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Introduction

This report summarizes the primary health findings for those individuals who completed the Personal Wellness Profile (PWP) health assessment. Group health needs and risks are presented along with recommendations for initiating risk reduction and health enhancement programs. This information is very helpful in planning a comprehensive health enhancement program for the participant population.

Improved control of behavioral risk factors, such as:

- use of tobacco
- ◆ alcohol
- drugs
- lack of exercise
- poor nutrition

could prevent:

- 1/2 of all premature deaths
- 1/3 of all cases of accidental disability
- 1/2 of all causes of chronic disability

From a report of the U.S. Preventive Services Task Force

Health Practices

By living a healthful lifestyle, much can be done to prevent serious illness and premature death. Recently, the U.S. Task Force on Disease Prevention and Health Promotion delivered a report to the health care providers of the nation. They stated that "the most effective interventions available to clinicians for reducing incidence of disease and disability in the United States are those that address the <u>personal health practices</u> of patients."

Group Needs

The PWP Executive Summary Report highlights those personal health practices most closely associated with high risk for disease and premature death. The most likely causes of death and disability for the participant population are shown with the prevalence of each contributing risk factor.

Health Age and Quality of Life

The impact of lifestyle is dramatically shown in the Health Age Summary. Studies show that most people could add five to 10 years or more to their life expectancy by choosing to follow good health practices. The potential for increased life expectancy for your group is shown.

Participant quality of life is illustrated using Health Status scores. These are compared with national norms.

Risk Reduction

The last section makes recommendations for specific interventions to reduce identified health problems in your organization. Based on this information, specific goals and planning can be provided for reducing risks, enhancing health, and improving the productivity of your group.

Demographics

There were 101 individuals from this group who participated in the wellness assessment program. The group consisted of 44 men and 57 women. The average age of the group was 46. The health norms and comparisons used in this report are based on these demographics.

	Executive Summary Rep Juniata College - 2010	ort	Page 2
Health Hazards	This report shows the personal health practices and leading causes of death nationwide. Both the numb each risk factor are shown.		
Reducing Risk	Reducing the number of people with these health reduces the health problems and costs, while improving productivity of the individuals.		•
Cardiovascular (697,754 deaths per year)	Contributing Risk Factors Personal history of heart disease, stroke or diabetes Family history of heart disease High total cholesterol (240+ or 200+ if CHD or Diabetes) High LDL cholesterol (160+ or 130+ if CHD or Diabetes) Low HDL cholesterol (less than 40) High blood pressure (140/90 and above) Smoking Diabetes/high blood sugar (100+ fast, 140+ non) Low aerobic exercise score Excess weight (BMI > 25, high waist girth or % fat) (1) *Abnormal ECG High overall coronary risk	# 8 2 8 6 25 9 3 14 31 64 0 24	% 8 2 8 6 25 9 3 14 31 63 0 24

Cancer	Contributing Risk Factors	#	%
(558,847 deaths per year)	Personal history of cancer	2	2
	Tobacco use (all forms)	11	11
	Drinking more than recommended (more than 1-2/day)	3	3
	High-fat diet	13	13
	Low-fiber diet	23	23
	Fruits and vegetables (less than 5/day)	90	89
	Excess weight (BMI > 25, high waist girth or % fat) (1)	64	63
	Bowel disease	8	8
	*Positive blood in stool	0	0
	*Positive PSA	0	0

* Concise Plus Profile does not include Factors with an asterisk.

(1) If done, waist girth or % fat may override BMI.

Accidents (102,303 deaths per year)	Contributing Risk Factors Does not wear seat belt all the time *No working smoke alarm in home Drinks and drives occasionally Does not use good lifting technique *Does not wear a helmet when applicable	# 6 0 0 13 0	% 6 0 0 13 0	
<i>Lung Disease</i> (125,500 deaths per year)	Contributing Risk Factors Smoking (cigarettes) *Low lung function (FEV1 <80% of predicted) No regular exercise Unusual shortness of breath Chronic bronchitis or emphysema (COPD)	# 3 0 31 5 2	% 3 0 31 5 2	
Diabetes (73,119 deaths per year)	Contributing Risk Factors Personal history of Diabetes High blood sugar (100+ fasting, 140+ non) Poor weight score (score < 50 or high waist girth)	# 6 10 64	% 6 10 63	
Cirrhosis, Liver (27,045 deaths per year)	Contributing Risk Factors Drinking more than recommended (more than 1-2/day)	# 3	% 3	
Suicide (30,646 deaths per year)	Contributing Risk Factors "I have recently thought about ending my life" "Feel down-hearted and blue" "Have been a happy person" "little of the time"	# 0 2 3	% 0 2 3	

* Concise Plus Profile does not include Factors with an asterisk.

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Other Key Health Practices

Lifestyle Risks	1	%
Low nutritional status	53	52
Heavily stressed (often have trouble coping)	5	5
Numerous stress signals present (3 or more)	5	5
Very unhappy with life	1	1
Low in sleep (less than 7 hours per day)	40	40
Low energy level (feel tired most the time)	10	10
Have no good social support system	8	8
Regularly use drugs that affect mood or ability		
to relax or sleep	12	12
*Consumes caffeine heavily (6 or more servings per day)	0	0

Disease States	Disease States	#	%
	*Allergies	0	0
	*Arthritis	0	0
	Asthma	13	13
	*Blindness or trouble seeing	0	0
	Bowel polyps or inflammatory bowel disease	8	8
	*Cataracts	0	0
	*Deafness or trouble hearing	0	0
	*Glaucoma	0	0
	*Kidney disease	0	0
	*Macular degeneration (AMD)	0	0
	Sciatica or chronic back problems	8	8
	*Skin problems or dermatitis	0	0
	*Ulcer or bleeding in stomach or bowels	0	0
	Chronic bronchitis or emphysema (COPD)	2	2
	Personal history of diabetes	6	6
	Personal history of heart disease or stroke	4	4
	Personal history of cancer	2	2
Medical Care Summary	Medical Care Issues	#	%
	*Doctor visits in past 12 months	0	0

	1 × 1	
0	0	
11	11	
0	0	
AMMAN	0 11 0	$ \begin{array}{cccc} 0 & 0 \\ 11 & 11 \\ 0 & 0 \end{array} $

* Concise Plus Profile does not include Factors with an asterisk.

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Health Status and Quality of Life

This is an evaluation of your population's current health status, including:

- Health perception and health status change.
- Functional status, both physical and social, as well as limitations due to physical or emotional problems.
- Well-being including bodily pain, mental health, and energy level.

By monitoring health status change over time, general health outcomes from medical care and health interventions can be measured. This type of research can help determine what procedures, treatments, and health care delivery methods are most effective or ineffective in enhancing personal health.

Health Age

Good Health Practices

- Not smoking
- Eat a good breakfast daily
- Regular aerobic exercise
- Weight in desirable range
- None or light drinking
- Seven to eight hours of sleep daily
- Avoid frequent snacking

Health Status and Quality of Life (HSQ-12)

Quality of Life Scale	Group Score	U.S. National Norms*	Low Scores (n)	Low Scores (%)
Physical Health Composite Score (PCS) males		51.05	0	0.0
females		49.07	4	7.0
Mental Health Composite Score (MCS) males		50.73	3	7.5
females		49.33	8	14.0

Note: Low scores are 40 or less. A high score is desirable

The participants' perceptions of their physical and mental health explains the variability of these scores. Compared to national norms, higher scores indicate better functioning and a higher than average quality of life. Lower scores indicate unsatisfactory mental outlook or poor perception of physical health.

Very low scores are associated with a number of health and health care consequences. These include limitations in physical activities, subsequent job loss, increased hospital stays, increase in doctor visits, probability of a chronic condition, likelihood of depression, and likelihood of five-year survival. These scores are compared with national norms.

* Ware, JE; Kosinski, M; Keller, SD. The Health Institute, New England Medical Center; *SF-12 An Even Shorter Health Survey*, Medical Outcomes Trust Bulletin, January 1996.

Ware, JE; Kosinski, M; Keller, SD. A 12-Item Short-Form Health Survey SF-12: Scale Construction and Preliminary Tests of Reliability and Validity, Medical Care, 1996.

Health Age Summary

One's choice of health practices has a significant effect on health and longevity. In a prospective study of some 7,000 people for 15 years, people who followed a healthy lifestyle lived on average 11.5 years longer than those with poor health practices, e.g., smoking, living a sedentary lifestyle, poor eating habits, being overweight, etc.

The health practices of people in your organization were compared to this study population to determine the effect of their lifestyle on longevity.

Average Age	Average Health	Average Achievable	Potential Years of Added Life
16.2	Age	Age	for Group
46.2	45.2	40.7	454.4

The average person in this group may add 4.5 years to his or her life expectancy by maintaining good health practices. For the entire group of 101 people, over 454.4 person years may be gained. The addition of these person years is invaluable. People will feel better and be more productive all the years of their lives.

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Recommended Health Actions	Based on the prevalence of health risks identified in this group, the following intervention programs are recommended. They are listed in order of need. Additional programs may include Healthy Pregnancy, Living with Diabetes, and Senior Living.
Weight Management	 Weight Management (62% are above their recommended weight range) Weight control is a commonly reported need. By losing or preventing excess weight, people can reduce their risk for heart problems, cancer, hypertension, diabetes, and other serious health problems. Losing weight can also have a positive effect on self-image.
Fitness	2. Improving Fitness (57% showed need for improving fitness levels) Regular exercise is a positive lifestyle practice that helps prevent many serious health problems: heart disease, stroke, diabetes, obesity, hypertension, and osteoporosis. It also helps ease tension and generally builds energy, self-worth, and motivation for other healthy practices such as not smoking and better nutrition. A good fitness program can be the foundation of a good health enhancement program.
Cancer	3. Cancer Risk Reduction (56% have higher cancer risk) These individuals could make lifestyle changes to significantly reduce their cancer risk. The National Cancer Institute has stated that most premature deaths from cancer could be prevented by lifestyle changes and regular preventive exams.
Nutrition	 4. Better Nutrition (52% showed need for making nutritional changes) Good nutrition is a positive step toward preventing heart disease, cancer, obesity, and osteoporosis, and improving general health and resistance to disease.
Coronary Risk	5. Coronary Risk Reduction (45% have a moderate to high coronary risk) These individuals are high risk due to existing disease, current symptoms, or multiple (two or more) risk factors. Emphasis on reducing overall coronary risk and on starting a systematic program to build heart health are always important.

Cholesterol	 6. Managing Cholesterol Levels (39% had cholesterol over recommended levels) Lowering cholesterol levels can significantly reduce risks for heart disease. For every 1% cholesterol is lowered, the risk for heart disease drops by 2%. A program of nutritional education, dietary counseling, and medical referral is needed for these individuals.
Stress	7. Managing Stress (16% are bothered by excessive stress or have an MCS score < 40) Excessive stress or poor coping ability can lead to diseases of the body and mind including ulcers, tension headaches, back problems, depression, and decreased job satisfaction and performance. Learning good stress management techniques can help people deal better with stress before it causes serious problems.
Back Care	 8. Better Back Care (13% do not know or practice correct lifting techniques) Back injury is a major cause of medical expense for most organizations. Education and training programs in lifting and back care are vital for this group.
Blood Pressure	9. Managing High Blood Pressure (9% had elevated blood pressure levels, 140/90 and above) Reducing blood pressure is a proven effective way to reduce risk for cardiovascular disease and increase longevity. Much can be done to control high blood pressure through lifestyle changes and medications. Regular opportunities for blood pressure checks, education programs, and medical referral are needed to decrease this problem.
Smoking	10. Quit Smoking (5% are smokers) Smoking cessation significantly reduces health risks and health care expense. Smoking is the most preventable cause of premature death in the United States.
Alcohol	 11. Alcohol Management (3% report drinking more than recommended) High levels of drinking lead to high accident rates, decreased job performance, and serious health problems including cirrhosis of the liver and increased cancer risk. Alcohol awareness education and referral help for those dependent upon alcohol can have a significant impact on the health of these individuals.

Intervention Strategies

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Your Next Step

To reduce costs and enhance health, the *next step* must be taken: implementing risk-reduction actions. Providing a class or a self-study guide for reducing known risks is a vital step. This table identifies the number of people in your group who could benefit from one or more of the these risk-reduction interventions.

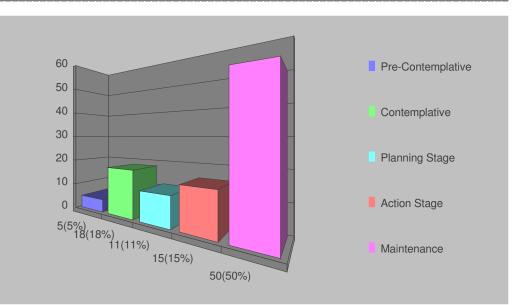
Readiness to Change

When planning your intervention strategies, it is valuable to know what portion of your group is ready to make changes for a healthier lifestyle. This graph illustrates the distribution of responses to the "live an overall healthy lifestyle" question in the "Readiness to Change" section, and includes only those who answered this question. The percentages are taken from the total population in this group.

Health Action Opportunities

Self-Help Study Guide or Class	Number of People	Percent of Group
Alcohol Management	3	3
Better Nutrition	53	52
Healthy Pregnancy	0	0
Managing High Blood Pressure	9	9
Improving Fitness	58	57
Living With Diabetes	6	6
Managing Cholesterol Levels	39	39
Stress Management	16	16
Protecting Your Heart	45	45
Quit Smoking	5	5
Senior Living	26	26
Strengthen Your Back	13	13
Weight Management	63	62

Estimated Readiness to Change Distribution



Participants in the pre-contemplative stage are not ready to make change but are ideal targets for health awareness strategies. Those in the contemplative stage need more information with encouragement and incentives. Those who are planning lifestyle improvements may need additional tools and methods for making those changes. Those in the action and maintenance stages continue to need encouragement with positive support and reinforcement.

Economic Impact Report

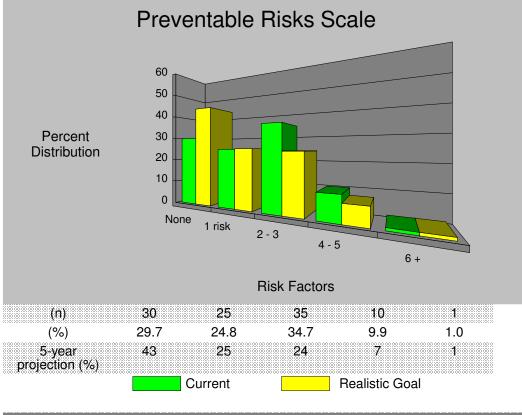
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Economic Impact of Major Health Risks

The national health care expenditure is currently 15% of the nation's gross national product, or nearly \$6,000 per person per year. Due to high health care costs, many organizations are keenly interested in the financial savings that wellness programs can provide. Over two-thirds of all companies surveyed have initiated wellness and safety programs to help curb these fast-rising costs. Recent scientific research reveals significant cost savings can be achieved by reducing health risks. Other benefits include increased productivity and job satisfaction and decreased lost time from sickness.

Risk Factors Associated with Higher Medical Claims:

- 5+ sick days/year
- Monthly drug use
- 21+ alcohol drinks/week
- Smoker
- Sedentary
- Occasional seat belt use
- Low life satisfaction
- 3+ stress signs
- ◆ > 20% overweight
- ◆ Systolic BP >= 140
- Health age > 4 years over potential health age
- ◆ Cholesterol > 240
- ◆ Diastolic BP >= 90
- Not satisfied with job
- Has COPD
- Serious health problem
- Poor health perception



Preventable Risks and Health Care Costs

A number of health risk factors have been shown to be associated with higher medical claims (see side bar). The presence of multiple risk factors provides a better prediction of future claims experience than any single factor. Based on the risk factors of participants in this group, the average medical claim per person is projected to be 3,050.14.* (A)

When your group is compared to a group with zero risk factors (average claim= \$1,385.65), your average preventable cost per person is \$1,664.49 per year. However, to achieve zero risk factors for all people is not a realistic goal. A more realistic method of estimating preventable costs is to compare your group with a company that has had an ongoing comprehensive wellness program in place for a number of years (average claim = \$2,673.93). This comparison shows preventable costs per person for your group to be \$376.21.

Therefore, by reducing preventable risks with an effective ongoing wellness program, your group could achieve a realistic total savings of \$37,996.77 per year. $(376.21 \times 101 = 37,996.77)$

* Average annual individual medical claims do not include spouse, dependent, or maternity claims.

(A) Adapted from - Yen, L. et. al., Associations between health risk appraisal scores and employee medical claims costs in a manufacturing company. American Journal of Health Promotion, 1991; 6(1):46-54. Claims have been present-value adjusted using average premium inflation rates.

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Scientific Basis for the Personal Wellness Profile

- American Cancer Institute
- American Cancer Society
- American College of Sports Medicine
- American Heart Association
- U.S. Department of Health and Human Services
- Health Outcomes Institute
- Johns Hopkins Medical Institutions
- National Academy of Sciences, NRC
- National Center of Health Statistics
- National Committee For Quality Assurance
- National Institutes of Health
- National Mental Health Association
- University of California at Berkeley
- University of Michigan
- U.S. Preventive Services Task Force
- U.S. Surgeon General's Report on Health Promotion and Disease Prevention
- U.S. Department of Agriculture's Dietary Guidelines for Americans
- World Health Organization

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