Developing a Comprehensive Wellness Program Initiative to Impact Health Care Costs

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Abstract

Now more than ever, employers are looking at implementing or enhancing worksite health promotion and wellness programs to help control health care costs. Research[1] has shown that cost follows risk and as the number of risk factors an employee has increases the cost significantly increases and as risk decreases, costs decrease. It is therefore the goal of any worksite health promotion and wellness program to keep low risk employees at low risk throughout their working career and to move high risk employees to lower risk categories. In order to manage costs, employers must manage risks and they do this by offering their employees a comprehensive health promotion and wellness program. If employers do this well, they can realize a significant return on investment (ROI)[2].

Using this research and data collected from an employee wellness survey, Central Michigan University (CMU) redesigned its existing program and implemented a comprehensive employee wellness program in May 2005 to better meet program goals and to align with the university mission and vision. The program enhancements included:

- Using an on-line comprehensive Health Risk Assessment (HRA) for increased accessibility, risk identification, targeted programming and data collection purposes
- Providing incentives that reward employees for desired behaviors rather than for outcomes (biometrics)
- Targeted intervention programs
- Education on how to use benefits and becoming better healthcare consumers
- Self-care
- Weekly wellness tips and monthly newsletters

Less than two years into the program the university has already realized some significant benefits that include:

- Employee participation in the program has increased **164% (2.6 times)**
- Below market increases in medical and prescription drug plan rates (8.5% and 8% respectively) in 2006/07 and a potential for no increases in 2007/08.
- A **7% reduction** in medical claims from 2004/05 to 2005/06
- An return-on-investment in 2005/06 on medical claims of $**9.63:1**
- A claims shift in 2005/06 from more costly facility services to less costly preventive services
  - Facility costs are down **13%**
  - Employees and dependents having annual physicals has increased **39%**
  - Preventive screenings have increased **59%**

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[1] Yen, Louis, PhD, et al. *Association Between Wellness Score from a Health Risk Appraisal and Prospective Medical Claims Costs.* JOEM, Volume 45, Number 10, October 2003: pgs 1049-1057

[2] Harris, John, Med and Baxter, Jerid, MPH. *From 0 to 500 in 30 Years Flat.* Absolute Advantage: The Worksite Wellness Magazine, The Wellness Councils of America, 2002: Volume 1, Number 6; pgs. 32-35.

Introduction of Organization

Central Michigan University

Central Michigan University is a multifaceted university that is helping shape Michigan's future and preparing graduates for careers in a global economy. With 27,025 students, it is the fourth largest public university in Michigan, offering students a choice of more than 200 academic programs at the bachelor's, master's, specialist's, and doctoral levels.

CMU distinguishes itself from other universities through its caring community and the way it engages students in learning, leadership, research, and service – a distinction that makes it one of Michigan's great economic values.

Nearly 96 percent of CMU's students come from Michigan, and 80 percent return to work in Michigan, contributing $2 billion annually to Michigan's economy. For the 20,025 undergraduate students at its Mount Pleasant, Michigan, campus, the university also offers The CMU Promise – tuition rates that are guaranteed not to increase for five full years.

The university's friendly and accessible 480-acre main campus blends classic early 20th century architecture with new health professions, library, residence halls, and music facilities. A new teacher education building will break ground in spring 2007.

CMU's off-campus programs enroll another 7,075 students at more than 60 locations through Michigan and the nation.

CMU was founded in 1892 and became a university in 1959. Today, CMU awards more than 6,000 degrees a year and remains connected to more than 158,000 living alumni throughout the state of Michigan and beyond.

Statement of the Problem/Initiative

While CMU had good intentions when it implemented its employee wellness program in February 1999, by June 2004 (year 6) financial support for the program was waning, participation was declining and showing program worth was difficult. CMU was faced with the decision to redesign its program focusing on the key elements of a comprehensive and results-oriented program or eliminate the program altogether. In addition, CMU had moved to self-funding its medical plan in July 2003 and saw wellness as an opportunity to help control health care costs for which it had assumed risk.

A comprehensive, results-oriented wellness program is described by the Wellness Councils of America (WELCOA) as having the following 7 common practices or benchmarks they call the "Seven C's"[3]:

a. Capturing Senior-Level Support
b. Creating Cohesive Wellness Teams
c. Collecting Data to Drive Health Efforts
d. Crafting the Annual Operating Plan
e. Choosing Appropriate Interventions
f. Creating Supportive Environments
g. Consistently Evaluating Outcomes

The most obvious problems with the initial program design were the Health Risk Assessment (HRA) tool used for data collection and the incentive program. The program began solely as a Health Risk Assessment (HRA) program. The assessment was

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[3] Hunnicutt, David and Angie Deming. *Building a Well Workplace*, Well Informed, The Wellness Councils of America, 1999: Volume 1, Number 1

developed and administered in-house as a cost savings measure. Employees were given an incentive (t-shirt or towel) for completing the initial HRA, which consisted of 16 questions addressing 9 wellness criteria. These criteria, tobacco use, blood pressure, body mass index (BMI), seatbelt usage, cholesterol and LDL levels, regular exercise and absenteeism were selected because they were modifiable behaviors and behaviors that were driving health care and productivity costs at CMU. Employees were given an initial "wellness" score and given educational materials and follow-up in areas where wellness points were not received. Employees were invited to complete subsequent assessments every 12 months and those receiving 7 points or more were given the choice of $120 in cash or an extra vacation day.

While some program participants reported improvements in health status and risk reduction, participation in the HRA program was poor. From February 1, 1999 and June 30, 2004, 297 employees had completed an initial HRA, which was only **13.5%** of the total employee population at CMU. The benchmark for participation in a HRA program is 80% in at least 1 year and 60% participation twice every 4 years[4]. These levels of HRA participation provide the employer with significant group data which summarizes major health problems and risk factors prevalent in the population. It also allows the employer to better address the health problems through programming and education. With this program design, the CMU program fell far short of achieving these participation benchmarks. As a result, it was difficult to meet the goals of the wellness program and to justify the continuation of the program.

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[4] Musich, Shirley, et al. *Benchmarking Longitudinal Health-Risk Appraisal Participation Trends*, AWHP Worksite Health, Summer 2001; Pg 37 – 43.

There are a number of factors that affected the participation and success of this program. Participants were required to provide lipid profile information (total cholesterol and HDL levels) from blood work taken within 12 months of assessment. This posed an inconvenience and expense for participants which may have outweighed the incentive received. Participants were also required to travel to the Central Health Improvement Program (CHIP facility) on campus to have height, weight, blood pressure and waist circumference measured. This affected accessibility and posed another inconvenience for participants. Other contributing factors included the elimination of the cash incentive for staff employees in 2003/2004 due to university budget reductions and the fact that participants were rewarded for low risk status, rather than for participating in healthy behaviors that ultimately lower their risks and health care costs.

In order for CMU to fully realize the benefits of the employee wellness program, the following changes were proposed:

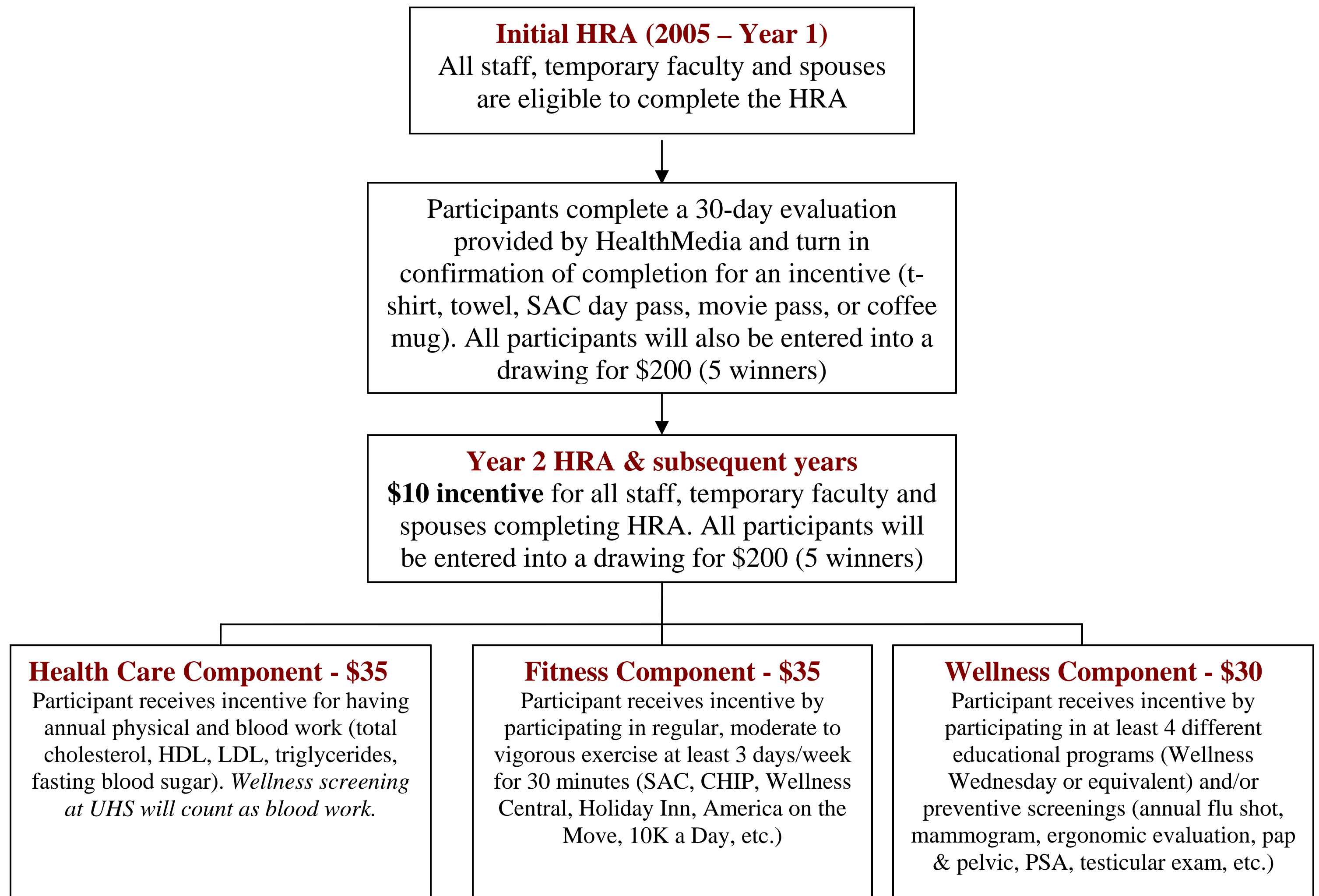
1. **Investment in a comprehensive Health Risk Assessment (HRA) tool which included intervention programs for employees and outcomes measures for CMU** **-** While the initial decision to develop and administer an HRA in-house seemed like a good one in 1999, it had not been effective in meeting the program objectives. In order for CMU to have a greater impact on changing behaviors and improving employee health and at the same time impacting health care costs, it was recommended that CMU enlist the assistance and expertise of a vendor who could provide a more comprehensive web-based HRA that was more accessible to all CMU employees and which included immediate intervention programs for making

behavioral changes. The vendor would also analyze and compare HRA results to CMU health care costs to measure outcomes.

2. **Change the incentives for program participation** – Participants completing the initial HRA received the choice of a t-shirt, towel or key chain. If participants scored 7 or more points on a subsequent HRA, staff employees received an extra vacation day paid for by their department and faculty received a choice of $120 or a discounted membership to campus fitness facilities. The $120 cash incentive was eliminated for staff employees in 2003/2004 as a budget reduction measure, leaving staff employees with only the vacation day incentive. The vacation day was not enough incentive for many staff employees to participate in the program, as they already have substantial vacation time accrued. Regardless of the incentive received, the major problem with the current incentive system was that it rewarded participants based on risk level (normal blood pressure, normal cholesterol levels, normal Body Mass Index, etc), rather than reward participants for participating in behaviors that improve health and well-being.

   Dr. Dee Edington at the University of Michigan's Health Management Research Center and other researchers have found that cash rewards used as positive reinforcement to strengthen desired behaviors are the best motivators. The cash incentive allows the recipient to use it for something personally meaningful, rather than accept a prize selected by someone else.

   In order to motivate employees to participate in the new HRA program and to encourage them to maintain or adopt healthy behaviors and preventive practices, the following incentive structure was recommended and implemented:



3. Health Care Earnings Incentive – Connecting Wellness to Benefit Costs

In year 3, a proposed enhancement to the program will include an incentive that will strengthen the motivation for employees to continue healthy behaviors and to recognize a more direct impact on health plan costs. As the participation increases and employees participate in the three components of Health Care, Fitness, and Wellness, claims costs should begin to decrease. In years that claims fall below original projections, the excess premium collected will be shared with employees as a gain-sharing reward incentive.

Design

As illustrated above, the new CMU employee wellness program has been implemented in 3 phases. It should be pointed out that the new program was rolled out to all temporary faculty and staff employees and their spouses (HRA only) if the spouse was enrolled the CMU self-funded medical plans. The CMU faculty is not a part of this program because their medical plans are not currently self-funded and therefore the potential to impact premiums is minimal and it would be very difficult to show ROI with this group.

Year 1- 2005/2006: The focus for year 1 of the program was to implement the first 5 common practices or benchmarks.

1. **Capturing Senior-level Support:**
    a. Proposal for the Revision of the CMU Employee Wellness Program was presented to the Executive Committee for support and funding.
    b. Once approved, Human Resources conducted presentations for all of the union leadership to get their approval and buy-in for the new program
    c. Approval and support for the implementation of the weekly wellness tip and monthly newsletters
    d. Participation in the program
2. **Creating a Cohesive Wellness Team:**
    a. **CMU Health Care Committee** - CMU was fortunate to have an established health care committee comprised of representatives from all of the employee groups at CMU. The committee was assembled in 1996 to research and recommend an alternative health care/prescription drug plan

that would both meet the needs of CMU employees and eventually save dollars to both CMU and its employees. It seemed logical that this group should also function as the employee wellness committee. This group spent most of 2004/2005 learning about wellness and helping to identify vendors and incentives that would be attractive and meaningful to employees.

b. **Wellness Advocates** – This program was implemented in 2000 and continues today. These advocates assist the wellness staff by disseminating wellness information, providing suggestions and feedback for wellness programming, encouraging and recruiting coworkers to participate in wellness activities and are actively involved in maintaining or improving their own personal wellness. Currently there are 40 faculty and staff who have volunteered to act as wellness advocates in their respective buildings. They all received an embroidered shirt for volunteering.

3. Collecting Data to Drive Health Efforts:

a. **Employee Wellness Survey** – The initial survey was conducted in October 2004 and will be repeated again in October 2007. The survey was designed to gather information on employee wellness program interests, knowledge of and participation in the employee wellness program and information on lifestyle behaviors (tobacco use, exercise habits, participation in wellness screenings and dietary habits). This information

was used to support the revision of the wellness program and to provide targeted and appropriate interventions and programming.

b. **New on-line Health Risk Assessment (HRA) tool:** The HRA is one of the most powerful tools when it comes to measuring results of wellness programs. The CMU Health Care Committee researched and evaluated various vendors in the fall of 2004. Several vendors allowed committee members to complete on-line assessments to get a better idea of how the tools worked and to test other on-line services and reports. This was very beneficial and critical to deciding on a vendor of choice. A vendor was selected and a contract for services was signed in March 2005.

Employees and their spouses (if enrolled in a CMU health plan) were invited to complete HRA #1 starting with benefits open enrollment in May 2005. Upon completion of the vendor 30-day evaluation, the participant could select from a variety of prizes for completing the HRA.

436 employees and spouses completed HRA#1 which was an increase of 271 or 2.6 times the number of participants who completed an HRA under the old program.

The vendor provides an aggregate report which provides risk factor information that can be used to provide appropriate interventions to maintain or change these risks.

4. **Crafting an Operating Plan:**

   a. **Mission Statement –** The mission of the CMU wellness program is to promote a healthy university community through assistance, awareness and education. The wellness advocated assisted in developing this mission statement for the wellness program in 2000, which continues today.

   b. **Goals and objectives –** Program goals and objectives were identified.

   c. **Timelines were established**

   d. **Itemized Budget –** The following is the projected budget for year 1:

EXPENSE ITEM	COST
HRA (includes 4 intervention programs and outcomes analysis costs)	**$23, 860.00**
Incentives:	
t-shirts – in stock	**0**
Towels – in stock	**0**
SAC Day Passes 200 @ $6	**$1,200.00**
Coffee Mugs 200@ $7	**$1,400.00**
Movie Passes 200 @ $5	**$1,000.00**
Cash Drawing	**$ 200.00**
TOTAL	**$27,660.00**
Cost per employee (100% participation)	**$11.74 annually or $0.98/month**

   e. **Marketing/Communication Strategies**

      i. Staff Meetings – Presentations on the new program were conducted for departments on campus.

      ii. Benefits Open Enrollment – A portion of all of each of the workshops during open enrollment was dedicated to presenting the new wellness program

iii. Weekly Wellness Tips and Monthly Newsletters – every Thursday CMU temporary faculty and staff receive an electronic wellness tip and the first Thursday of the month they receive the monthly wellness newsletter. Marketing for the new program was included periodically from January – December 2005.

5. **Choosing Appropriate Interventions**

   a. **HRA Vendor –** CMU selected a vendor that offers 4 intervention programs packaged with the HRA. Upon completion of the HRA all participants have access to the 4 intervention programs that address many of the risk factors identified in the assessment. The programs offered by this vendor are weight management, nutrition, smoking cessation and stress management and are available to CMU employees and their spouses on-line 24/7.

   b. **Fitness Opportunities -** Wellness survey and HRA data has shown that fitness is a top priority for CMU employees. The wellness program offers opportunities for employees to participate in fitness activities at work with such activities as the annual scavenger hunt and poker walk. Employees can also purchase memberships to two campus fitness facilities - Central Health Improvement Program (CHIP facility) and the Student Activity Center (SAC)

<u>Year 2 – 2006/2007 – Actual Budget $111,756</u>

CA$H in on Wellness Program -The emphasis in Year 2 was to provide cash incentives that rewarded desired behaviors rather than rewarding for outcome measures or

biometrics (blood pressure, BMI, tobacco use, cholesterol levels, etc). The four desired behaviors are completing the HRA (HRA Component), having an annual physical and blood work for prevention and early detection (Healthcare Component), participating in regular exercise (Fitness Component) and participating in programs and screenings to improve or maintain health and wellness (Wellness Component).

During the 2006/2007 fiscal year, CMU employees have the opportunity to earn up to $110 or $120 for completing the 4 wellness program components. Because the various components have their own timeframe for completion, awards are earned separately throughout the year. The challenge for Year 2 was to come up with a timely and effective award system.

Several options were considered such as adding the award to the employee's paycheck. Because wellness awards are taxable income, it was felt that the significance of the award might be missed and the connection between the completion of desired wellness behavior and award for that behavior would be lost. Prepaid credit cards were also considered, but the cards did not come in the dollar values needed and the processing fees were excessive. An on-line award system was finally selected because it provided efficient and timely awards and employees had the option of redeeming their award for merchandise, gift cards or gift certificates.

CMU selected a vendor who could customize the redemption site and who works with 400 national retailers with 5000 different items for employees to choose from. Employees can redeem their awards immediately or let them accumulate as their awards never expire. CMU orders awards monthly and employees receive their awards within 2 days of placing the order.

The other challenge was to develop a tracking system for the various components. The HRA tracking was provided by the HRA vendor. Tracking forms were developed for the other 3 components. These forms are available on-line for all employees. A database has been developed to track the employees completing the various components for future budget projections and to measure participation rates.

Year 3 – 2007/2008 Projected Budget $137,000

In the upcoming fiscal year, CMU will implement the final phase of the program which is gainsharing. This program is designed to motivate employees to continue to participate in healthy lifestyle behaviors and to become better health care consumers. All employees enrolled in the self-funded CMU health plan and who also complete all 4 components of the wellness program beginning with the HRA in May 2007 will be eligible for the gainsharing program. If the CMU self-funded medical and prescription drug plans have a positive balance after all expenses are covered and reserves are fully funded, CMU and the employees in the plan will split the surplus based on percent of employee participation and the employees will then receive gainsharing checks from their share of the split. The CMU Health Care Committee reviewed and recommended program specifics which will be taken forward in February 2007 for final approval.

Implementation Process

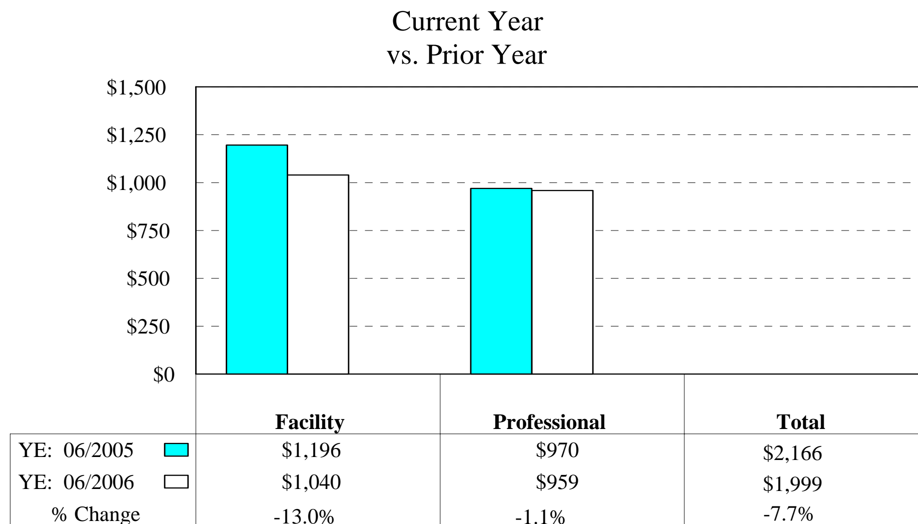
These have been discussed throughout the document. The CMU employee wellness program can be contacted for more specific timelines.

Benefits

With all wellness programs, return-on-investment (ROI) takes a few years to materialize since behavior changes impact health over time and are not immediate. CMU has however realized the following benefits from this initiative:

1. Overall participation in the Health Risk Assessment (HRA) program has increased from 297 to 436, which is an increase of164% or 2.6 times the participation in the old program.
2. The percent of employees completing the HRA has increased from 13% (297 employees) to 26% (424 employees) with the new program.
3. CMU spent $42,102 on employee wellness in 2005/2006 and at the same time experienced a 5.9% decrease in medical claims in the same time period of $405,469. This is a return-on-investment of $9.63:1.
4. CMU is seeing a shift from the more costly facility inpatient services to the less costly professional services as indicated below:

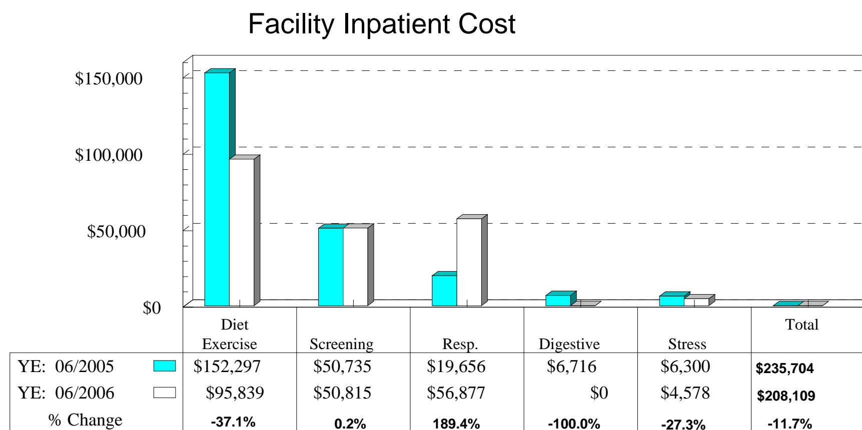
Central Michigan University
Payments per Member by Line of Business



	Facility	Professional	Total
YE: 06/2005	$1,196	$970	$2,166
YE: 06/2006	$1,040	$959	$1,999
% Change	-13.0%	-1.1%	-7.7%

The overall cost per member *decrease* was 7.7% in the current experience period. Facility cost per member decreased the most 13.0%, moving from $1,196 to $1,040 and was the largest contributor to the overall cost per member decrease. The decrease at the Facility Inpatient location had the largest impact. The Professional location also experienced a cost per member decrease of 1.1%, moving from $970 to $959. The only place of service that experienced an increase was the Professional outpatient.

5. Preventive medicine and wellness activities promote good health and are associated with decreasing the number of costly inpatient hospitalizations for specific illnesses related to lifestyle choices. As the graph below shows, CMU has experienced a 37.1% decrease in facility inpatient costs for admissions related to diet and physical inactivity.



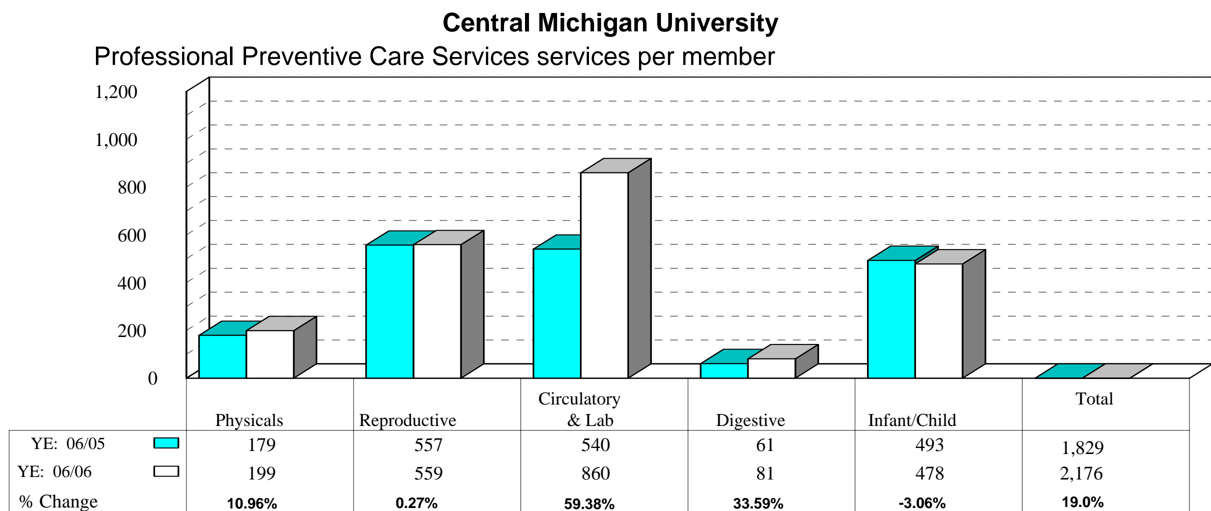
	Diet Exercise	Screening	Resp.	Digestive	Stress	Total
YE: 06/2005	$152,297	$50,735	$19,656	$6,716	$6,300	$235,704
YE: 06/2006	$95,839	$50,815	$56,877	$0	$4,578	$208,109
% Change	-37.1%	0.2%	189.4%	-100.0%	-27.3%	-11.7%

Current period hospitalizations for lifestyle related diagnoses relating to diet and physical inactivity were potential contributing health risk factors to the patient’s condition comprised 6.3% of inpatient admissions. Admissions for these diagnoses decreased from 14 (prior) to 11 (current). Diseases in this category

include coronary artery disease, stroke, heart attack and obesity. Total expenditures in this category represented less than 10% of all inpatient costs for lifestyle related admissions.

Diseases where early detection and screening can have a positive impact accounted for 5.1% of all life style related admissions. Total admissions in this category stayed the same (9). In addition, it should be noted that the number of outpatient visits for screening decreased 2.6% to 436, which indicates that some CMU member are moving screening for these procedure to the Professional office setting where they are covered under the preventive service benefits offered under the PPO.

6. CMU has experienced an increase in preventive services as indicated below. Preventive Medicine promotes good health. Encouraging members to participate in routine physical exams, gynecological exams (with pap smears), fecal occult blood and PSA (Prostate Specific Antigen) testing, immunizations and other preventive care services leads to better quality of life and can decrease costs of catastrophic care in the future.



	Physicals	Reproductive	Circulatory & Lab	Digestive	Infant/Child	Total
YE: 06/05	179	557	540	61	493	1,829
YE: 06/06	199	559	860	81	478	2,176
% Change	**10.96%**	**0.27%**	**59.38%**	**33.59%**	**-3.06%**	**19.0%**