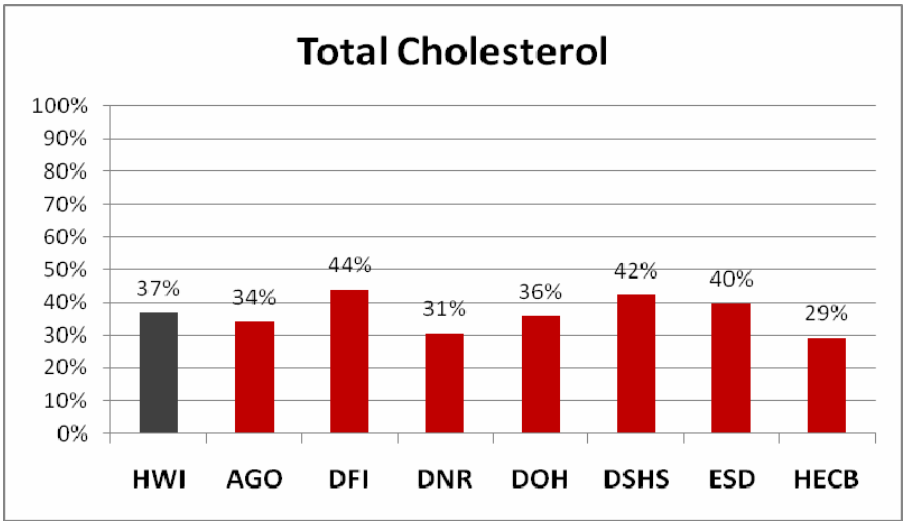


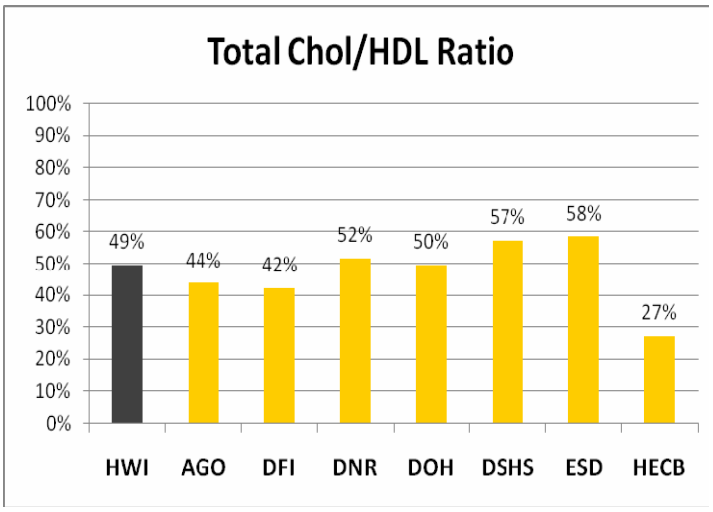


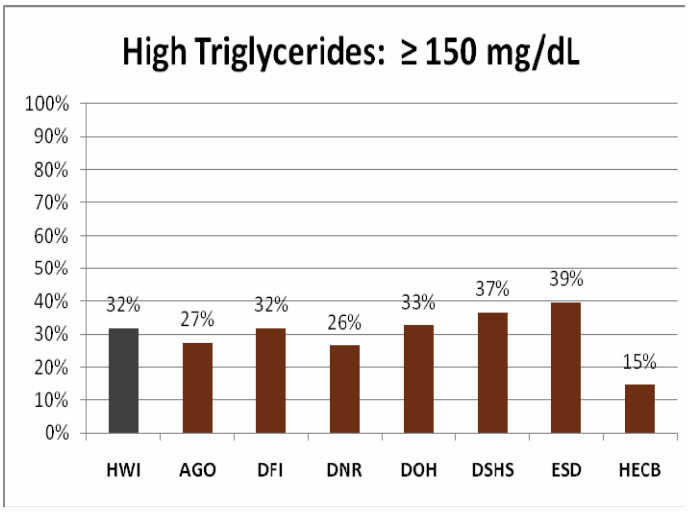


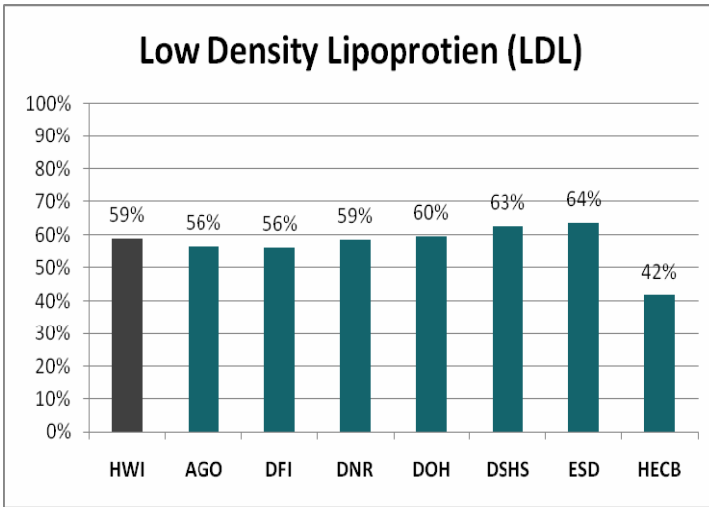


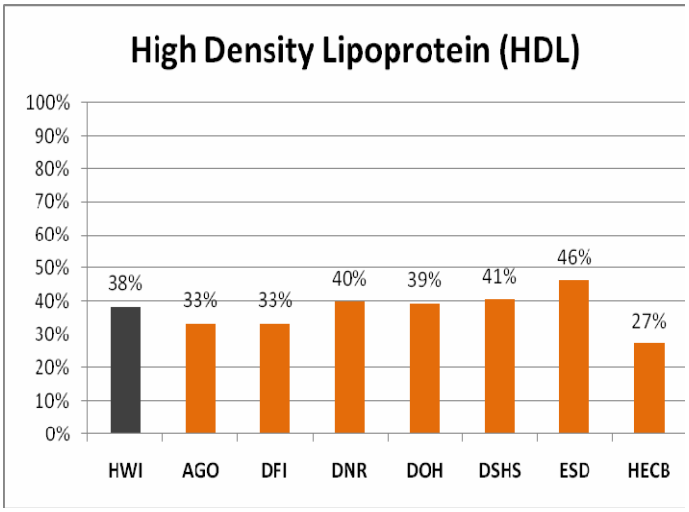
HEALTH RISK SCREENING RESULTS: LIPIDS











Number of "At Risk" Measures/ Employee - from Health Risk Screening

HWIs Health Risk Screenings (i.e. lab and physical measurements) identify employees with blood levels, weight levels, or waist circumference measures that put them at increased risk. IHPM analyzes this data, assessing risk in eleven possible categories.

1. Underweight (BMI)
2. Overweight (BMI)
3. Obese (BMI)
4. Waist circumference
5. Total Cholesterol Level
6. High Density Lipoprotein (HDL)
7. Total Cholesterol/HDL Ratio
8. Low Density Lipoprotein (LDL)
9. Triglycerides
10. Blood Pressure (systolic and or diastolic)
11. Fasting Blood Glucose (FBG)

IHPM then cumulated risks per individual, since often these risks run in tandem or clusters. Of those who took the Health Risk Screenings, 26% were in the low risk category with only 0-2 risk factors per individual, while 74% had more than two health risks identified.

Table 10A. Number of Risk Factors per Employee (from Health Risk Screenings)–HWI Population

Overall Risk - the Collaborative	Goal	2008 Baseline
Number of "At Risk" Categories		
Low Risk (0-2)	Increase	**26%**
Moderate Risk (3-4)	--	28%
High Risk (≥ 5)	--	46%
Decrease number of risk factors by at least 1	≥10%	--

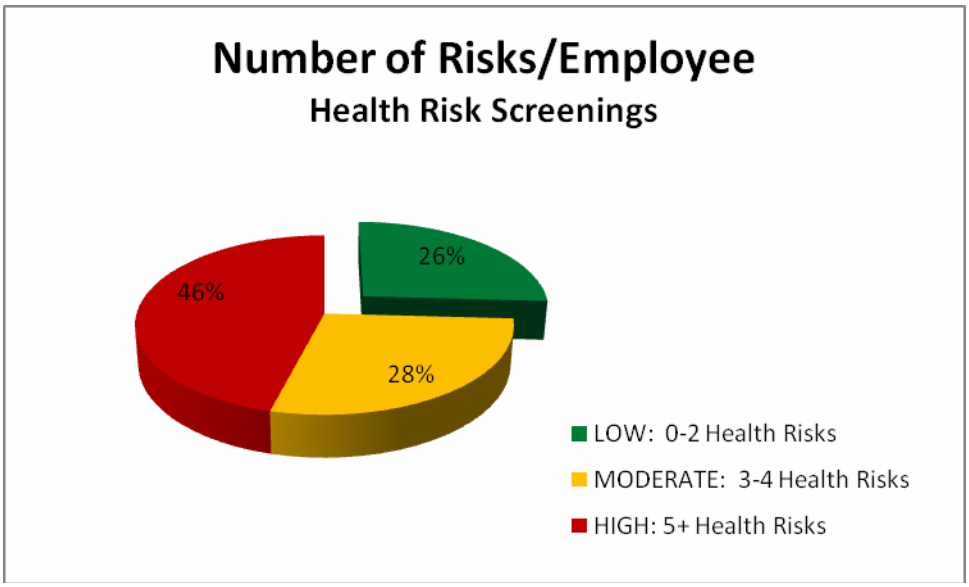
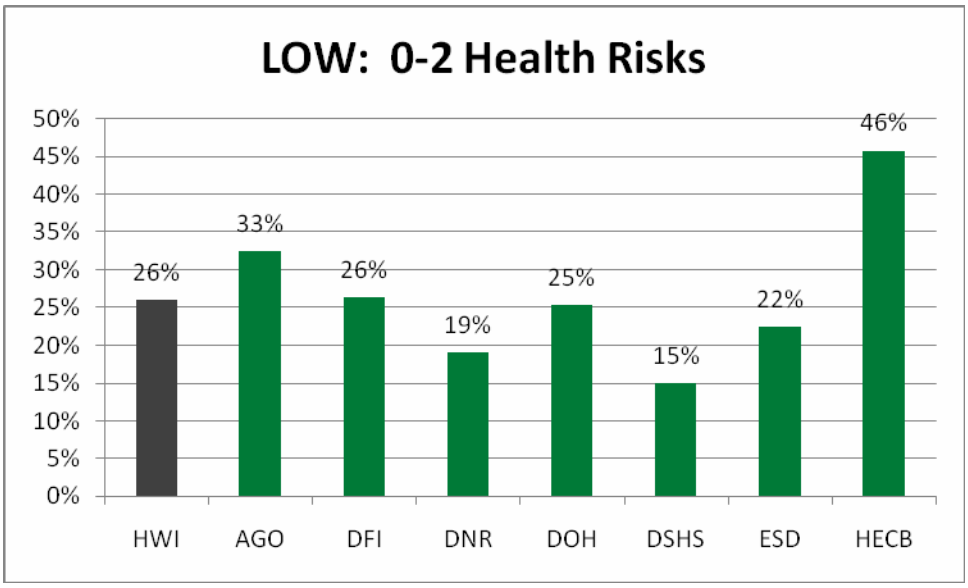


Table 10B. Number of Risk Factors per Employee (from Health Risk Screenings) – By Agency

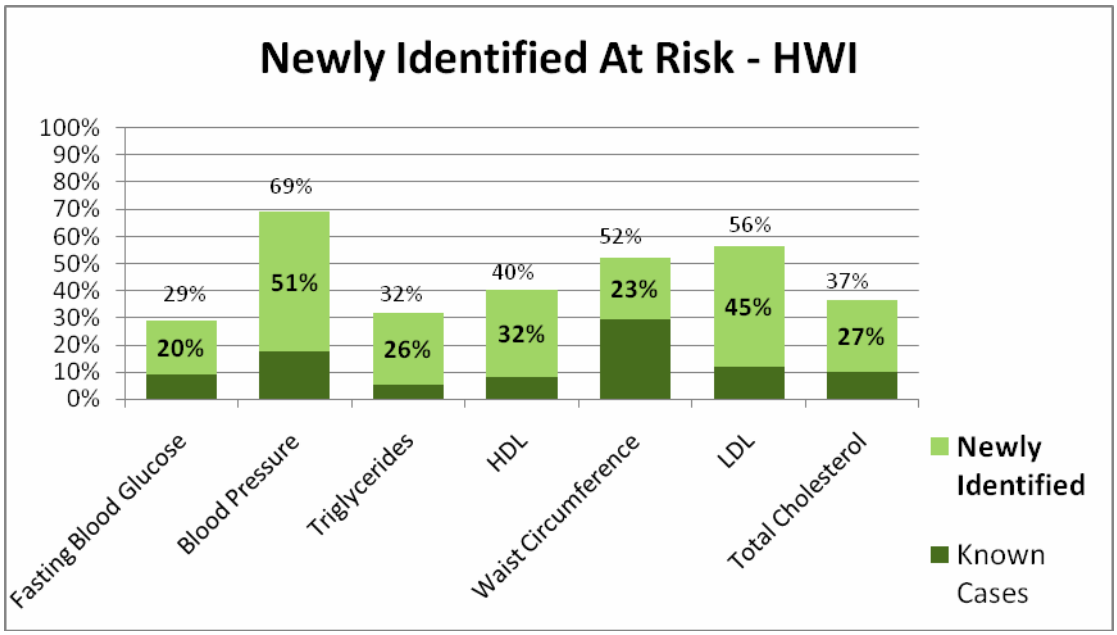
Overall Risk – Number of Risk Factors	Goal	2008 Baseline						
		AGO	DFI	DNR	DOH	DSHS	ESD	HECB
Overall Risk *(number of risk factors)*								
Low Risk (0-2)	Increase	33%	30%	38%	33%	30%	38%	33%
Moderate Risk (3-4)	--	26%	33%	40%	26%	33%	40%	26%
High Risk (≥ 5)	--	19%	35%	46%	19%	35%	46%	19%
Decrease number of risk factors by at least 1	≥10%	--	--	--	--	--	--	--



Newly Identified at Risk (from Health Survey & Health Risk Screenings)

The chart below shows the proportion of employees who did not know they were at risk (determined by their Health Survey responses), but who were identified as at risk through the baseline Health Risk Screening.

- More than half (51%) did not know they were at risk due to their blood pressure levels.
- Almost half (45%) did not know their LDL levels were elevated
- 32% did not know their HDL was low
- 27% did not know their total cholesterol level was elevated.
- 26% did not know their triglycerides were elevated
- 23% did not know their waist circumference measurement put them at increased risk.
- A fifth (20%) did not know they had elevated fasting blood glucose levels.

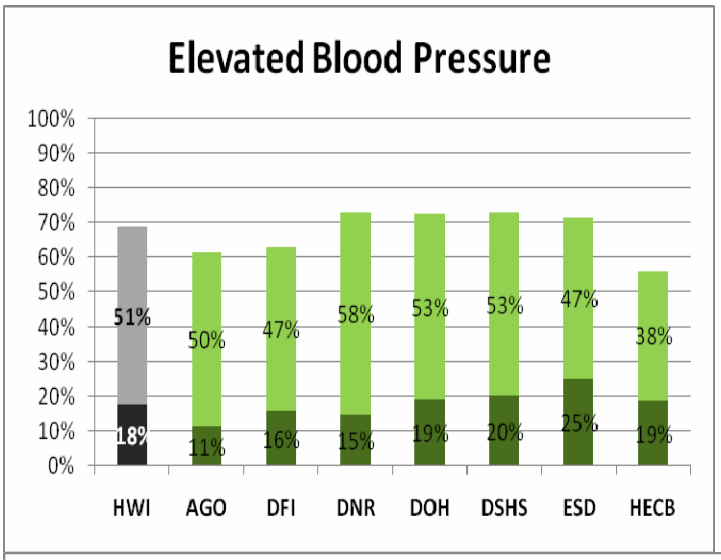


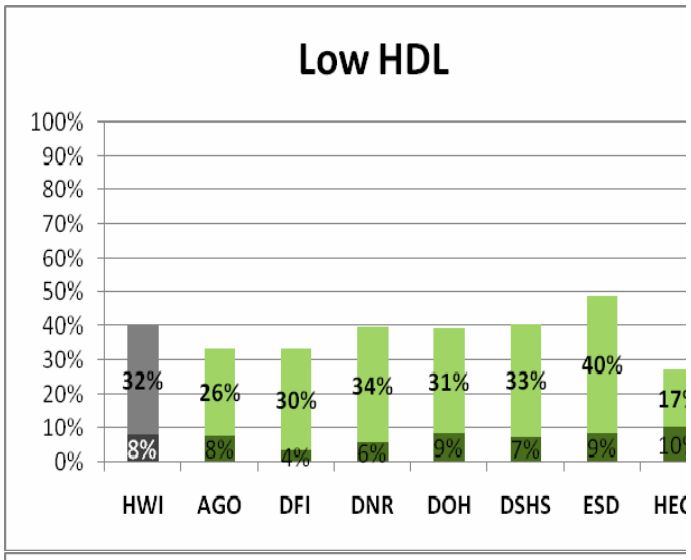
Employees who participated in the Health Risk Screening received a personal health report identifying their areas of risk. Employees who were newly identified as “at risk” were advised to follow up with their physician. For this group of people, HWI has already made a significant impact/contribution to their health and well being by making them aware of their increased risk.

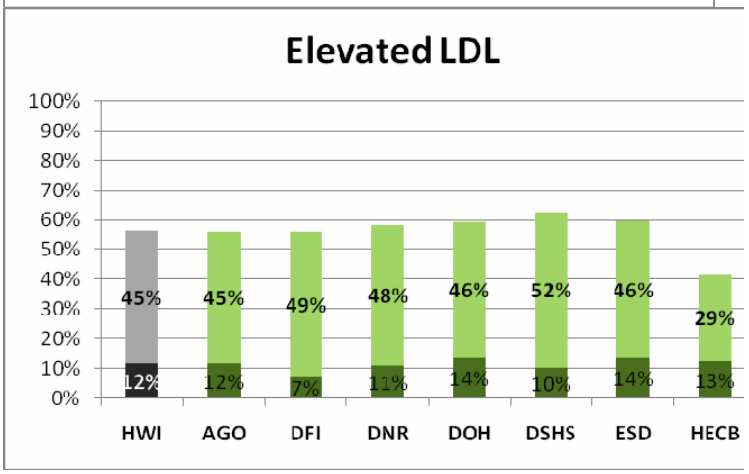
Distribution of new risk cases across agencies ranged considerably, with an average spread of about 20.

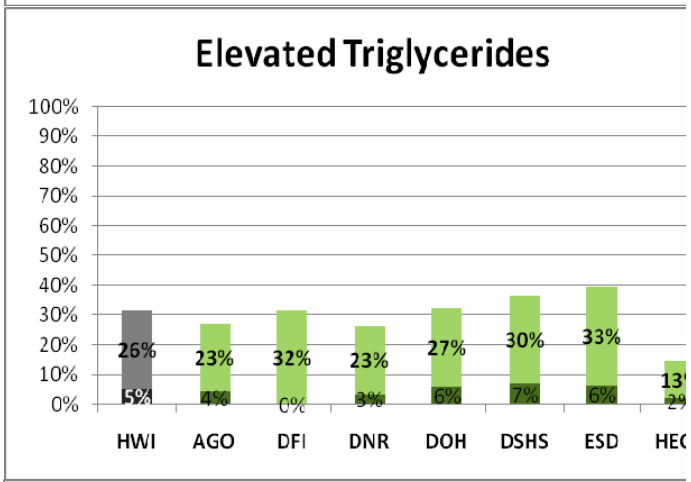
NEWLY IDENTIFIED "AT RISK"

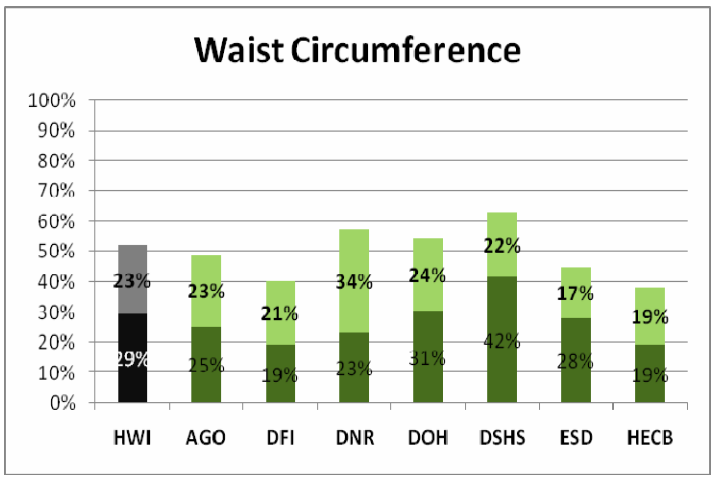
The top portion of the stacked bars shows the percent newly identified as "at risk" while the bottom/darker portion shows the percent who already knew they were at risk. Together they illustrate the total percent of those screened who are "at risk" by agency.

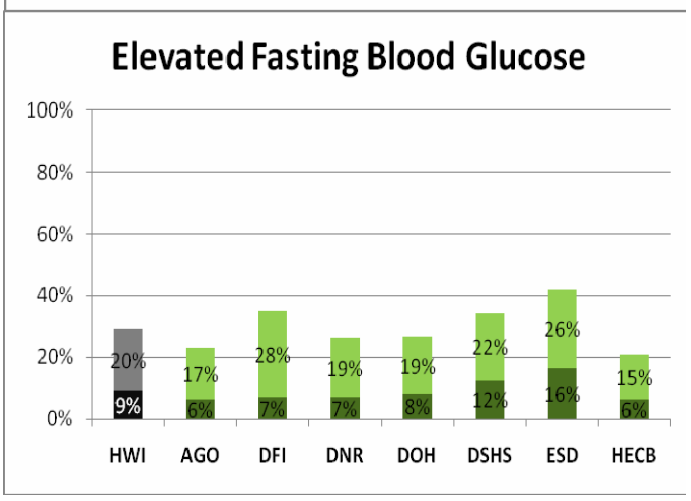












RESULTS: OTHER MEASURES

Other measures that are included in the evaluation include:

- Health Seeking Behavior/Receiving Needed Preventive Services
- Absenteeism rates

Healthy Behavior – Receiving Needed Preventive Services

Receiving recommended preventive services is also a component of healthy behavior. To estimate baseline rates for three screenings (colon cancer, PAP smear, and mammograms) , we looked at claims data for employees in HWI who were continuously enrolled in the UMP over a four and a half year period (specifically from 7/1/03 to 12/31/07). The following guidelines were used:

- Colon cancer screening, every 2 years for all adults 50+
- Pap smear, every 3 years for women 18-65
- Mammogram, every 2 years for women over 40

The data showed that:

- 64% of employees age 50 and older, are overdue for a colon cancer screening
- 24% of female employees between the ages of 21-65, need a PAP smear
- 28% of female employees, age 40 and older are overdue for a mammogram

We do not have the data for participation in the Tobacco Cessation program and so are unable to report on it at this time.

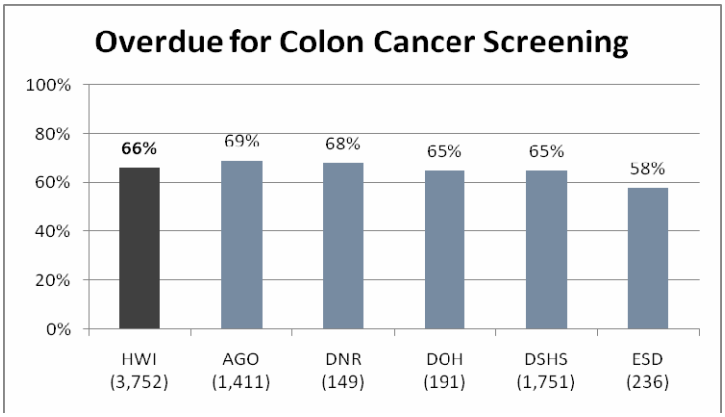
Table 11A. Preventive Screenings – HWI Population

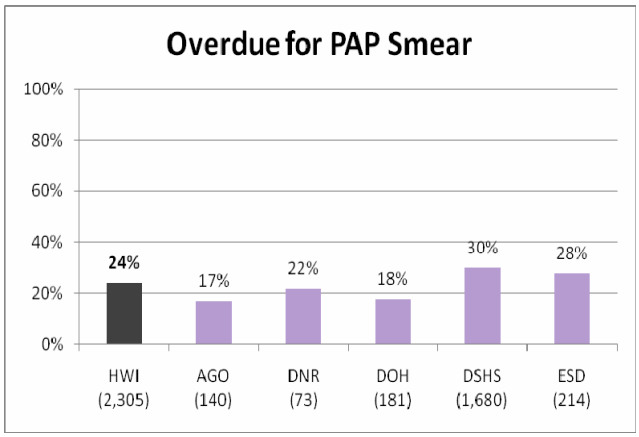
Preventive Screenings - Collaborative	Goal	Eligible for (N)	2008 In Need
Not following recommended preventive screening schedule for their age/gender (at least one of the following):	Reduction		
Need to be Screened for Colon Cancer *(age 50+)*	--	3,752	64%
Need to be Screened for Cervical Cancer *(women, ages 21-65)*	--	2,305	24%
Need to be Screened for Breast Cancer *(women, age 40+)*	--	2,132	28%

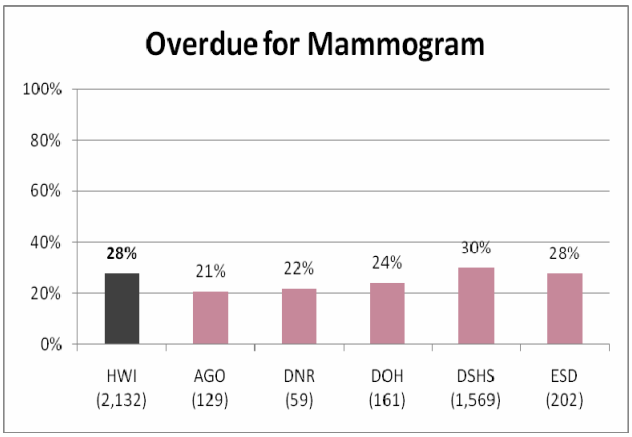
The table below shows the rates by agency (note: the numbers of employees in the DFI and HECB samples were too small to report).

Table 11B. Preventive Screenings – by Agency

Outcome Measures	AGO	DNR	DOH	DSHS	ESD
Not following recommended preventive screening schedule for their age/gender (at least one of the following):					
Need to be Screened for Colon Cancer *(age 50+)*	69%	68%	65%	65%	58%
Need to be Screened for Cervical Cancer *(women, ages 21-65)*	17%	22%	18%	30%	28%
Need to be Screened for Breast Cancer *(women, age 40+)*	21%	22%	24%	30%	28%







Absenteeism

The legislation identified absenteeism as a measure to use for evaluating the initiative. The Washington Wellness HWI team is proposing to use the WLQ measurement of presenteeism as a more valid measure of the link between health status and work performance.

Absenteeism data is collected from Washington State's Department of Personnel Government Management Accountability & Performance Initiative (GMAP) database/reports and from their Human Resources Management Reports (HRMR). Currently, only a few agencies have data on GMAP, the rest have data in HRMSs. HECB is a small agency and not required to report absenteeism rates to DOP/Governor.

Unfortunately the available absenteeism data is not very useful. It is not possible to distinguish for example between sick time taken because an employee was sick, vs. to go the doctor's office to receive a preventive health screening, vs. to tend to a dependent who is ill.

VIII. SUMMARY AND CONCLUSION

This report presented baseline results from individual-level Health Survey and Health Risk Screenings, along with process measure accomplishments from the HWI change package. The table below summarizes the findings. State employees participating in the Health Survey and Health Risk Screenings have a number of health behaviors and risk factors in need of improvement. The most prevalent problems are being overweight/obese and having high blood pressure. Regarding the change package, HWI agencies have made considerable progress in implementing policy, worksite and program interventions that have the potential to improve employees health and productivity.

Table 12. Summary of Baseline Findings and Progress on Process Measures

Outcome Measures	Goal	Baseline Percent At Risk (N=1,503)
Overweight/Obese (*BMI > 25)*	↓ **Reduction**	**67%**
Cholesterol *(elevated Total cholesterol, triglycerides, Ratio, or LDL or low HDL)*	↓ **Reduction**	**TBD**
Blood Pressure - Systolic *< 90 or ≥ 120 and/or* Diastolic *< 60 or ≥ 80*	↓ **Reduction**	**69%**
Blood Glucose – F*asting Blood Glucose* (FBG) *<65 or > 99 mg/dL*	↓ **Reduction**	**29%**
Diabetes (from Health Survey)	↓ **Reduction**	**33%**
Poor Quality of Life	↓ **Reduction**	**41%**
Tobacco Consumption	↓ **Reduction**	**12%**
Poor Health Seeking Behavior	↓ **Reduction**	**TBD**
Process Measures		**Status of Goal**
Documented process for collecting & synthesizing population data		**In process**
Documentation of effective promotion efforts		**In process**
Effective Wellness Committee		**Achieved**
Commitment from Senior Leadership		**Achieved**
Policies & Procedures in place that encourage wellness		**In process**
Evidence of 3 New Programs Implemented at each agency		**Achieved**
Evidence of 1 Sustainable Program Implemented at each agency		**In process**
Evidence of Community Linkages		**Achieved**
Collection of participation rates and evaluation of programs		**In process**

Washington State, through HWI, is one of the first state governments in the nation to attempt building a sustainable culture of health and productivity on such a large and comprehensive scale in such a short period of time. If this pilot project proves successful and the HWI approach is spread to all state agencies, Washington State will become a national leader in state employee worksite health promotion.