



## **2008 Annual Report**

Prepared by UI Wellness and UI Benefits, Units of Human Resources  
The University of Iowa

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## Executive Summary

The University of Iowa is committed to providing a healthy and supportive work environment for its faculty and staff. A significant example of this commitment is the **liveWELL** initiative provided by UI Wellness and UI Benefits, units of Human Resources. **liveWELL** is a comprehensive program designed to improve the health and well-being of faculty and staff by offering opportunities to participate in a number of resources tailored specifically to meet each person's needs and interests. The foundation of the program is an online Personal Health Assessment (PHA). The PHA is fully integrated with Online Lifestyle Management Programs and the Health Coach Service for those individuals interested in developing a tailored health improvement plan.

The following data provides a brief overview of the UI population health as identified by the PHA, utilization of **liveWELL** services, outcomes for 2008, and key actions planned for 2009.

### Personal Health Assessment (PHA) Aggregate Summary Data

#### PHA Utilization/Demographics

	Total Participation	Females	Males	Average Age
2006	4814 (49% eligible population)	70%	30%	42.3
2007*	7660 (53% eligible population)	73%	27%	42.3
2008	9,596 (64% eligible population)**	73%	27%	42.1

\*Merit Staff eligible as of 7/1/07 \*\*Total eligible population in 2009 = 14,987.

#### Prevalence of Chronic Conditions – All PHA participants

	Migraines	Chronic Back Problems	Arthritis
2006	16%	13%	13%
2007	17%	16%	15%
2008	16%	15%	16%

#### Prevalence of Behavioral Risk Factors – All PHA participants

	Unmanaged Stress	Lack of Regular Exercise	Smoking	Unhealthy Eating
2006	21%	44%	6%	57%
2007	22%	45%	9%	58%
2008	21%	45%	9%	56%

#### Prevalence of Multiple Behavioral Risks – All PHA participants

	Zero or One Risk Factor*	Two Risk Factors*	Three Risk Factors	Four+ Risk Factors
2006	43%	26%	20%	11%
2007	42%	25%	20%	13%
2008	44%	25%	19%	12%

\* behavioral risk factors include unmanaged stress, lack of regular exercise, smoking status, unhealthy eating, and binge drinking.

### Health Coach Service Summary Data

#### Utilization and Reported Health and Productivity Measures

	Complete 12/31	Active 12/31	Improved Health	Improved Productivity	Improved Workplace Satisfaction
2006	231	87	97%	86%	78%
2007	403	147	97%	84%	78%
2008	503	155	97%	93%	90%

## **Program Outcomes 2008**

- For the UI population, 64% of eligible faculty and staff completed the Personal Health Assessment (PHA). Target was 60% participation.
- A migration of individuals from high to moderate/low behavior risk categories was demonstrated for those participating in 2007 and 2008 with an estimated cost savings of nearly \$400,000\*.
- 503 Health Coach clients successfully completed the service. Demonstrated improvements in all health behavior categories with 48% of clients meeting goals and 37% partially meeting goals outlined in their health improvement plan. Estimated cost savings by avoiding future medical expenditures of over \$100,000\*.
- Improvements in the population behavioral risks of unmanaged stress, physical inactivity, unhealthy eating, and smoking were demonstrated for those individual participating in 2007 and 2008 (N=6230).
  - Unmanaged stress decreased from 21% to 19% (N=99)
  - Lack of regular exercise decreased from 44% to 42% (N=166)
  - Unhealthy eating decreased from 58% to 53% (N=359)
  - Smoking decreased from 9% to 8% (N=54)
- Smoking cessation benefit expanded to support University smoke-free campus policy. 433% increase in number receiving Nicotine Replacement Therapy reimbursement (6 in 2007 vs. 26 in 2008) and a 600% increase in Health Coach clients setting goals around quitting smoking (11 in 2007 vs. 66 in 2008).
- Targeted marketing and communication efforts enhanced to include multiple print and electronic formats with direct result of an 11% participation increase in the Personal Health Assessment.
- **liveWELL** services were expanded with the addition of six (6) Online Lifestyles Management Programs that include weight management, physical activity, depression management, stress management, managing high blood pressure, and managing high cholesterol.
- Integration with the University's disease management provider and enhanced referral process resulting in increased utilization of disease management programs.

## **Target Indicators and Key Actions for 2009**

### **Target Indicators**

- Personal Health Assessment (PHA) - 65% completion rate for eligible population.
- Health Coach Service – 800 clients successfully complete the service with 60% of clients meeting established goals.
- On-line Lifestyle Management Programs - 30% of the eligible population will utilize a program with 50% of those who utilize completing a program.
- Population health risk migration - 3% migration from high to medium/low risk categories.
- Change in behavioral risks - 1% to 2% decrease in behavioral risk categories.

### **Key Actions**

- Data integration with third party data warehouse vendor and program specific outcome analysis.
- Targeted marketing and communication efforts related to the top three behavioral risk categories.
- Integration of services along the health management continuum to include the Personal Health Assessment, Online Lifestyle Management Programs, Health Coach Service, 24/7 Personal Health Assistant, and Disease Management Program.
- Development of small group Health Coach Service, in addition to 1:1 service.
- Development of one new small group behavior change program in a targeted behavioral risk area.
- Integration of service delivery with Employee Assistance Program (EAP) to focus on behavioral health issues, such as the development and implementation of a depression management program.

*\*See full report for methodology.*

## **Introduction**

The University of Iowa is committed to providing a healthy and supportive work environment for its faculty and staff. A significant example of this commitment is the **liveWELL** initiative provided by UI Wellness and UI Benefits, units of Human Resources. **liveWELL** is a comprehensive program designed to improve the health and well-being of faculty and staff by offering opportunities to participate in a number of resources tailored specifically to meet each person's needs and interests. The foundation of the program is an on-line Personal Health Assessment (PHA). The PHA is fully integrated with Online Lifestyle Management Programs and the Health Coach Service for those individuals interested in developing a tailored health improvement plan. Additionally, a variety of internal UI referral sources are made available for participants at a significantly reduced cost through subsidy provided by the University. Lastly, services are fully integrated with the University's disease management program to provide health improvement opportunities for those individuals with chronic disease.

The goals of the **liveWELL** program are:

- Individual faculty and staff health improvement
- A culture that supports people as our most important asset
- Return on investment through population health management that effectively manages health care utilization and cost, supports individual health enhancement efforts, and improves organizational performance.

Positive population health outcomes were demonstrated in 2008 and include improvements in specific behavioral risk categories, as well as a migration in the population from higher to lower health risk categories. Participation in the Personal Health Assessment (PHA) increased by 11% and successful participation in the Health Coach Service increased by 25%. Both of these increases were coupled with continued high satisfaction and quality rating of services by faculty and staff. These results demonstrate a positive impact at both the individual and organizational level and provide the framework for planned expansion in 2009.

## **Operations**

### **Services**

The foundation of the program remains the Personal Health Assessment (PHA) integrated with Online Lifestyle Management Programs and the Health Coach Service for those individuals interested in developing a tailored health improvement plan. In 2008, six (6) Online Lifestyle Management programs were added to provide individuals a greater variety of resources to assist in them in their health improvement efforts. These programs include physical activity, stress management, weight management, depression management, managing high blood pressure, and managing high cholesterol. The Health Coach Service continues to be offered at both east and west campus locations, with expansion in the area of telephonic and email based coaching. To provide services along the entire health continuum, a referral process between the Health Coach Service and the University's disease management provider was implemented in 2008. Individuals who are diagnosed with chronic condition now have seamless access to resources, with lifestyle issues addressed by the Health Coach Service, and condition management issues addressed through disease management. Internal referral programs, such as the Mindfulness Based Stress Reduction program, continue as a vital component of **liveWELL**. To meet the needs of individuals who use Nicotine Replacement Therapy (NRT) or prescription medications to stop smoking, the amount of reimbursement for NRT was increased from \$200 to \$300 in 2008. Over four times the number of people utilized the NRT reimbursement benefit in 2008 than in 2007.

### **Participation Incentives**

To encourage participation and engagement, a variety of incentives are used: cash, wellness points, and time. **Cash** is used to encourage Personal Health Assessment (PHA) participation. In 2008, individuals received \$50 for PHA participation if they were a first time user and \$65 if 2008 was a subsequent year. Additionally, a monthly \$500 drawing was in place for all who took their PHA. **Wellness Points** are earned by participating in a variety of self-directed, online programs, and can be spent on items like pedometers, t-shirts, and fitness passes. A goal for 2009 is to increase participation in the Well On Our Way program, which uses a wellness point-based incentive structure. **Time** to take the PHA during working hours once per year is permitted and supervisors are encouraged to promote participation in the PHA and Health Coach Service.

## **Communication and Marketing**

Communication efforts in 2008 were enhanced to increase participation in the Personal Health Assessment and Health Coach Service, and build on the concept of a healthy campus culture. Communication was multi-modal and targeted to the individual either by work group or by segmenting the population based upon job classification. Highlights include:

- Progressive monthly emails targeting those who have not accessed Personal Health Assessment in 2008.
- Success stories featured in quarterly **liveWELL** newsletter and University publications, such as *FYI*.
- On-site presentations to leadership and large groups such as Staff Council, Nursing Staff Council, Hospital Human Resources, and HR Unit Representatives.
- Organizational unit-specific summary shared with Senior HR Leaders.
- 2007 Annual Report and 2008 Program Goals shared with Vice Presidents and President.
- Targeted communication based upon specific behaviors. For example, those indicated that they smoke were sent information about smoking cessation resources.
- UIHC Physicians were sent a program booklet and letter thanking them for support and encouraging them to continue to refer patients to **liveWELL**.
- Faculty communication via home mailings during Fall semester.
- Focus group for participants and non-participants held in Spring 2008 addressing questions surrounding program participation.

As a result of these enhanced efforts, participation in the PHA grew from 53% in 2007 to 64% in 2008, and the Health Coach Service increased by 25%.

## **Financials**

Funding for the **liveWELL** program is provided through the Benefits Office. The overall budget is divided into salary and general operational expenses for a total annual budget of \$1,026,721 for FYE June 30, 2008. The FYE June 30, 2009 budget was increased to \$1,313,712 due to the addition of the Online Lifestyle Management Programs, and expected participation increase and associated incentives.

## **Program Outcomes**

Positive population health outcomes were demonstrated in 2008 and include improvements in specific behavioral risk categories, as well as continued migration of the population from higher to lower health risk categories. In addition, participation in both the Personal Health Assessment and Health Coach Service increased, coupled with high satisfaction and quality ratings from participants. Previous analysis of the Health Coach Service demonstrated improvements in health status and an associated decrease in predicted monthly medical expenditure related to the participant group. The cost savings estimate for the Health Coach Service in 2008 is over \$100,000. Lastly, an analysis of health-related productivity losses (or presenteeism) for those individuals completing the PHA was conducted to establish a baseline measure for the UI population. Results of this analysis provide opportunities for service expansion in 2009. The following information provides a more detailed review of the 2008 outcomes.

## **2008 Utilization**

**Table 1: PHA Utilization/Demographics**

	<b>Total Participation</b>	<b>Females</b>	<b>Males</b>	<b>Average Age</b>
<b>2006</b>	4,814 (49% eligible population)	70%	30%	42.3
<b>2007*</b>	7,660 (53% eligible population)	73%	27%	42.3
<b>2008</b>	9,596 (64% eligible population)**	73%	27%	42.1

\*Merit Staff eligible as of 7/1/07 \*\*Total eligible population in 2009 = 14,987.

**Table 2: Personal Health Assessment Participation by Job Classification**

	<b>Faculty</b>	<b>Professional &amp; Scientific</b>	<b>Merit Supervisory Exempt</b>	<b>Merit*</b>	<b>Total</b>
<b>Personal Health Assessment **</b>	32% 31% in 2007	73% 59% in 2007	71% 58% in 2007	64% 54% in 2007	64%

\*\* Overall PHA participation 64% of eligible (N=9,596 of 14,987. 73% Female (as compared to 64% Female at UI); 27% Male (as compared to 36% Male at UI).

**Health Coach Service:** Five-hundred and three (503) faculty/staff completed the service in 2008, with 155 clients actively engaged at the start of 2009. The majority of participants were P&S and Merit staff members.

**Referral Programs:** UI Wellness partners with existing UI/UIHC programs that have demonstrated positive health-related outcomes for certain chronic conditions or behaviors. For programs where a fee is associated, liveWELL pays for 75%, with the Health Coach client responsible for 25% of the fee.

**Table 3: Referral Program Utilization**

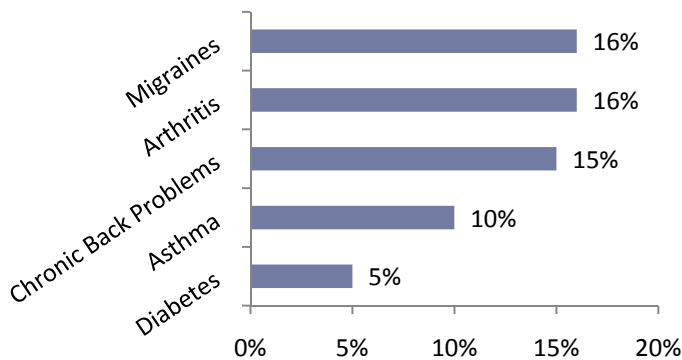
Program	Provider	2007 Utilization	2008 Utilization
Lifestyles Weight Management Program	UI Wellness	19	19
Employee Assistance Program	Faculty and Staff Services	16	36
Personal Training – One-on-One	Recreational Services	16	24
Mindfulness Based Stress Reduction	UI Behavioral Health	64	73
REACH – Diabetes Prevention	Rehabilitation Therapies - UIHC	12	8
CHAMPS – High-Risk Cardiovascular	Heart and Vascular Care - UIHC	2	12
Reimbursement for smoking cessation	UI Benefits	6	26
Disease Management	Wellmark	N/A	7

**UI Population Health**

**2008 Health Snapshot**

The information below reports on the 9,596 Personal Health Assessment users in 2008 and gives an overview of the population health indicators for the year.

**Prevalence of Chronic Conditions** – Chronic conditions are long-term illnesses or impairments that can have a significant impact on a person’s life. Many chronic conditions can be managed by health behavior change programs to minimize the severity of symptoms and their impact.



**Figure 1:** Migraines and Arthritis identified as the most significant chronic conditions reported in 2008.

**Health Screenings** – Table 4 shows the number of individuals who received various health screening tests and immunizations. The numbers of individuals screened and immunized are then presented as a proportion of individuals who SHOULD have received each test based on age, specific risk factors, or other criteria established by the US Preventive Service Task Force Guidelines. Healthy People 2010 goals are to increase to 80% the proportion of adults who have their blood pressure checked within the preceding five years, and to 95% the proportion who have their blood pressure checked in the preceding two years. Additionally, for 90% of eligible women to receive a Pap Test and for 70% of women over 40 years to receive a mammogram. **UI has met the 2010 goals for screenings.**

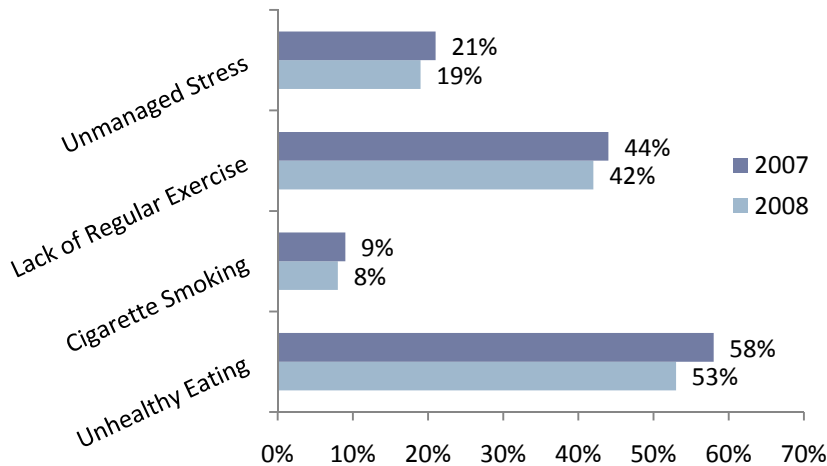
**Table 4: Preventive Health Screenings**

	Cholesterol in 5 years	Blood Pressure in 2 years	Diabetes in 3 years	Stool Screen in 1 year	Colorectal Screening	Mammogram	Pap Test
Number	6,209	9,202	3,198	1,339	2,215	3,069	6,498
% respondents	82%	97%	76%	45%	68%	78%	93%

### 2007 vs. 2008 Comparison

The information in this section reports on the 6,230 individuals who completed the Personal Health Assessment in 2007 and again in 2008, allowing for a Health Snapshot comparison for the same individuals.

**Figure 2: Prevalence of Behavioral Health Risks**



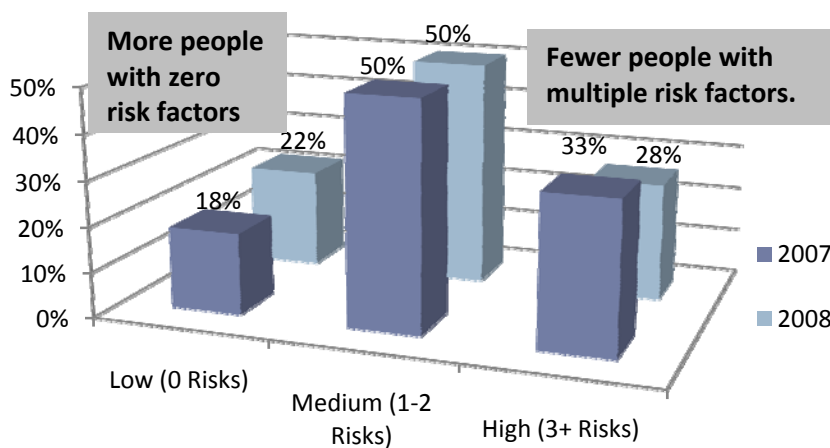
**Figure 2.** Improvements demonstrated in the areas of nutrition, stress, exercise, and smoking. The most significant improvements were related to nutrition.

### Risk Migration

The behaviors of cigarette smoking, lack of regular exercise, unmanaged stress, unhealthy eating, low fruit and vegetable intake, and binge drinking contribute to the leading causes of sickness and death. Individuals with multiple behavioral risk factors typically have higher healthcare utilization, and are among the most costly members of a workforce. When comparing the 6,230 individuals who took the Personal Health Assessment in 2007 and 2008, a significant improvement in health risk profiles was seen. The organizational goal is to provide programming that maintains low-risk individuals at low-risk, while moving those individuals at high-risk to lower risk categories.

**Figure 3** illustrates the movement amongst the three risk categories.

- The percentage of Low Risk (reporting zero behavioral risk factors) shifted from 18% in 2007 to 22% in 2008, indicating 237 more individuals reporting no behavioral health risks.
- The percentage of High Risk (three or more behavioral risk factors) decreased from 33% to 28%, indicating 288 fewer individuals in this costly category.



**Figure 3.** Research has shown that individuals with 3-4 risk factors cost \$1,261 more per year in health care expenditures. For the 6,230 alone who participated in the PHA in 2007 and 2008, 288 moved out of this highest risk category. Therefore, there is an estimated cost savings of around \$363,000 for this small population alone based upon available PHA data. In 2007, a larger than \$200,000 estimated cost savings was realized. *Edington, D.W. American Journal of Health Promotion. 15(5):341-349, 2001.*

**Work Limitations** – The Work Limitations Questionnaire © (WLQ) is embedded within the Personal Health Assessment. The WLQ measures the extent to which physical and mental health problems limit workers' ability to meet the following four types of job demands:

- **Time Demands:** Meeting a job's time and scheduling demands and following the work schedule.
- **Physical Demands:** Performing job tasks that involve bodily strength, movement, endurance, coordination and flexibility
- **Mental-Interpersonal Demands:** Performing cognitive job tasks, tasks that involve the processing of sensory information, and/or tasks that require the ability to interact with work colleagues.
- **Output Demands:** Meeting demands for quantity, quality, and timeliness of completed work.

In 2008, a detailed analysis of the UI population who completed the PHA in 2006 and 2007 was completed by Tufts University researcher and principal developer of the WLQ Questionnaire, Debra Lerner, PhD. A summary of the analysis concludes:

- As the number of total risk factors (both medical and lifestyle) increased, at-work limitations and productivity loss generally increased (worsened).
- In 2006, the subgroup with four lifestyle risk factors (alcohol risk, nutrition risk, exercise risk, tobacco risk) had double the productivity loss of the subgroup with none. In 2007, there was a four-fold difference between the subgroup with five risk factors and the subgroup with none (Merit staff were included in the 2007 population).
- In both the 2006 and 2007 sample, the total at-work productivity loss was approximately \$6 million.

The analysis also highlighted two focus areas, depression and lack of exercise, as significant risk factors associated with productivity loss.

#### **Health Coach Service - Predicted Monthly Medical Expenditure**

Health status and predicted monthly medical expenditures were analyzed in 2007 for Health Coach clients as compared to non-participants to determine the effectiveness of the service. Quality Metrics, Inc. was used as the third party vendor to conduct the analysis. Results demonstrated an improvement in health status and associated predicted medical expenditure by the participant group, as compared to non-participants. The analysis concluded that there is an expected savings of \$17 per month or approximately \$204 per year per Health Coach client.

**Based on this analysis, over \$100,000 is predicted to be saved for 2008 participants over a 12-month time period. Taking into account those who completed the service in 2006 and 2007, the savings is over \$200,000.**

#### **Satisfaction Data**

At completion of the Health Coach Service, clients are provided with a satisfaction survey. Quality and satisfaction with the service continue to be rated very high, with 97% of respondents rating the services as good to excellent in each area. Additionally, 97% of clients report that the service improved their health, 93% improved their work productivity, and 90% report improvement in their satisfaction with working at The University of Iowa.

#### **Six-Month and One-Year Follow-Up Survey**

A six month follow-up survey is distributed to Health Coach clients via campus mail. The return rate is 77%. Eighty-six percent of respondents report that they are maintaining the behavior changes made during their interaction with a Health Coach. Additionally, a similar survey is sent out one year following completion of the Health Coach Service. The return rate at one year is 78% and 95% of these clients indicate maintenance of their improved health behavior. While rates differ slightly, both the six-month and one-year survey indicate a high percentage of respondents maintaining their healthy behaviors.

## **Plans for 2009**

Plans for 2009 are focused on increasing participation in the Personal Health Assessment, Online Lifestyle Management Programs, and Health Coach Service through aggressive targeted communication to campus through multiple channels that focus on the individual faculty/staff member, supervisor and managers, and campus leaders. Based on the productivity analysis conducted using the Work Limitations Questionnaire ©, it will be important to work collaboratively with behavioral health experts and develop a comprehensive approach to depression management. Lastly, it remains vital to the program that an integrated data set including health care, pharmacy, PHA, and worker's compensation information be available for both specific analysis of interventions and design of population health strategies. This type of integration will allow for further targeting of programs and services, establishment of key metrics, and aid in the identification of enhancements in health benefit design that support prevention and health improvement.

## **Target Indicators and Key Actions for 2009**

### **Target Indicators**

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### **Key Actions**

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- Development of one new small group behavior change program in a targeted behavioral risk area.
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