Williams College

Health Assessment
Aggregate Report

10/1/12 – 11/30/13
Executive Summary

This report is a compilation of Williams College’s population data from the Health Assessment campaign between 10/1/12 – 11/30/13. A total of 663 employees completed the health assessment. This report summarizes the demographics, health risks, healthy behaviors, medical and self-care patterns, and readiness to change of your population. The data focuses on modifiable health risk factors to help you plan more cost-effective programming to better manage the health of your population. This report will also provide you with a 2012 BCBSMA book of business comparison.

The High Cost of Modifiable Behaviors

It is estimated that the U.S. will spend $1.66 trillion on health care expenditures. Health care spending is growing faster than the gross domestic product (GDP) and is projected to account for nearly one-fifth of the U.S. economy by 2021.* A small number of chronic disorders, such as diabetes and cardiovascular diseases account for the majority of deaths each year, and the medical care costs of people with chronic diseases account for more than 75 percent of our nation’s medical care costs. As the population of the United States ages substantially over the next several decades, the prevalence of chronic diseases and their impact on health care costs will likely increase.

Each individual’s health is shaped by many factors including medical care, social circumstances, and behavioral choices. Increasingly, there is clear evidence that the major chronic conditions that account for so much of the morbidity and mortality in the U.S., and the enormous direct and indirect costs associated with them, in large part are preventable and that to a considerable degree they stem from, and are exacerbated by, individual behaviors. In particular, overweight and obesity, lack of physical activity, and smoking greatly increase the risk of developing the most serious chronic disorders. Most of the dollars spent on health care in the United States, however, are for the direct care of medical conditions, while only a very small portion is targeted on preventing those conditions. As Americans see health care expenditures continue to increase, it is important to focus on strategies that reduce the prevalence and cost of preventable diseases.

Key Findings & Recommendations

**Overall Strategy:** Provide ongoing, multi-modal wellness programming to Williams College’s employees. Based on the health assessment and biometric screening results, the following focus areas and programming are recommended.

**Weight Management:**
- 24% of participants are not eating the correct number of calories to maintain a healthy weight
- 36% of participants are not eating a low fat diet
  - 32% of participants intend to change their eating habits within the next 6 months
- 49% of participants are not getting the minimum recommended amount of exercise
  - 41% of participants intend to change their exercise habits within the next 6 months
- 48% of the participants are in the overweight or obese categories for BMI

**Cardiovascular Health:**
- 48% of the participants have some form of risk for developing heart disease
- 13% of the participants self-reported having high cholesterol
- 16% of the participants self-reported having high blood pressure
- 8% of the participants currently smoke

**Preventive Practices:**
- 9% of the participants are overdue for their colorectal cancer screening
- 3% of the participants are overdue for their mammogram screening

**Recommended Programming**
- Promote the ahealthyme tools and resources as methods of behavior change, focusing specifically on physical activity, weight management and cardiovascular health.
- Leverage ahealthyme activity and nutrition trackers to promote healthy eating.
- Offer onsite nutrition & fitness counseling sessions; promote Telephonic Health Coaching.
- Host onsite educational seminars on weight management & heart health.
- Host annual onsite biometric screenings
- Promote Preventive Screening Guidelines.
- Promote smoking cessation tools and resources.
- Implement “healthy back” program.
- Consider implementing a verifiable fitness program.
A Summary of Williams College’s Health Assessment Results

PLEASE NOTE: In some areas, the totals may be less than 100%, which indicates that some participants did not answer the question. In areas where the responses exceed 100%, participants were allowed to elect more than one answer.

Demographics

- Williams College had an equal percentage of males and females who completed the health assessment as the BCBSMA book of business; the average age, as well as the race/ethnicity breakdown of Williams College participants, was also the same as the BCBSMA book of business.

Self-Reported Risk

- While still the majority, Williams College had a significantly lower percentage of participants in the Low Risk category and a significantly higher percentage in the Medium Risk category than the BCBSMA book of business.

Total Number of Risk Factors

- Low Risk = 0 - 2 Risk Factors
- Medium Risk = 3 - 4 Risk Factors
- High Risk = 5 or more Risk Factors

*Risk status is determined from data collected from the Health Risk Assessment, including alcohol use, blood pressure, Body Mass Index, Total Cholesterol, HDL Cholesterol, the number of sick days, job satisfaction, life satisfaction, perception of health, level of physical activity, tobacco use, stress, use of drugs used to relax, stress, safety-belt usage, and any of the following medical conditions: heart disease, cancer, diabetes, stroke.
The greatest self-reported chronic condition is allergies, followed by hypertension (high blood pressure), high cholesterol, back pain and asthma.

The greatest health risk linked to excess costs is participants with existing medical problems, followed by participants with a low level of cardiovascular physical activity, and not wearing seat belts 100% of the time.
Medical Utilization

- Williams College had a lower percentage of participants report never using the emergency room during the year, but a higher percentage using it 1–2 times/year, as compared to the BCBSMA book of business.

Preventive Practices

- 9% of Williams College participants over the age of 50 have never had a colorectal cancer screening, which is significantly better than the BCBSMA book of business score of 14%.
- 3% of Williams College participants over the age of 40 have never had a mammogram, compared to 4% of the BCBSMA book of business.
- 8% of Williams College participants have not visited a dentist in the past 12 months, which is significantly better than the BCBSMA book of business score of 14%.
- 38% of Williams College participants have not had a flu shot in the past 12 months, which is better than the BCBSMA book of business score of 45%.
Lifestyle Behaviors

Tobacco Use Habits

8% of Williams College participants indicate they currently smoke cigarettes, cigars or pipe.
26% used to smoke cigarettes.

Compared to the BCBSMA business, a slightly lower percentage of Williams College participants do not drink at all, and a significantly higher percentage consume 2 or more drinks daily.
Lifestyle Behaviors (continued)

Nutrition Habits - Not eating correct amount of calories to maintain healthy weight

- 24% of Williams College participants indicated they do not eat the correct number of calories to reach and maintain a healthy weight; this is lower (better) than the BCBSMA book of business.

Nutrition Habits - No Low Fat Diet

- 36% of Williams College participants indicated they do not eat a low fat diet; this is 2% higher than the BCBSMA book of business.
49% of Williams College participants indicated they do not engage in at least 30 minutes of regular exercise 5-7 times per week, the same as for the BCBSMA book of business.

19% of Williams College participants indicated they do not effectively manage stress. This is significantly lower (better) than the BCBSMA book of business.
Readiness to Change

The stages of change describe how ready individuals are to make a health behavior change. Knowing where your organization’s individuals are in the five stages of change can help to maximize your care management strategies and resources. There are five stages of change including:

- Pre-contemplation: not intending to make a behavior change in the next 6 months (not ready)
- Contemplation: intending to make a behavior change within the next 6 months (getting ready)
- Preparation: intending to make a behavior change in the next 30 days (ready)
- Action: made the behavior change but less than 6 months ago
- Maintenance: has sustained the healthy behavior for over 6 months

- 22% of Williams College participants intend to change their exercise habits in the next 6 months; 19% intend to change their exercise habits in the next 30 days.

- 15% of Williams College participants intend to change their dietary habits in the next 6 months; 17% intend to change their dietary habits in the next 30 days.
8% of Williams College participants intend to manage their stress levels more effectively in the next six months.

**Emotional Health**

How Satisfied are you with your life?

89% of Williams College participants are completely or mostly satisfied with their lives.
In the past 2 weeks, how often did you have little pleasure/interest in doing things?

- 15% of Williams College participants had little pleasure/interest in doing things at least several days within a 2-week period.

In the past 2 weeks, how often did you feel down, depressed, or hopeless?

- 18% of Williams College participants indicated they felt down, depressed, or hopeless at least several days within a 2 week period.
Emotional Health (continued)

In the past 12 months, how many days did your feelings keep you from working?

- 12% of Williams College participants were not able to work for at least one day over the last 12 months, due to feelings.

How often do you use drugs or medications which affect your mood or help you relax?

- 11% of Williams College participants indicated they use drugs or medication almost every day and 7% sometimes to affect their mood or help them relax.
10% of the participants reported they have been diagnosed with Asthma, compared to 7% of participants from the BCBSMA book of business.
0% are not successfully treating the disease.

**Asthma Facts:**
Asthma is an obstructive lung disease caused by an inflammatory reaction and hyper reactivity of the airways to various triggers. Currently, asthma is the 6th ranking chronic condition among the general American population in terms of prevalence and the leading serious chronic illness of children in the U.S.

The financial burden of asthma is borne heavily by patients and their families. Out-of-pocket expenses for asthma are estimated at roughly 25 percent of total medical costs compared to the average of 10 percent for medical expenses for all illnesses. The average family in the U.S. spends between 5.5 percent and 14.5 percent of its total income on treating an asthmatic child.

For asthmatic employees, wage-replacement costs for workdays lost as a result of disability and absenteeism accounted for almost as much as did medical care (40 percent versus 43 percent). Both prevalence and costs of asthma have increased markedly over the past decade and a half. While there is no consensus as to why asthma prevalence has increased, scientists studying the phenomenon have postulated that obesity and lack of physical exercise, dietary changes, and increased exposure to indoor allergens are among the reasons for the increase. Treatments have become more cost-effective, however total costs have still ballooned because of the greater proportion of the population with asthma. This indicates that, in order to contain asthma costs in the future, better treatments must be supplemented with prevention strategies aimed at reducing asthma prevalence.

**Healthy Work Culture Recommendations:**
- Relocate smoking areas far from building entries and common areas
- Provide education around asthma awareness
Tobacco Use

Percentage of Cigarette Smokers in Population

- 8% of the participants reported they still smoke cigarettes, cigars or pipe, which is slightly more than the BCBSMA book of business.
- Of those, 6% smoke cigarettes, 1% smoke cigars, and 1% smoke pipes

Tobacco Use:
Tobacco use is the single most preventable risk factor for death and disease, contributing to more than 440,000 premature deaths annually in the United States during 1995 through 1999. This figure represents one out of every five deaths each year being associated with tobacco use, ranking tobacco use as the number one health problem contributing to death and disability in the U.S. Tobacco use is a risk factor for chronic lung disease, heart disease, stroke, and several forms of cancer, specifically cancer of the lungs, larynx, esophagus, mouth and bladder. Additionally, research indicates that smoking contributes to cancer of the cervix, pancreas and kidneys. Shorter-term effects of smoking include increased heart rate and blood pressure, coughing with phlegm or blood, shortness of breath when not exercising, wheezing or gasping, and reported poorer overall health.

The Costs of Smoking: The direct and indirect economic costs associated with tobacco use are significant. According to the National Institute on Drug Abuse (NIDA), the direct and indirect costs of smoking are estimated at $138 billion per year. As with other chronic conditions, employers are significantly affected by the indirect costs of the health problems that result from tobacco use. An extensive review of the literature published in 2001 found solid evidence that 6 to 14 percent of personal health care expenditures could be attributed to smoking, and that smokers had greater medical costs over the course of their lifetimes. The review also found a large number of studies that demonstrated that smokers are more costly to their employers than those employees who do not smoke. The economic costs of smoking are estimated to be about $3,391 per smoker per year. Each pack of cigarettes sold in the United States costs the nation an estimated $7.18 in medical care costs and lost productivity.

Healthy Work Culture Recommendations:
- Promote smoking cessation programs or multi-week workshops
- Provide tobacco cessation information/resources
- Restrict smoking areas outside of buildings
Hypertension

29% of the participants are in the medium to extreme risk category for hypertension (high blood pressure). (Systolic >129 and/or diastolic >84).

Hypertension:
High blood pressure (hypertension) killed 44,619 Americans in 2000 and contributed to the deaths of more than 60,000 others. Because the consequences associated with high blood pressure are so serious, early detection, treatment, and control are important.

- High blood pressure increases the risk for heart disease and stroke, both leading causes of death in the United States. About 1 in 4 American adults have high blood pressure. High blood pressure affects about 1 in 3 African Americans, 1 in 5 Hispanics and Native Americans, and 1 in 6 Asians/ Pacific Islanders.
- What do blood pressure numbers indicate? Blood pressure is often written as two numbers. The top (systolic) number represents the pressure while the heart is beating. The bottom (diastolic) number represents the pressure when the heart is resting between beats.
- High blood pressure for adults is defined as a systolic pressure of 140 mmHg or higher, or a diastolic pressure of 90 mmHg or higher.
- Optimal blood pressure is a systolic blood pressure less than 120 and a diastolic blood pressure less than 80.
- Among people with high blood pressure, 31.6% don't even know they have it.
- High blood pressure is easily detectable and usually controllable with lifestyle modifications such as increasing physical activity or reducing dietary salt intake, with or without medications.
- The Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-7) recommends that adults have their blood pressure checked regularly.

Healthy Work Culture Recommendations:
- Provide multiple blood pressure screenings throughout the year.
- Continue to offer workplace exercise programs and/or subsidize health club memberships.
- Provide healthy eating options in campus cafeterias.
Cardiovascular Disease

Percentage of Population with Risks for Developing Heart Disease

- 48% of the participants reported to having some form of risk for heart disease, including tobacco use, high cholesterol, high blood pressure, lack of physical activity or overweight / obesity.

Cardiovascular Disease:
Cardiovascular disease (CVD) is predominantly caused by atherosclerosis—a hardening of the arteries—due to a thickening of the lining of the arteries. Atherosclerosis results in inadequate blood flow to particular tissues in the body, causing poor function, damage, or death of those tissues. In heart disease and stroke, the principal components of CVD, atherosclerosis affects the arteries of the heart and brain, respectively. CVD accounts for 40 percent of the mortality in the United States, killing about 950,000 Americans annually. Taken as a whole, CVD is the cause of more deaths than the next five causes of death combined.

It is commonly believed that CVD primarily affects men and older people. However, research shows that more than half of all CVD deaths each year occur among women. Heart disease also results in significant disability among working adults. Stroke is a leading cause of serious, long-term disability that accounts for more than half of all patients hospitalized for a neurological disease. Of the 4.5 million Americans who have had a stroke, 1 million have been impaired by some form of long-term disability. Almost 6 million hospitalizations each year are due to CVD.

Costs of CVD: The NHLBI/AHA studies of CVD evaluated both direct costs (physician services, hospital and nursing home services, medications, home healthcare, and other durables) and indirect costs of lost productivity resulting from morbidity and mortality (days of work lost due to absence from work or premature death). For the year 2003, these cost categories totaled $209.3 billion and $142.5 billion, respectively. Direct medical care costs covered approximately 66 million physician office visits and 7 million outpatient department visits and over 4 million emergency department visits. CVD ranks highest among all disease categories in hospital discharges. An estimated 3 million Americans ages 35-64 who are currently free of coronary heart disease will develop the disease in the next ten years in the absence of intervention to reduce risk factors.

Healthy Work Culture Recommendations:
- Promote BCBSMA’s programs including smoking cessation, online workshops, and health coaching
- Implement a team-based walking program
- Provide onsite exercise / healthy eating seminars
- Offer a low cholesterol/low fat/low salt menu in dining commons
- Offer healthy choices in vending machines
Overweight and Obesity

Percentage of Population Overweight or Obese (BMI 25.0 and over)

- **Based on Williams College’s HA, 48% of the participants reported being overweight or obese compared to 50% of participants from the BCBSMA book of business.**

The current widely-used definition for overweight in adults is a body mass index (BMI) of 25 to 29.9, and for obesity in adults, a BMI of 30 or over. BMI is calculated solely on the basis of the height and weight of an individual; the calculation does not take into consideration the sex of the individual, the proportion of fat and muscle, or different body shapes. Excess weight, as measured by BMI, is not the only risk to health. So is the location of fat on your body. If fat is carried mainly around your waist, people are more likely to develop health problems than if fat is carried mainly in your hips and thighs. This is true even if the BMI falls within the normal range. Women with a waist measurement of more than 35 inches or men with a waist measurement of more than 40 inches may have a higher disease risk than people with smaller waist measurements because of where their fat lies.

Public health officials refer to obesity as an epidemic. The prevalence of overweight and obesity has increased dramatically in recent years, doubling since 1980, and now is seen by the CDC as one of the top threats to the health of the Nation. Weight gain is a direct function of an imbalance between the amount of calories consumed and the amount of calories expended by an individual. While there are some genetic determinants of obesity, much, if not most, of the recent increase in prevalence of obesity in the U.S. population stems from changes in people’s diets and the level of their physical activity. To some extent, these dietary changes may reflect the greater availability of pre-packaged foods, lowcost/big-portion restaurant meals, and soft drinks, all of which may be high in sugar, calories, and/or fat. This increase in obesity has occurred even though the public generally is more educated about what constitutes a healthy diet, and ingredients in food products have become more clearly identified on labels.

On the other side of the equation, changing people’s habits related to physical activity has proved to be a challenging task. Individuals who want to be more physically active, often find it difficult to do so because of demands, and other constraints associated with their work, family, and community. According to a recent study by the National Center for Health Statistics (NCHS), less than a third of US adults engage in regular leisure-time physical activity, and only about one-fifth of adults engage in a high level of overall physical activity. One study looked at adults who were trying to lose or not gain weight and found that less than 20 percent of the individuals were following recommendations about increasing physical activity and reducing calories. Also notable is a finding that only 42.8 percent of obese people who had routine checkups in the past months had been urged during those visits to lose weight.

Research has shown that as body mass increases, so does health care utilization and costs. Obesity may account for as much as a 36% increase in costs for inpatient and ambulatory care for individuals, a greater increase than that attributed to aging 20 years, smoking, or problem drinking. In addition to using more physician and hospital services,
obese individuals have high annual costs for medications, particularly those for diabetes and cardiovascular disease (CVD). One researcher estimated that obese individuals may pay as much as 77 percent more for medications compared to non-obese individuals. Conversely, there is evidence that patients who lose weight reduce their use of these kinds of medications, and even modest sustained weight loss (a reduction of 10 percent in body weight) may reduce expected lifetime health care costs for major obesity-related diseases by $2,200 to $5,300, depending on age, gender, and initial BMI.

**Impact on Businesses:** Employers and businesses bear a sizable portion of costs associated with treating obesity-related conditions, primarily in terms of lost productivity and the increased cost of health and disability insurance. Studies of overweight and obese employees have shown that obese employees take more sick leave than non-obese employees and are twice as likely to have high-level absenteeism (seven or more health-related absences during the last six months). In addition, another study found a reduction in the use of sick leave and disability pension by obese employees in the second and third years following surgical treatment of their obesity. An analysis of business costs in the late 1980s through the mid-1990s found that in 1994, due to conditions associated with obesity, employees:

- lost 39.3 million workdays (a 50 percent increase since 1988);
- made 62.7 million visits to physician offices (a 88 percent increase);
- had 239 million restricted activity days (a 36 percent increase), and
- had 89.5 bed-days (a 28 percent increase).

The costs to U.S. businesses of obesity-related health problems in 1994 added up to almost $13 billion, with approximately $8 billion of this paying for health insurance expenditures, $2.4 billion for sick leave, $1.8 billion for life insurance, and close to $1 billion for disability insurance.

**Healthy Work Culture Recommendations:**
- Provide dietary/healthy eating classes
- Initiate a peer supportive diet and exercise program
- Offer workplace exercise programs and/or subsidize health club memberships
- Provide healthy eating options in the dining commons
- Minimize unhealthy choices in vending machines
Depression

Percentage of Population with High to Extreme Risk for Depression

- 9% of participants scored high to extreme for depression/low "life satisfaction" compared to 11% of participants from BCBSMA book of business.

The economic burden of depression totaled $83.1 billion in 2000. Of this total, $26.1 billion (31%) were direct treatment costs, $5.4 billion (7%) were suicide-related costs, and $51.5 billion (62%) were workplace costs.

The Facts about Depression
- Depression ranks among the top three workplace problems, following only family crisis and stress.
- In an EAP study of the First Chicago Corporations, depression accounted for more than 50% of all mental health dollars spent. The dollar amount spent to treat depression nearly equaled the amount spent on the treatment of heart disease.
- 3% of total short term disability days are due to depressive disorders and in 76% of those cases, the employee was female.

Employee Attitudes Toward Depression
- Many individuals are unaware they have depression.
- Employees believe that they can handle depression on their own.
- Some will not seek assistance as they are concerned about the employee confidentiality policies and the potential impact on their career.
- Most employees are unaware of assistance programs or believe their insurance will not cover treatment.

Learn to recognize the symptoms of clinical depression in the workplace
There are many different signs and symptoms of clinical depression. Each individual is unique, so no list of symptoms will fit every situation. According to the National Mental Health Association, depression often manifests itself in the workplace in the following ways:
- Decrease in productivity
- Morale problems
- Lack of cooperation
- Excessive fatigue
- Unexplained aches/pains
- Safety problems/accidents
- Excessive absenteeism
- Alcohol and/or drug abuse

Healthy Work Culture Recommendations:
- Promote Employee Assistance Program
- Promote online stress management / depression prevention programs offered through ahealthyme
- Offer onsite stress management seminars/workshops
Diabetes is a group of diseases in which blood glucose (sugar) levels are elevated either because of failure to make adequate amounts of the hormone insulin or failure of cells to respond to insulin. Diabetes results from interaction between inherited, autoimmune, and environmental factors. There are two principal forms of diabetes that account for the majority of cases.

**Type 1 diabetes**—often called "insulin-dependent diabetes mellitus" or juvenile-onset diabetes, develops when the body's immune system destroys pancreatic beta cells, the cells in the body that make the hormone insulin that regulates blood glucose. Thus the pancreas can no longer produce insulin. This form of diabetes usually strikes children and young adults, and requires them to take several insulin injections a day to survive. Type 1 diabetes may account for 5 to 10 percent of all diagnosed cases of diabetes.

**Type 2 diabetes**—is sometimes termed "adult-onset diabetes" or "non-insulin dependent diabetes mellitus," even though some affected individuals require insulin for control of the disease. Type 2 diabetes usually begins as insulin resistance, a disorder in which cells do not use insulin properly. As it progresses, the pancreas gradually loses its ability to produce insulin. Type 2 diabetes often appears after age 40, although it is now being diagnosed increasingly in children and adolescents. This form of diabetes accounts for 90 to 95 percent of all diagnosed cases of diabetes.

The CDC has estimated that one in three persons born in the U.S. in 2000 has a lifetime risk of developing diabetes, unless significant changes occur in patterns of eating and exercising, and that 39 million people in the U.S. could have diabetes by 2050. Untreated or poorly treated diabetes can result in death or significant disability, including heart disease and stroke, kidney failure, blindness and lower limb amputations. More than 60 percent of non-traumatic lower-limb amputations occur among diabetics. Diabetes is the leading cause of new cases of blindness for adults aged 20-74, and is the leading cause of treated end-stage renal disease accounting for 43 percent of new cases. Other complications of diabetes include: high blood pressure, nervous system damage, dental disease, complications of pregnancy, acute life threatening events caused by biochemical imbalances, and susceptibility to other illnesses and worse prognosis over the course of these illnesses.

**Costs of Diabetes:** CDC research has shown that people with diabetes lost 8.3 days per year from work, accounting for 14 million disability days, compared to 1.7 days for people without diabetes. The ADA study examined total U.S. expenditures for major health care services, including inpatient, hospital outpatient, emergency, physician office, nursing home, home health and hospice care, and determined that these services cost a total of $865 billion, and that $160 billion or 18.5 percent of this total was incurred by people with diabetes. Per capita medical expenditures totaled $13,243 for people with diabetes and $2,560 for people without diabetes.