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INFORMATION EXCHANGE FOR
VALUE-BASED DESIGN

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October 22, 2009

Value-Based Designs

Presented to the Michigan House Committee on Public Employee Healthcare Reform

Cyndy Nayer, MA, President and Chief Executive Officer of the Center for Health Value Innovation

Madam Chair Byrnes, and Members of the House Committee on Public Employee Healthcare Reform, thank you for the opportunity to provide these comments today.

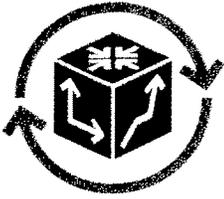
The Center for Health Value Innovation is barely 3 years old, a 501c3 non-profit, and our membership represents over 40 million covered lives. We began with a mission of sharing the evidence and driving the innovation in value-based design. As the information exchange for value-based design (VBD), we scan the market, identify what works and what is not sustainable, and share both the evidence and the passion for improved health and economic outcomes.

In the early 1970's and for the next 15 years, the connection between improved medical care to improved health status was not very well understood.

The Rand Corporation first studied the original concept of copays based upon financial and clinical need married to incentive-based design in 1991 (Brook, R.H., "Health, Health Insurance and the Uninsured," JAMA 265 (20):2998-3002, 1991). In this 11-year population-based study, which began in the early 1970s, Brook concluded that higher levels of cost-sharing led to decreased use of the healthcare system. Elimination of cost-sharing led to an increased use in medical care but, at the time, the researchers were unable to demonstrate that this led to improved outcomes (Nayer, Mahoney, Berger, Leveraging Health.2009; page 22).

It was not until the connections between improved medical care and improved health and productivity—the economics of improved health—were documented by Michigan's own Dee Edington, PhD at the University of Michigan, together with another good friend and colleague of the Center, Dr. Wayne Burton of BankOne and later JPMorgan Chase, that we could begin to develop and apply the concepts of value-based design: health and productivity management are intrinsically tied for economic improvement and sustainability.

These early pioneers, and now, innovators and experts, are sharing their path to predictable, sustainable health cost trend that supports business strategy and community health improvement.



The early work was based on chronic care management, and the stories that became legend were built in Asheville, NC and at Pitney Bowes (designed by my partner and co-founder in the Center and the retired Global Health Strategist for Pitney, Dr. Jack Mahoney). The legend grew that free drugs for diabetes, asthma and hypertension would reduce health costs, drive productivity, and be sustainable.

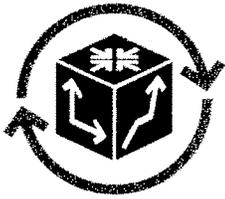
If that were the case, then every Medicaid recipient in the United States would be compliant with his or her treatment, adherent over time, and we would not have the burgeoning diabetes epidemic that we have. And, while we consider the facts versus the legend, let's also be sure that we recognize that the real epidemic in this country is hypertension, uncontrolled in 59% of the insured population and in 79% of the uninsured (Commonwealth Fund, 2008). In the face of diabetes and hypertension, a co-morbid condition of diabetes, it is the hypertension that drives the emergency room visits, the early cardiovascular complications, the renal disease and kidney failure, the coronary heart failure, the blindness and the amputations. Much of this is preventable through adherence to the appropriate care, which is much more than free drugs as prescribed. Diabetes is a cardiovascular condition that with blood sugar elevation, as one of our members once told me.

As a co-founder of the Center and the experienced market surveyor, I began 4 years ago to build the quantification of the market of VBD. How many were in it, how many were thinking about it, and what levers—incentives and insurance design—did they use? Recently Towers Perrin published a study that said that 49% of the US employers had a form of VBD for drug therapies. We know, however, that a VBD is much more than drug co-pay reduction, and that it can deliver much more in prevention, wellness, early risk reduction, and productivity.

There are 3 categories of VBD: Prevention and wellness (we call this individual competency), Chronic Care Management, and Care Delivery. There are over 100 levers that companies use to encourage or discourage use of medical care based upon evidence, business strategy, and population health indicators. We have rolled the 100 levers into 15 macro levers. Further, we have tracked the maturation of the market and shift in philosophy, sophistication and outcomes.

Here is what we know:

1. No company uses only one lever. Levers can be reduced co-pays, deposits in health savings accounts, personal days off, or even a ticket to a ballgame; they can also be increased premiums for inappropriate use, high tiering of services that are used inappropriately (such as emergency room visits for a sore throat), and more.
2. No company succeeds at VBD without a substantive prevention and wellness focus. They may begin with a health risk appraisal and biometric screen, reported to them in the aggregate by segment, zip code, etc, but they quickly expand the offerings to include annual physicals, age and gender appropriate screens and immunizations, behavioral health access, and even urgent care/convenient care services. This use



of preventive and predictable interventions moves the company from reactive (high costs are out of control) to pro-active (linking the business of the company with the improved health status of its workers, their families, and the community).

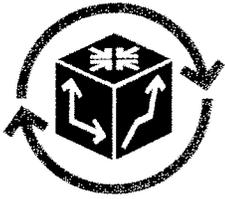
3. Companies who succeed have 1 or both of the following quality-improvement platforms: either they use a risk management focus to identify early and future risk (thereby managing waste and controlling for potential new costs) and/or they use a process improvement platform (such as Six Sigma, Lean, ISO 9000) and they wrap the medical community into the platform, driving improved engagement, adherence and efficiencies for better outcomes.
4. Once companies begin to drive the quality improvements, they begin to influence their communities for better health. After all, when you get a hospital system to improve its processes or a small physician office to begin to track care on an electronic medical record (EMR), then these efficiencies permeate the system and other plan sponsors—small and large employers, the health hospital system as an employer, the governments—reap the benefits of the innovation from an employer-sponsored change.

I was invited to participate in a Calhoun County collaborative meeting in late 2007. A multi-stakeholder group, including hospital, physicians, employers, health plans, and more, were building a new care program called a patient centered collaborative. It was almost 1 year old, and someone in Michigan thought they should hear what I had been uncovering. Since then, we have educated, convened, approved, raised funds, and implemented a VBD in Kellogg, Kellogg Foundation, and the City of Battle Creek, and we hope that the Battle Creek Health System will launch their VBD in January 2010. Again, a quality improvement process, focused on prevention and chronic care, showing promising results, needed the collaborative engagement of the businesses of the community for a complete health value chain.

Like most, the group started with a focus on managing diabetes. Integrated Health Partners is visionary physician group, Blue Cross Blue Shield of Michigan is the willing partner in Battle Creek, but I've spent time with another partner, Priority Health, who has launched (or is in the process of launching) several VBD in other venues in Michigan. We received funding and in-kind services from several organizations, including Denso, Merck, Pfizer, Novo Nordisk, Novartis, sanofi-aventis, Takeda, and Johnson and Johnson, and from the Robert Wood Johnson Foundation. I want to clarify: at no time was there any promotion of pharmaceutical drugs—these folks are working side-by-side with us to understand the adherence barriers, the key statistics and health indicators, and the communication barriers to improved diabetes, pre-diabetes, and hypertension/cholesterol control in this community.

What do we know? In Michigan, in the 2 years we've been involved, the rate of diabetes has increased from 8.5% diagnosed to 9%, with another 3rd undiagnosed (Michigan Diabetes Burden...accessed 9.09). Even more frightening:

- 27.3% have pre-diabetes, but 35.5% of adults over age 35 have pre-diabetes



- 28% of diagnosed population have had stroke, angina, heart attack or CVD
- **66.7% of MI adults with DM have been diagnosed with hypertension (HTN)**
- 2006: 42% of newly diagnosed ESRD (end stage renal disease) had a primary diagnosis of Diabetes
- 2007: 20.1% of vision impairment had diagnosis of diabetes

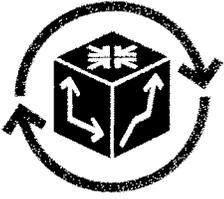
We estimate that 1/3 of the Battle Creek population is not appropriately diagnosed with diabetes. Further, the total cost of care for the diabetic population in our study (just under 4000 people) is almost \$60,000, 000, just under 25% of the total cost of care across the 64,000 lives in the database. Finally, to drive home a point, the total cost of care for diabetics with diagnosed hypertension in this database is over \$39 million, fully 65% of the total health care expenditures for the total diagnosed diabetes population.

Couple this with the Kaiser Foundation's study that showed that, in these times of economic distress, over 44% of people nationally have relied on home remedies instead of seeing a doctor, 35% skipped a dental or medical checkup, 33% put off needed medical care, 1 in 5 skipped doses of needed medication or cut doses to half... the list is long, but the sum is this: 56% of the surveyed Americans were cutting back on needed care. A burgeoning health care crisis in access and affordability, and the economic crisis of personal and public budget shortfalls, stress-anxiety, and job loss is straining the US; Michigan is in the forefront of this storm. What we are learning in Battle Creek should help us to understand how to withstand this storm.

What I stress in working with patient centered collaboratives is FOCUS on what others have done to move the needle: identify the most pressing risk, remove access and affordability barriers, create behavior-changing incentives, and manage the costs, the worsening of the health, and productivity impact to lower trends. We now know, through research published in the Journal of Occupational and Environmental Medicine, that every dollar spent on medication adherence for example, delivers \$2.30 in improved productivity (JOEM, July 2009).

Here are some other examples we've documented where VBD pays off in real-world applications:

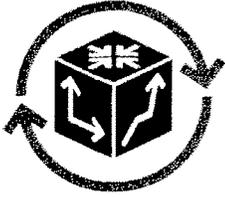
1. Gulfstream in Savannah GA linked improved quality at the health system-physician levels with co-pay reductions for using the improved system, onsite services for flu shots, improved engagement in diabetes management, and more: they have seen a 21% reduction in average medical cost per diabetic, a 43.3% increase in average drug cost per diabetic, a 4-year health cost trend that was only 4.3% (less than half the national trend), and an annual health care cost avoidance of \$5-6 million—which they reinvest in the health and safety of their employees. But they were also instrumental in changing the expectations of shared risks and rewards across the community.



2. Quest Diagnostics nationally has launched a colon cancer prevention design. By improving the rates of fecal occult screening, they identified several high-risk folks who had colonoscopies for pre-cancer and cancerous lesions. This, coupled with the improved engagement for prevention and wellness company-wide, has resulted in a \$1million productivity improvement for the company.
3. The State of Maine, in the State Health Benefits Plan for their employees, was averaging an annual cost of \$10,000 per diabetic, 33-55% more than the national average for appropriate care. They reduced copays for drugs and supplies, but the employees had to be engaged in the diabetes education, and they drove their costs down by \$1300 per year over the control group—in just 12 months. They are now expanding to asthma and congestive heart failure. By the way, they did NOT give the drugs or treatment at no cost, but instead worked within their budget to reduce the tiering for care to make it more affordable, and they held the quality indicators high for the hospitals and physicians to be part of the program.
4. In Massachusetts, they began to push the use of mail-order pharmacies to manage costs and improve adherence.
5. The City of Springfield, Oregon instituted a diabetes-focused VBD 4 years ago, with an intervention group and a control group. In the first year, those that received counseling from the pharmacists reduced their absenteeism by 21%—a tremendous savings to a small municipality of 450 employees.
6. In a soon-to-be-published report of another city's results, the concentrated engagement and management of diabetes and hypertension resulted in an improved adherence rate of 1%. That may not sound like a lot, until you realize that it translates to a savings of \$1000 per person per year in the study—a hearty reduction in cost trend.

What does this mean? In one county in which we are working, we showed that reducing the productivity impact of unscheduled absences due to disease —by only 1%—would result in 212 more workdays per year. That translated to a $\frac{3}{4}$ nurse practitioner who could deliver immunizations to the underinsured children in the county—a measurable, cost-neutral intervention that meant real-world results. In an era of public employee lay-offs due to revenue shortfalls, there was a welcome excitement at the potential of VBD to optimize resources for key public health services.

We have documented levers in personal health (such as reduced copays or pre-deductible costs for prevention, immunization, well-woman/ well-man exams, and mandatory recording in the Personal Health Record) that result in a reduction of cost-trend of up to 50% over 5 years in employers as small as 100 employees and as large as 350,000 employees. We have documented levers in chronic care management that have delivered the same 50% cost trend reduction. And we have documented levers that guided patients to appropriate services, from urgent care to primary care, and,



sometimes, to medical travel across state lines, resulting in up to 35% trend reduction—and this is on its way to achieving the same 50% reduction in some instances.

What this means for Michigan: with people out of work or worried about losing their jobs, there is less use of appropriate care and more use of symptomatic relief for pain or discomfort. This will result in even poorer health, with communities overwhelmed with care in emergency rooms that could have been handled with earlier primary care. Unreimbursed medical expenses will continue to grow. Until more jobs are created, tax dollars will continue to decline. Then more physicians will leave, hospitals will start closing departments, and employers will leave communities.

Dire? Yes. I am witnessing this every day in southwest Florida, where we moved a little over a year ago. For every 1% increase in the unemployed nationally, the ranks of uninsured—some of whom are still working and have access to care—grow by 1.1 million. There is a 4:1 reduction in services, and the spiral continues.

Michigan has been the full-throttle-forward leader in manufacturing and productivity for so many years. I know these are unprecedented times for your state. I can't build jobs, but I can suggest a reversal of the trend by creating the very incentives, tied to appropriate behaviors and engagement, that can improve health and productivity so that business can stay in place and new businesses can be seeded.

I have been honored to be a part of community health improvements in Michigan, from Battle Creek to Lansing to Grand Rapids, from Kalamazoo to Ann Arbor to Detroit. It takes the intuition to see a different course, the bravery to chart it, and the boldness to execute it. This is very spirit of the America that I know, and I know several of the most innovative folks in Michigan have set their hearts ---folks such as the leaders of the Calhoun County Pathways to Excellence-- and their communities on fire with the vision.

It is doable. It is not easy. But it does work. Quality drives the efficiency. Innovation fills the need within a community. Hope is built, and that drives development.

Health is intrinsically linked to our economic survival, in Michigan and in America. Engagement is necessary, rebuilding a better system one step at a time. But let's be sure: the focus on health care will get us more health care. What we need, what we cannot wait for, is more health. Our vision is one of better health for America, and Michigan is part of our journey. One family, one organization, and one community at a time: Keep our focus on the health and economic outcomes, the rest will follow.

Thank you again for the opportunity to speak before you today. I would be happy to try and answer any questions you might have at this time. You may also reach me at 314 422 4385 or cyndyn@vbhealth.org



**CENTER FOR
HEALTH VALUE
INNOVATION**
INFORMATION EXCHANGE FOR
VALUE-BASED DESIGN

Value-Based Design in Action

*How Five Public Sector Employers are Managing Cost
and Improving Health Using Value-Based Design*

FEATURING

STATE *Maine*

COUNTIES *Chippewa County, Wisconsin
Polk County, Florida*

CITIES *Springfield, Oregon
Battle Creek, Michigan*

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About THE CENTER FOR HEALTH VALUE INNOVATION

The Center for Health Value Innovation has grown into the nation's premier organization dedicated to sharing the evidence of improved health and economic outcomes through value-based designs. A non-profit (501c3) organization, the Center was launched in 2007 and currently represents an estimated 40 million covered lives. Visit www.vbhealth.org.

In Recognition of the Efforts of Many

Each case study represents significant contributions by many individuals working together to create innovative healthcare solutions. Our special thanks go to those who provided lead interviews.

State of Maine

Frank Johnson, Executive Director, Employee Health & Benefits

Chippewa County, Wisconsin

Connie Goss, Risk/Purchasing Manager

Polk County, Florida

Michael Kushner, Risk Management Director

Springfield, Oregon

Ardis Belknap, Human Resources Manager

Battle Creek, Michigan

Rick Hensley, Risk Manager

Introduction

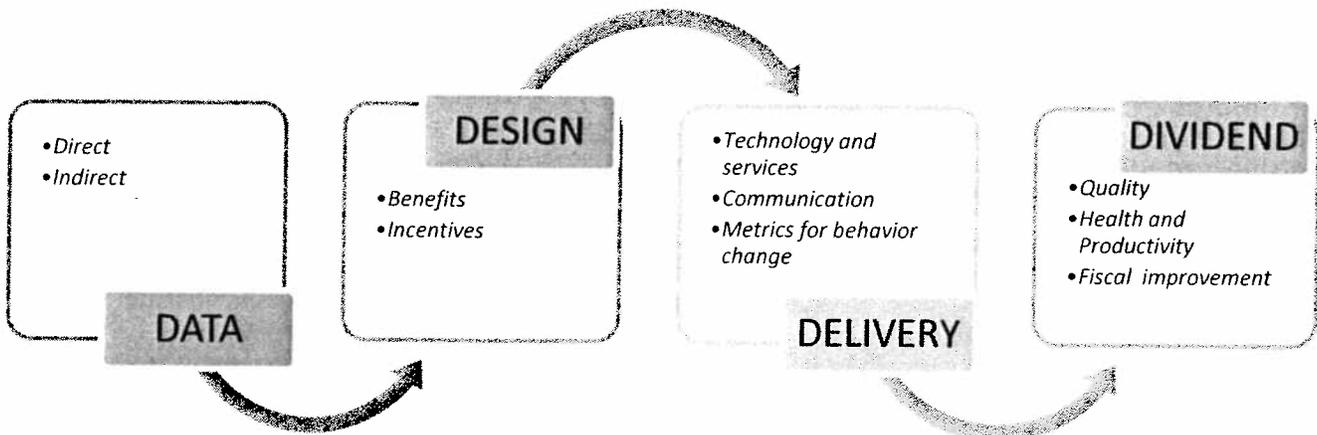
Public Entities Are Rapidly Adopting Value-Based Designs

The Center for Health Value Innovation was launched January 1, 2007. In the two and a half years since, the market place has remarkably changed:

- Value-Based Designs (VBD) have been developed, implemented, tracked, and analyzed.
- A growing body of evidence shows improved health and economic status as a result of Value-Based Design.
- Multiple stakeholders in the public and private sectors have adopted Value-Based Designs.
- Multiple organizations have developed competencies in education, training, and consulting around VBD.
- The economic downturn has accelerated VBD adoption as a means for improving health with limited resources.
- Public entities [cities, counties, and states] that have experienced huge financial burdens due to the economic crisis through reduced tax revenues, increasing numbers of uninsured, and escalating costs, are rapidly adopting Value-Based Designs for economic stability and improved health outcomes.

This monograph highlights the unique challenges that five public sector employers encountered and describes their innovative approaches not only to solving their immediate problems but building competencies and strategies that will serve them in the years to come. We selected a state (Maine), two cities (Battle Creek, Michigan and Springfield, Oregon), and two counties (Chippewa County Wisconsin and Polk County Florida). We included them because they represent a range of different catalysts for their Value-Based Design efforts and because their unique VBD designs shed light on the variety of approaches available. These innovators represent a broad time horizon, from the Chippewa County initiative that started in 2000 to Battle Creek which is kicking off in the fall of this year [2009].

We have organized each case study according to the 4 Ds—our shorthand for the key elements of any Value-Based Design. Organizations typically start with DATA, both direct and indirect health cost data, to assess the seriousness of their problem and to target areas for attention. The DESIGN phase involves the development of their unique VBD including the insurance plan design and the incentives that stand outside the plan design. DELIVERY means using technology, health improvement and quality care services, communications links, and outcomes metrics to implement the key design components. Each of these case studies applied a suite of technology and services and required interoperability for improved metrics and outcomes. DIVIDEND is our fancy way of defining the critical (and often overlooked) element of evaluating the outcomes of the VBD including change in quality of care, improvement in personal health and productivity, and, ultimately, fiscal improvement.



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We have taken a stab at providing a glimpse of the challenges these public sector employers encountered, the unique solutions they deployed, and their results to date. Detailed information on each is available in their case study including quotes and anecdotes on key challenges, insights, and lessons learned.

The benefits designers for the **State of Maine** created their VBD to address two issues. One was their concern over the poor quality and variability of health care resulting in a high percentage of potentially avoidable direct medical costs. The State Employee Health Commission realized that “it’s not who pays for what that’s important but that we’re getting value for what we pay for.” They created performance standards for a preferred hospital and preferred primary care practice designation and “steered” employees to these high quality providers through financial incentives. The second issue was the high personal and organizational cost of diabetes. The benefits designers implemented a diabetes management program providing access to preferred hospitals and primary care physicians, a copayment waiver for diabetes drugs and supplies, and a deductible exemption for preventive services. The results: The number of preferred hospitals increased from 14 to 28 out of 36 total hospitals and the total cost of care for diabetes was reduced while outcomes improved. Compared to a randomly selected control group, participants in the diabetes program had an average adjusted cost of \$1,300 less over 12 months of follow-up.

In 2000, **Chippewa County** was experiencing double digit health care cost increases with a maximum tax cap of 2% per year—an unsustainable dynamic. Their Risk Manager Connie Goss took an interesting approach to the problem by designing a “loss control” effort to reduce employee health risk. The unions would need to approve this approach. A big issue? Not really. Connie recalls that “The Union Management Insurance Committee was invaluable in supporting, enhancing, and moving change forward.” The results are summed up by the County’s auditor who stated on local TV in 2008 that “it was the first time in two decades that health care spending actually declined.”

In 2004, Michael Kushner, Risk Management Director for **Polk County, Florida** began to address the high prevalence of diabetes and hypertension that their Workers’ Comp claims showed were driving health insurance costs. The County has a low turnover rate and a large retiree population with the predictable result that these problems would only get worse. The County partnered with their PBM to offer the Contract for Care program. They provided co-pay waivers for high-value therapeutic class drugs and co-pay incentives for high-risk employees to engage those with the most complicated problems. The key to success, as Mike emphasizes: “You cannot solve health care costs by denying care. We make care affordable and easy to get.” And they are getting results. Quality is improving as evidenced by increased ACE/ARB adherence by participants. Health is improving as evidenced by a 22% drop in the number of employees with high diabetes risk from 2004 to 2008.

Springfield, Oregon quantified the health care issues in another interesting way. The team calculated that modifiable risk factors were causing 25% or more of the city’s health care costs. They also looked at the productivity drain of poor health practices which they pegged at \$290,000 through a WebMD survey. Ardis Belknap, Human Resources Manager for the city, decided to address the problem using the Asheville community model approach for diabetes improvement. According to Ardis, “We knew the Asheville model and we worked hard to institute it here in Springfield. But we wanted to do more—we wanted to provide business-based evidence that the model delivered.” She facilitated a randomized control study with one group receiving pharmacy counseling to measure the effects. And the results are impressive. Hemoglobin A1C dropped 30% in the control group and 50% in the intervention group. Further, the city experienced a 30% decrease in sick days for enrollees in the intervention group. In order to expand the VBD options, the city recently opened a wellness center called Springfield Wellness in Motion. Depression and heart disease management are next on the list for deployment.

As a founding member of the Calhoun County “Pathways to Health” patient-centered medical home initiative, the **City of Battle Creek** had the advantage of a robust set of data and design options for addressing their huge diabetes problem. They knew for example that 10% of Calhoun County residents have diabetes—much higher than State and national averages. They set out to remove financial barriers to essential diabetes drugs, supplies, and medical care while increasing the use of high value diabetes prevention services. The Pathways to Health initiative provides the city with a multi-stakeholder commitment to better health involving employers, insurers, providers, and the consumer community. As Rick Hensley, the city’s Risk Manager describes it, “we’re layering Value-Based Design over the Pathways to Health patient-centered medical home model.” The program kicks off officially with a special open enrollment in August 2009.

Learning from the Leaders

Each of these case studies has its own unique set of issues and challenges. Each has developed and implemented a unique VBD. We were impressed by the wide range of innovation. We were also interested in the similarities across these Value-Based Designs. These characteristics provide ample evidence that VBD has built a solid foundation that yields real dividends.

1. Health risks have been reduced, quality of care has been improved and productivity loss minimized.
2. VBD requires a team effort and the teams that implement these programs are typically cross-functional.
3. Successful public sector VBD efforts require continuous communication with key decision-makers including union leaders, business leaders, research organizations, provider groups, health plans, and the greater community.
4. The relationships with health plans, health management companies, and other suppliers evolved into collaborative arrangements using shared data (all the while protecting privacy) with the consumer/patient ever-present as the primary focus.
5. Data is considered essential to the design phase and critical for ongoing program adjustment. Data is reviewed on a regular basis and includes previously disconnected sources such as disability days, absenteeism, and safety along with the traditional health care benefits information.
6. Each organization in this case study accrued dividends through improved health and productivity in addition to reduction in health care cost trend. But it takes time. Early signs of improved cost outcomes were evidenced by improved adherence, reduced utilization, and improved productivity. And some costs go up. In order to engage patients and help them begin their personal health ventures, increased adherence regarding drug compliance, lab readings, and physician visits is an expected investment with a measurable outcome.
7. Dividends are re-invested. Since these are public entities the reinvestments sometimes went to other departments. This often meant saving jobs in addition to improving health.

Value-Based Design is a rapidly evolving discipline. The term VBD was coined just a few years ago. Yet the field has grown exponentially. This growth is due largely to the challenges overcome and the lessons learned from the “early entrants” to the field. These lessons are now informing new entrants to the field that are rapidly moving forward to seize the obvious advantages of VBD and, in the process, move the discipline forward.

The Center for Health Value Innovation recognizes the bravery of individual efforts and the bold team approaches using critical thinking that result in innovation. This monograph documents the efforts of five public sector employers to do, to learn and to share for the improved quality of life of their employees and their communities at large. We think the big story here is that the summation of these case studies shows the essence of American innovation for improved health and economic outcomes in the public sector.

Cyndy Nayer
President and CEO
Center for Health Value Innovation

John Riedel
President
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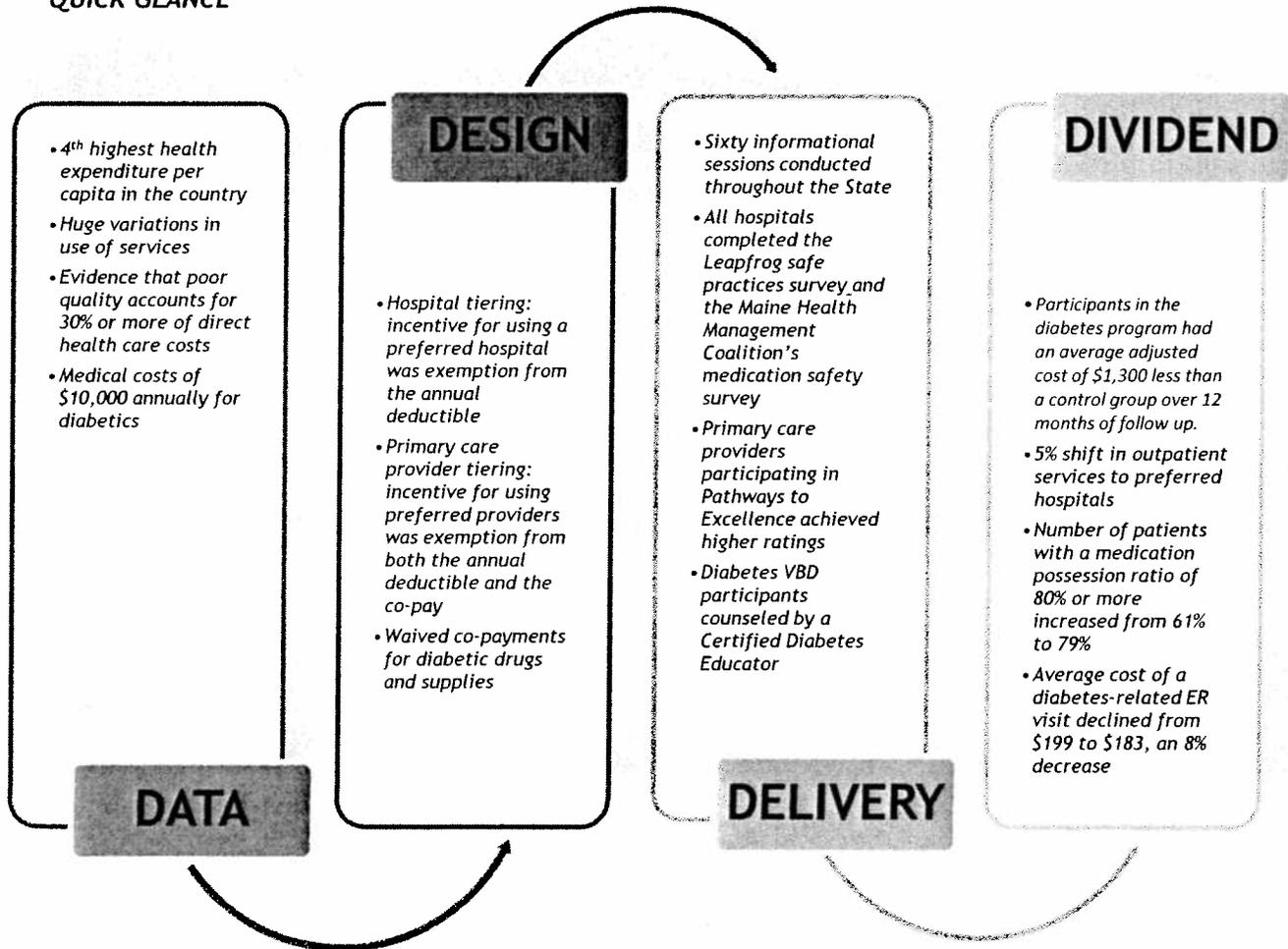
EMPLOYER SNAPSHOT: State of Maine



Maine Employee Health & Benefits (MEHB) provides health insurance to state employees, retirees, and their dependents, using Anthem Blue Cross and Blue Shield as a third party administrator. MEHB has nearly 40,000 covered lives including 30,000 active state employees and their dependents and 10,000 retirees and their dependents. The average age of employees is 47 who work throughout the state in a wide range of jobs including corrections officers, classroom instructors, and human services caseworkers.

The health plan is overseen by a 22 member trustee organization composed of labor and management representatives. Called the State Employee Health Commission (SEHC), it must reach consensus on vendor selection, benefit design features, and the health plan’s overall strategy.

QUICK GLANCE



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MAINE’S STORY

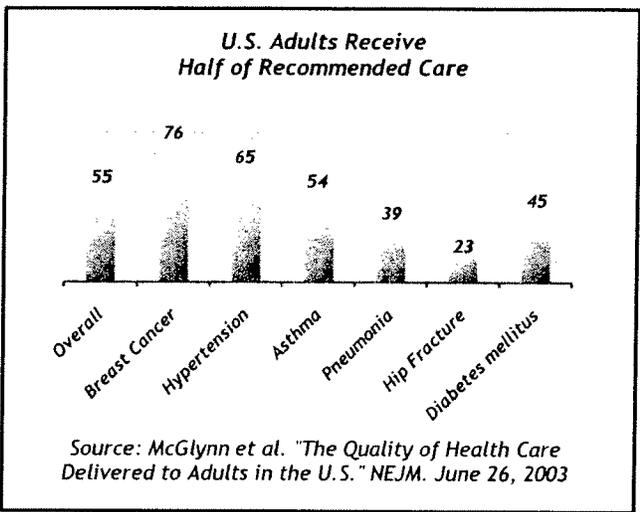
DATA

Maine, a state with a relatively modest per capita income, has the fourth highest health expenditure per capita in the country. This is not only a burden for the state’s government, but also for

companies. “In order for our private sector partners to stay in business in the state, they have to be more competitive,” says Frank Johnson, Executive Director of the state’s Employee Health & Benefits program (MEHB).

Faced with constraints on their funding, ongoing escalating health care costs, and consumer

expectations for more and “better” care, a change of course was essential. The “street wisdom” advocated shifting more costs to employees and retirees. But the MEHB knew that, while saving money in the short term, cost shifting does little to address a serious cost driver—poor quality. The Commission had ample evidence that poor quality accounts for 30% or more of the nation’s direct health care costs. This seemed consistent with their own data on the cost of employees with diabetes--\$10,000 per year on average. The Commission made the case that “these quality issues translated to their state and emphasized that it’s not who pays for what that’s important but that we’re getting value for what we pay for.”



As a member of the Maine Health Management Coalition (MHMC) Frank had access to compelling information painting a dire picture: huge variations in the use of services, a failure to practice evidence-based medicine, and preventable errors and system flaws leading to unnecessary injury and death. There was ample evidence that poor quality drives costs.

DESIGN

The commission’s strategy resisted traditional cost shifting. Instead, the Commission adopted a value-based purchasing strategy that:

- Encourages consumers to make informed, prudent decisions about their care.
- Provides incentives for members to seek care from high quality providers.
- Rewards providers who can demonstrate superior performance.

- Waives co-payments for diabetes medications and supplies, and exempts preventive services from the deductible for participating employees with diabetes.

The State Employee Health Commission (SEHC) addressed the quality issue with two Value-Based Designs: It focused on hospital quality and patient safety because health plan payments to hospitals make up more than 50% of plan expenses, and because comparative data were available on hospitals. It focused on diabetes management because of its high cost and the potential for improvement as a result of reducing barriers to essential drugs.

A waiver is necessary. Though the SEHC embraced the principles of value-based purchasing, the state’s geographic access standards did not allow differentiation of health benefits based on quality measures. This changed in 2005, when the legislature amended the statute, giving the Commission a waiver to develop and implement tiered provider networks and tiered benefits.

Phase 1—July 2006 to June 2007

Phase 1 set the stage with two objectives: to make state health plan members aware that health care quality varies by provider and to encourage providers to publicly report their performance.

The measures used to identify “preferred hospitals” were chosen by the Maine Health Management Coalition’s Pathways to Excellence Hospital Steering Committee. These measures included:

- Completion of the Leapfrog Group’s safe practices survey.

Basic Criteria

- No member should be penalized if he or she lives in an area with no preferred hospitals.
- Hospital metrics should be reasonable and attainable by all Maine Hospitals.
- Members need to know that health care quality varies and can be improved.
- Hospitals need to publicly disclose their performance.

- An aggregate score of “1/2 pie” on the Maine Health Management Coalition’s

medication safety survey. The “1/2 pie” indicates that the hospital has “made good early stage effort implementing recommended safe practices” on five key elements including:

1. how prescriptions are double-checked;
 2. how medicines are given;
 3. how medicine is stored;
 4. use of bar code scanning technology to confirm patient identity;
 5. the use of systems to identify and follow patients with poor renal function.
- An aggregate score on the Centers for Medicare and Medicaid Services (CMS) clinical measures that meets or exceeds the national average for acute myocardial infarction, heart failure, pneumonia, and surgical infections.

Preferred Hospitals—Hospitals that achieved all three of these standards of performance were designated “preferred hospitals.” With the introduction of the tiered hospital benefit on July 1, 2006, there were 14 facilities with preferred status.

The incentive—All hospitals remained in the network and members could seek care from any network hospital. The incentive for using a preferred hospital was exemption from the annual deductible.

Project Phases

- Phase 1 July 2006 to June 2007*
Create performance standards for a “preferred hospital designation.
Create a financial incentive to utilize preferred hospitals.
- Phase 2 July 2007 to September 2008*
Modify performance standards based on year one results.
Introduce a tiered benefit for primary care practices.
- Phase 3 October 1, 2008 forward*
Revise the financial incentive.

Diabetes Management— The State worked through its third party administrator [WellPoint] to create and evaluate a unique diabetes management program. They partnered with Medical Care Development to provide telephonic diabetes education and support (TDES). Participants in the program received an initial face to face interview with a Certified Diabetes Educator. Ten telephone sessions plus a post assessment face to face interview were required to continue receiving program benefits.

In addition, if the patient participated in the TDES, he/she received a range of financial incentives, including prescription drug and supplies co-payment waiver, access to the preferred hospitals and primary care physicians, and a deductible exemption for preventive services.

DELIVERY

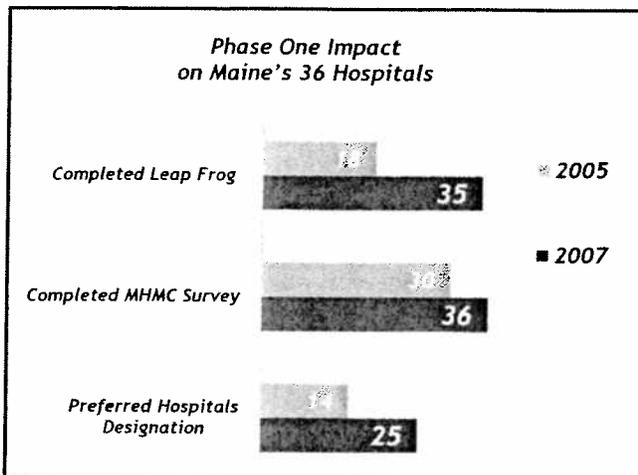
Prior to launching the tiered benefit, 60 informational sessions were conducted across the state. These sessions explained the rationale for this new approach, including a strong dose of how and why the performance measures were selected and a general discussion on health care quality. Over 4,000 employees, dependents, and early retirees attended. “While the education sessions for plan members were costly, they appear to have paid off,” says Johnson. “They understood what we were trying to accomplish and they became instrumental in getting hospitals to move from non-preferred to preferred status.”

Hospitals Take Action

Hospital leaders were informed in early 2006 that performance would be evaluated and that those hospitals that met the established criteria would be designated “preferred hospitals.” As a result, 35 acute care hospitals completed the Leapfrog survey (up from 18 in 2005) and all 36 completed the MHMC medication safety survey (up from 30 in 2005). After only six months of the project, the number of “preferred hospitals” increased from 14 to 25.

Fast-acting medicine prompts results. Hospital quality improvement staff and pharmacists have acknowledged (gratefully) that the initiative has helped secure resources for patient safety and quality improvement projects.

Activated members make a difference! Employees are communicating which hospitals have failed to achieve preferred status. In one instance, state employees got the opportunity to make their case



for improvement to the hospital leadership at a certificate of need hearing. "It was clearly more important for the local hospital administrator to hear from them than from some bureaucrat in Augusta," said Johnson.

Employees with Diabetes Take Action

In the trial run of the VBD, 225 employees were targeted for participation. Of that group over 66% enrolled and engaged in the program. More than nine in ten had a physician visit, 88% received a retinal eye exam, and 73% were screened for kidney disease.

Phase 2—July 2007 to September 2008

The Commission decided in October of 2006 to adopt the "blue ribbon" designation of the MHMC which would become effective on July 1, 2007 to identify preferred hospitals. The Commission made this decision having been persuaded that the multi-stakeholder vetting of the patient safety and clinical quality measures lends credibility to the Coalition's rating. While the measures used remain the same, the benchmarks are incrementally higher. As a result, the number of preferred hospitals dropped from 25 to 16 as of August 2007. However, by the end of September 2008, the number of preferred hospitals had increased to the highest level yet—27.

The Commission has also determined the importance of introducing efficiency into the overall value equation. To date, the absence of transparent efficiency and cost measures has impeded the Commission's objective of merging cost, quality and patient safety into comparative benchmarks.

Preferred Primary Care Practices—During the second phase, a tiered benefit was also introduced for primary care practices. The Commission

adopted the MHMC's Pathways to Excellence (PTE) "blue ribbon" designation for primary care practices. The "blue ribbon" designation measures the practice's systems to manage chronically ill patients and the effectiveness of the practice in managing patients with diabetes and heart disease. Those practices that have achieved at least two "blue ribbons" are identified as preferred practices.

The Incentive—A modest incentive was offered to members to seek care from high-value practices. The office visit co-pay is waived as is the annual deductible for any services billed by the primary practice.

As with the hospital tiering initiative, 35 information sessions were held across the state to explain the preferred physician designation and the incentive provided to seek care from those practices.

From 2007 to 2008 there was a 35% increase in the number of primary practices that achieved 3 blue ribbons and a 20% increase in the number achieving 2 blue ribbons. Over 50% of the 400+ primary care practices have achieved either 2 or 3 blue ribbons. This dramatic increase is attributed, at least in part, to the introduction of patient incentives. And how did the patients do?? Need to ask Frank.

Phase 3—October 2008 Forward

The pilot's third phase, rolled out on October 1, 2008, revised the benefit in response to a \$3.5 million reduction in plan funding for fiscal year 2009. Two substantive changes were introduced that included larger financial incentives for care received at preferred hospitals in order to achieve more value for every dollar spent. A third change introduced a \$50 copayment that applies to all hospitals. Additionally:

- Copayments of \$100 per day for inpatient admissions and \$50 per event for outpatient surgery were introduced. Both fees are waived for admissions and services at preferred hospitals.
- A \$50 copayment for advanced imaging including MRIs, CT scans, PET scans, and SPECT and nuclear cardiology, applies regardless of where care is received.

DIVIDEND

These Value-Based Designs, using incentives to drive patients to higher-performing hospitals and physicians, and targeting diabetes with patient education and financial incentives, are having a positive impact on health, quality, and economic trend.

The provider scorecard shows:

- As of January 2007, all Maine hospitals are completing the Leapfrog Group's Hospital Safe Practices survey and the MHMC medication survey. This is significant given the Joint Commission on Accreditation of Hospitals report that "hospitals that have implemented patient safety practices report better process quality and lower mortality rates."
- The CMS core clinical measures for Maine hospitals have improved both individually and collectively.
- The number of preferred hospitals has increased from 14 at the outset of the pilot (July 2006) to 28 by February 2009 even as the performance benchmarks have become more challenging.
- The number of primary care practices achieving two or three blue ribbons has increased. Among 447 practices, those achieving two blue ribbons increased by 20% from 2007 to 2008, and those achieving three blue ribbons increased by 35%. Overall, more than 50% of primary care practices have achieved two or three blue ribbons.

On the member side:

- Claims data demonstrate a 5% shift in outpatient services from non-preferred to preferred hospitals.
- Data on migration among primary care practices is not available but it is likely that the financial incentive will have a similar effect on members seeking primary care.
- Average cost for a diabetes-related ER visit declined from \$199 to \$183, approximately 8%.
- Average cost for an inpatient day declined from \$1,168 to \$1,117, a decrease of 4%.
- Average cost for a physician visit increased from \$189 to \$256, and the average cost of diabetes drugs increased from \$1414 to \$1850 pmpy, which is expected when people get the care needed to treat diabetes.
- The number of patients who had medication possession ratios of 80% or more increased from 61% to 79%, showing that the proper care drives improved adherence.
- Compared to a randomly selected control group, participants in the diabetes program had an average adjusted cost of \$1,300 less than a control group over 12 months of follow up.

The Bigger Picture

Frank Johnson puts their VBD in perspective, "*Our success will ultimately be measured by an increase in quality and safety at all our hospitals, the efficiency and quality of our clinicians, and the adherence of our patients to appropriate care. The pilot helped us move in that direction.*"

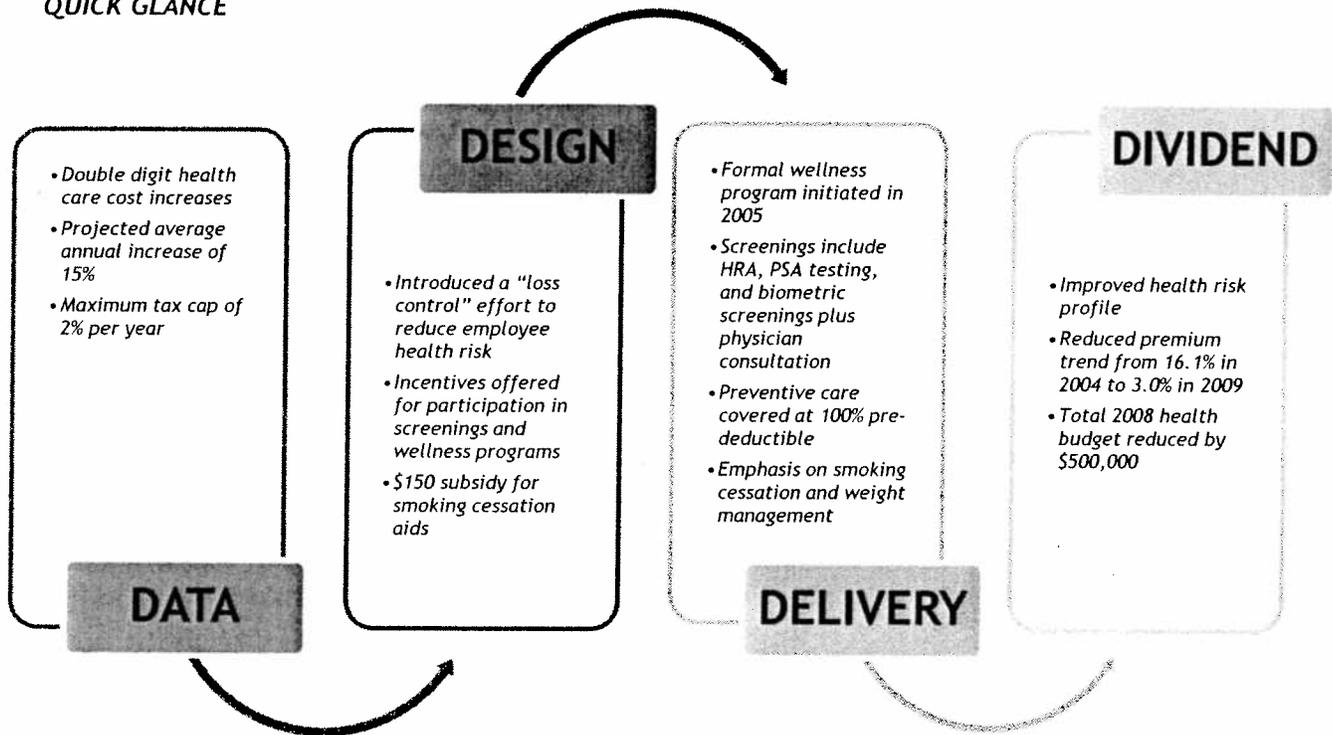
EMPLOYER SNAPSHOT: Chippewa County, Wisconsin

Chippewa County in northwest Wisconsin is home to 60,000 residents. The municipality is served by 450 employees, mostly a mix of laborers, administrative staff, nurses, social workers, and law enforcement personnel. The employee base includes 300 courthouse, 80 highway department and 70 law enforcement staff.



Personnel represent a mix of management and union members represented by five different unions including: AFSCME (American Federation of State, County and Municipal Employees), LAW (Labor Association of Wisconsin), and the WPPA (Wisconsin Professional Police Association).

QUICK GLANCE



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CHIPPEWA COUNTY'S STORY

Even before the current national economic recession, many small city and county governments had been wrestling with the rising expense of their employee health benefit. Chippewa County, Wisconsin was no different in that regard. This is the story of how one municipality faced a threat and saw opportunity; how the smart use of health data led to effective interventions; and how a risk manager's focus on loss control created a healthier workforce by evolving to a Value-Based Design (VBD).

The Chippewa County story is not just about managing cost or changing plan design; it is about creating a long term strategy to get people to be

more self-sufficient about their health. Using a combination of plan design and incentives to engage their employees in behavior changes, Chippewa County achieved reduced cost trends and healthier, more productive employees.

Their overall strategy took into account a broad and evolving range of data including insurance premium costs, union contracts, medical and prescription drug utilization, biometric screening results and health risk assessments.

DATA

Local governments face unique challenges.

In 2000, Connie Goss, Risk Manager for Chippewa County, was beginning to feel the pain that employers across the country were experiencing: double-digit cost increases for health insurance. As she looked to the 2001 plan year, she recognized danger ahead: the County's long-term health benefit costs were projected to rise at an average annual rate of 15%, exceeding the budget allocation which had already doubled in the past five years.

As health costs increased, a fundamental issue facing the county was that there really were few options available to fill the gap. Taxes had a maximum cap of 2% per year and other revenue sources were insignificant. Complicating this was a union environment that could have made plan design changes very difficult, particularly as the unions involved initially did not want to increase their co-pays or insurance premium contributions.

As part of the focus on health improvement issues, the county had provided free and voluntary cholesterol screenings in the Highway Safety Days program. In early 2000, about 82% of all employees participated to learn the importance of managing cardiovascular risk. But Connie Goss had a wake-up call as a result of the voluntary health screenings.

*"Lady,
you have a
problem..."*

This time the screening provided some worrisome data. The highway department was the employee group with the most risk. They were given more in-depth screenings with full lipid profiles, electrocardiogram tests and physical agility evaluations. Goss confirmed with the data what she already knew: "Eighty percent of all healthcare costs are avoidable. Our strategy is simply to avoid them."

DESIGN

Plan design changes were necessary.

With an approach toward innovation, the County's plan design evolved to focus on health improvement with a long term strategy to avoid these costs. In order to remove cost barriers to health improvement, preventive care was covered at 100% pre-deductible with different maximums depending on the plan chosen. Plus, the County

reimbursed employees and dependents who participate in the smoking cessation program up to \$150 annually for over the counter aids and prescription drugs.

The county addressed the Highway Department health problems head-on with a three-month health education program on cardiovascular risk factors, physical fitness, cardiac testing, and lifestyle change programs. Some 62% of those screened were referred to a physician following a review of the results:

- 20% were diagnosed with high blood pressure.
- 33% had an unhealthy body mass index.
- 40% had elevated cholesterol.

Fortunately, most of the health issues were easily addressed with medication and behavior modification. Informational sessions were also provided by the local hospital on topics such as signs and symptoms of a heart attack, lifestyle change, and more. These sessions were targeted at the Highway but, because of their positive impact, health risk assessments were opened to all employees and spouses.

Chippewa County quickly moved from the "loss control" efforts in health risk reduction to the plan design changes that would address the upcoming budget shortfall. The County needed to address the spending side and had to do so quickly, as spending was projected to outstrip

Chippewa County Timeline for Loss Control

- 2000** Cholesterol screening voluntary for all employees.
- 2001** Developed health screening program for the Highway Department.
- 2002** Obtained a new consultant for the health plan who could offer tools such as data analysis, reporting, and access to HRAs with labs.
- 2003** Offered HRAs for all employees and spouses. Approached by the Women, Infant, and Children (WIC) staff to partner on employee health.
- 2004** Formal arrangement with WIC program for 250 hours of Nutritionist time to help facilitate the Wellness Program.
- 2005** Developed Employee Wellness Committee.
- 2006** Increased Health Risk Assessments.
- 2009** Expand participation in the Health Risk Assessments and healthy lifestyles.

revenue. In 2002 a specific goal was established to reduce plan costs within the union negotiations by \$130,000.

Unlike other labor situations where union leaders are often firmly opposed to negotiation on health benefits, the Union Management Insurance Committee took a realistic view of the financial dilemma and realized that they needed to be part of the solution. Union members were participants on the health insurance committee so they saw the problems firsthand. They agreed to absorb some of the cost increases through plan design changes or premium contributions.

Goss recalls the collaboration, "The Union Management Insurance Committee was invaluable in supporting, enhancing and moving change forward." They were also willing to explore different plan options. The main goal was to create a situation that would provide a winning outcome for all—better health at lower cost.

The existing plan design required no premium contributions from employees and there were no penalties for out-of-network usage. "In 2002 we created an approach to guide members to use their benefits more wisely, particularly by introducing more out-of-pocket contributions for treatments that were not evidence-based, and increasing the cost of out-of-network use. By using the balancing strategy of paying for desired services and increasing the costs of extraneous use, Goss and her team were able to guide the behavior changes that supported the focus on "loss control."

DELIVERY

Wellness and behavior improvement rise to the top.

In 2003, loss control expanded to include both employees and spouses in the broadened awareness, screening and action that would be covered under the new Wellness program including:

- Health Risk Assessment (HRA)
- Blood pressure reading
- Lipids profiling
- Physician consultation

The entire process was conducted onsite, and it was short and inexpensive—just \$45 per participant and paid by the county. Additionally, all of the participants who were screened had

their name put into a raffle for incentives such as Packers' football tickets and gift certificates for the local sporting goods store.

The physician that administered the screenings was contracted through Associated Financial Group, Chippewa County's insurance consultant. By having the physician involved in the screening and the strategy, information loops were aligned for the design phase for the next budget year.

Goss easily convinced executive management to approve an annual budget of \$23,000 for wellness beginning in 2004. She also looked for "excess capacity" among current employees. For instance, the nutrition counselor from the Women, Infants, and Children Program of the department of health (WIC) had time available and was hired to provide the same lifestyle, exercise and nutrition counseling for the County employees. Goss pointed out that "nutrition and exercise will save the day around here."

In 2004 the health plan design went through some revisions:

1. A modest premium contribution was instituted so that employees would begin to carry some of the financial burden of health costs.
2. An alternative plan was offered with no employee premium contribution. This Consumer Driven Health Plan (CDHP) from Humana was offered as a high deductible plan and included deposits from the county of \$600 per covered participant, up to \$2400 per family per year into the Health Reimbursement Account. Further, the HRA (health reimbursement account) was installed as a

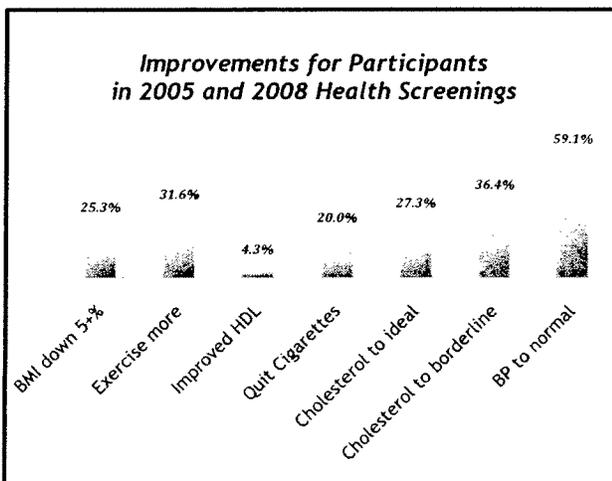
SCREENING SAVES LIVES

One of the employees referred to a physician from the first year's screening had some significant cardiovascular health risks and ended up with a quadruple bypass. It was a fortunate intervention, not only because it probably saved his life, but it also saved Chippewa County Employee Health Plan Program a lot of money. The previous year an employee's heart attack cost \$365,000 in fees and aftercare. The bypass cost only \$57,000.

transportable trust fund (FAS 105B), so that employees would not have to forfeit their account if they moved to another job.

In the first year, 8% of the eligible population adopted the plan. Though this was a relatively small group of employees, it actually exceeded expectations, and, by 2009, 19% of employees had voluntarily signed up for the CDHP/HRA. Retiring employees could convert their unpaid sick time tax free to this PEMT/401(a) account through a “post-employment medical trust.” By the end of 2008, there was over \$600,000 in that account—all allocated for medical expenses into the future.

In 2005, behavior change was integrated throughout the plan through a formal wellness program. Smoking cessation was moved under the wellness program rather than being part of the benefit plan, which enabled the county to offer more individualized approaches for success. The program was run through the WIC program since the WIC leader had experience in this area. Participants achieved up to a 70% quit rate and are remaining smoke-free. The \$150 reimbursement for smoking cessation aids (available upon use of the counseling program) is certainly a factor in the program’s success.



Screening has continued to identify risks with PSA testing to detect prostate cancer in 2006 and 2008, and biometric screens to identify high glucose, high blood pressure, and more. The annual health risk appraisal maintains a high level of on-going participation. This is a key factor because the more people participate the more likely they are to make changes. For instance, 55.5% of the employees who completed the HRA in 2008 also completed it in 2005. And the results are

encouraging. During that same timeframe over 30% of participants were exercising more, 20% had quit cigarettes, almost 30% had moved their total cholesterol to ideal, and over 25% had reduced their BMI score.

In 2007 routine colonoscopies were added as a pre-deductible, though limited to a cost of \$2000. This opened an interesting situation as routine colonoscopies in the area were priced at \$3800 to \$4500, far above the national or even state norm. The \$2,000 cap encouraged employees to price-shop in nearby areas or negotiate directly with their physicians. The County was also able to contract at the negotiated \$2000 fee, preserving the budget and the health of employees.

DIVIDEND

The results to date – impressive.

In addition to active involvement in programs driving improved health status, health care costs are moving in a positive direction as well. The table below shows Chippewa County premiums are significantly less than the Wisconsin Employee Trust Fund—\$1,593 vs. \$2,317 in 2009.

Long range planning is addressing health costs. Goss says that this is all part of Chippewa County’s long range goal. “We want to help people fund their medical expenses into the future, including, perhaps, long-term care.”

A 2008 article by the local WEAU TV highlighted the county’s auditor, George McDowell, who said that it was the first time in two decades that spending actually declined. As a result of their five-year VBD experience, total premiums were reduced and an additional \$500,000 was available for the other programs and services in the 2008 proposed budget.

Premium Cost Comparison Chippewa County vs. State Employee Trust

	Chippewa County		Employee Trust Fund	
	Premium cost	% change	Premium cost	% change
2003	1,017.00		1,197.20	
2004	1,212.00	16.1%	1,515.30	21.0%
2005	1,355.00	10.6%	2,242.90	32.4%
2006	1,517.00	10.7%	2,501.20	10.3%
2007	1,654.00	8.3%	2,501.20	0.0%
2008	1,546.00	-7.0%	2,250.40	-11.1%
2009	1,593.00	3.0%	2,317.60	2.9%

"Our long-term goal is to take a look at our health care costs, and our claims dollars, and do our best to avoid them," said Goss. "That frees up revenue for other departments to accomplish their goals. It also means we can continue to provide health care access without reduction of employees due to layoffs. In other words, we don't have to put all of our resources towards health care."

In addition to the health risk appraisal and education that Connie's group provides yearly, they are working to create a culture of health. Many small but incremental steps demonstrate their commitment. They communicate through a monthly newsletter; they have installed a treadmill in the Highway Department; and they are sponsoring an after-hours exercise class for employees. Healthy foods like fruit, granola bars, and low fat chocolate milk are now served at meetings. Motivational posters are showing up everywhere (including the bathrooms near the wash stands). They even make healthy root beer floats with frozen yogurt and diet root beer!

Connie is very proud of the County's initiatives, "We participate in Lighten Up Wisconsin, a five-month exercise competition focused on physical activity and weight loss, with teams competing across the state of Wisconsin. At the County level, 80 people participate and the winning team gets the traveling gold sneakers for their office!" More individuals and departments, even those with non-traditional hours requiring work 24/7, are getting involved. In the 2009 Lighten Up Wisconsin challenge the "jail team staff finished in the top 5%. Almost 75% of the participants identified with high cholesterol in the 2004 health risk appraisal have brought their levels down to ideal or borderline. The smoking cessation program has been successful. We have a smoking rate of only 12% compared to the national average of 20%."

"We're managing loss, managing the budget, improving health, and reducing our trend below Wisconsin's trend and the national averages."

EDUCATION SAVES LIVES

An employee was taken to the doctor by his co-workers after he noticed his symptoms were similar to those of a heart attack, a fact they had learned in our Value-Based Program.

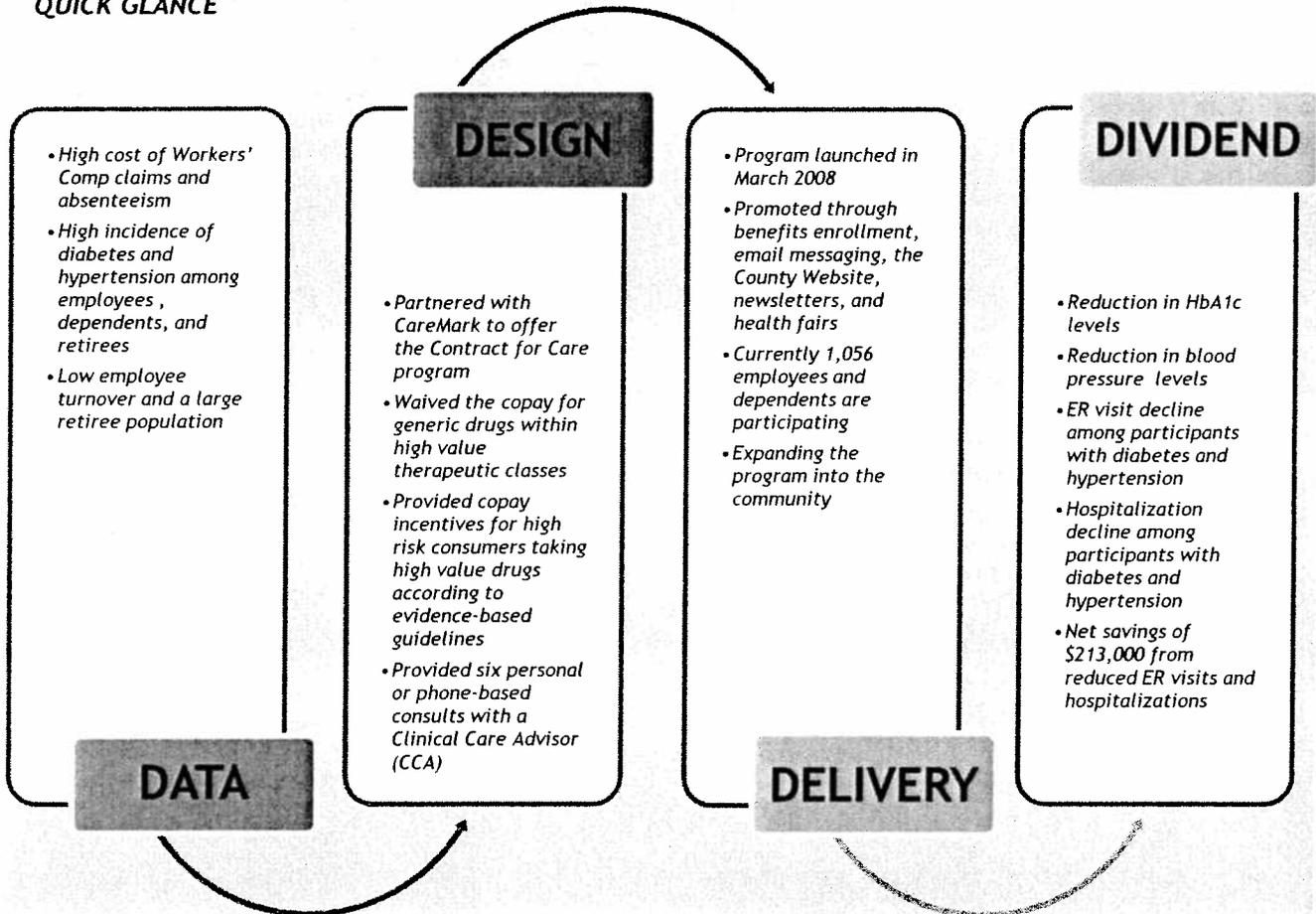
Fortunately, there was no heart attack, but he did get treated for high blood pressure and high cholesterol and started walking for exercise.

EMPLOYER SNAPSHOT: Polk County, Florida



Polk County is located in Central Florida. In 2007 almost 600,000 people called Polk County home. The economy is largely based on phosphate mining, agriculture, and tourism. The County's 4,500 employees provide public safety and emergency medical services plus transportation and environmental resources. They also manage a 60-bed nursing home, adult day care centers, veteran's services and a health plan for indigent families. The County budget for 2009 is \$1.8 billion. The County covers 8,000 employees and dependents in their self-insured health plan.

QUICK GLANCE



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POLK COUNTY'S STORY

DATA

High Workers' Compensation claims prompts action.

In 2004, Michael Kushner, Risk Management Director for Polk County, was becoming concerned about the high cost of Workers' Compensation claims. His concern prompted him to investigate the cause for increased claims. By utilizing risk data from their data warehouse managed by

Thomson Reuters, he found that the County had a high rate of employees with diabetes and hypertension—over 11%. Mike and his colleagues determined that the best course of action was to mitigate health risks before they became problems.

They set out to find a way of getting greater value from their health care investment by crafting a new, Value-Based Design (VBD) for employees who were already diagnosed or at risk for developing chronic conditions. The strategy—remove barriers to appropriate care.

While their approach is driven by risk mitigation to stem the tide of escalating costs, the County management team is striving to make a difference in the health and quality of life of their chronically ill employees because, as Mike says, “it’s the right thing to do.”

DESIGN

Wellness center provides focus for the Value-Based Design.

Polk County had an advantage going for it as plans were drawn up for a Value-Based Design—a Wellness Center had been established in 1997 to provide medical management to promote a healthy workforce under the direction of its Occupational Health Program. The experience with the Center was very positive. Medical care was provided for most occupational injuries and various services like infection control, annual TB testing, and hepatitis vaccination were positively received by the workforce. In its first five years of operation, the occupational health program showed cost savings of over \$5 million in Workers’ Compensation injury care alone.

This approach supported the County’s Value-Based Design philosophy. Mike emphasizes that “you cannot solve health care costs by denying care. We make care affordable and easy to get, and we’re getting results.”

The Wellness Center expanded to offer employee health services for preventive care coupled with the VBD Mike and colleagues were creating. Services including routine health care, nutrition counseling and weight management, and smoking cessation programs are provided by health care professionals at the Center. It was a natural step to utilize these resources for the increasing number of employees with chronic conditions, especially diabetes and hypertension. As a result of this expansion, the County reaped additional cost savings:

- X-ray costs were greatly reduced through a partnership with a local hospital.
- Lab costs were reduced by 75% through a contract with a local lab company.
- The number of primary care insurance claims have been reduced and employee leave time associated with doctor visits has been minimized.

In 2005, Polk County partnered with CVS Caremark to implement the Contract for Care program designed to improve health outcomes and reduce costs for employees living with diabetes and hypertension. Here’s how it works:

- Members have the opportunity to opt into the program.
- A contract is signed that highlights the requirements of participation.
- Participating members are assessed at the Wellness Center and categorized by severity of the disease.
- Individualized care plans are developed by the member and the Clinical Care Advisor (CCA) provided by CVS Caremark and located on-site at the Center.
- An initial encounter addresses the patient’s overall knowledge of their disease.
- Each participant receives up to six visits with the CCA. Frequency is based on their risk stratification.
- Each visit includes a discussion of lab results, current medications being used, and educational topics related to their condition.

The Plan

1. *Assess patients and categorize by severity of disease state.*
2. *Develop individualized care plans.*
3. *Assess patient’s overall knowledge of their disease state.*
4. *Schedule routine consultations to educate, promote behavior change, and set health care goals.*
5. *Incent participants by waiving co-pays for supplies and drugs.*

Enrollment Incentive

Co-pays are waived for diabetes and hypertension medications and supplies. Based on the existing co-pay structure the incentive can be as high as \$100 per month per participant. If family members enroll the incentive includes them as well. After taxes, this incentive can add up to 10-20% of patient monthly income for medication co-pays.

Members have to actively participate in the program to retain their \$0 co-pays. If a member fails to meet the program requirements they are given two opportunities (two strikes) and then are dis-enrolled for non-compliance.

Evidence-Based Design Approach	
Therapeutic Class-Based	<i>Co-pay waiver for generics within high value therapeutic classes. Move all generic and brand drugs within a therapeutic class to a lower tier.</i>
Risk-Based	<i>Co-pay incentives for high risk consumers taking high value drugs according to evidence-based medicine.</i>
Compliance-Based	<i>Co-pay incentives for consumers who are compliant with the health management model.</i>

DELIVERY

The program was launched in March 2005. The County used a variety of communications channels to get the message out to employees including a benefit enrollment package, a County website, newsletters, and health fairs. Employees are eligible to enroll after 90 days from hire.

Upon enrollment, the Wellness Center staff reaches out to participants to schedule a first visit. This visit focuses on communicating the nature of the program, the requirements of each member, and, most importantly, begins the process of creating an individualized care program.

The Wellness Center provides professional medical staff including RNs, nurse practitioners, and diabetes educators who provide wellness programming and patient support systems that are called upon, as appropriate, to provide the level of resources necessary for each unique participant. Participants are accountable for their behavioral components of care including:

- Attending scheduled appointments.
- Taking medications as directed by the physician.
- Providing current medical information.
- Providing a current medication list.

- Performing home monitoring of their disease including blood pressure and blood sugar levels.

To date, 1,056 County employees have participated. Their reaction—very positive. “Employees feel a sense of control over their health. They don’t feel rushed during their appointments allowing them ample time to cover the issues of greatest concern to them,” says Mike Kushner.

A participant describes his experience this way: “I learned how to manage my health, I’m feeling better, and I’m more productive.”

DIVIDEND

The program is paying off in enhanced quality improved health, and cost savings.

Quality Enhancement

- ACE/ARB adherence increased for participants with medium and high severity hypertension and diabetes—8% and 3% respectively.
- The medication possession ratio for Beta-blockers and Calcium Channel Blockers improved 9% and 7% respectively among participants with hypertension.
- Statin adherence for participants with diabetes increased 1%.

Health Improvement

These quality enhancements have driven significant improvements in health:

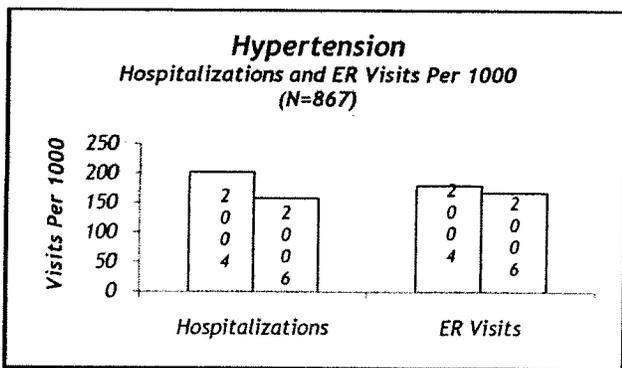
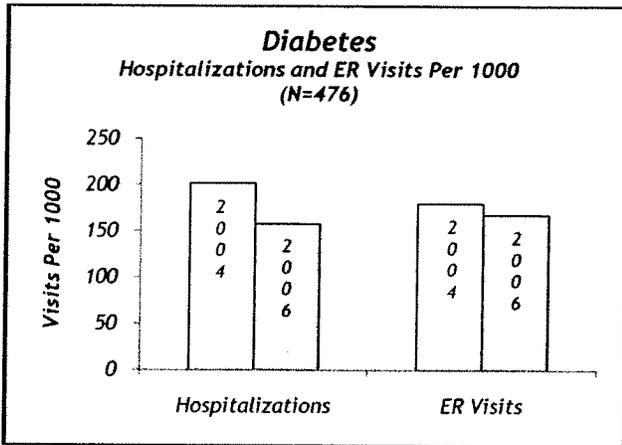
- 67% of participants with high severity diabetes achieved average reduction of HbA1C of 1.51 mg/dl.
- The average reduction in blood pressure for high severity participants was 11/5 mmHg.
- Employees with hypertension have decreased their risk of stroke and heart attack.
- Participants with diabetes have experienced a decreased risk of kidney disease, amputations, and blindness.
- Polk County has seen a drop of 22% of employees with high diabetes risk from 2004 to 2008.

How do they explain these remarkable results? According to Mike, “We make sure that our community physicians are completely connected

to us. We need them to complete the care circle. Our onsite clinic, and our diabetes efforts—and soon, our depression and heart disease efforts—work because we are fully connected to the primary care physicians.”

Cost Savings

The bottom line on costs: after the initial program investment and cost of waiving diabetes and hypertension medication co-pays, Polk County has seen net savings of \$213,000. This savings is a result of reduced hospitalizations and ER visits. The following graphs show emergency room visits have declined 7% among participants with diabetes and hospitalizations even more—22% from 2004 to 2006. For those with hypertension the reduction in ER visits is 11% while hospitalizations have dropped by 18% over the same time period.



The unmeasured net gain from increased worker productivity and reduced absenteeism likely increases the total savings by a considerable amount.

Lessons Learned

This first step in the County’s Value-Based Design has yielded valuable insights that Mike and his colleagues are using to improve the program and expand into areas like smoking cessation. While the list is quite long, the following “short list” of lessons learned provides essential insights for continued success.

Lessons Learned

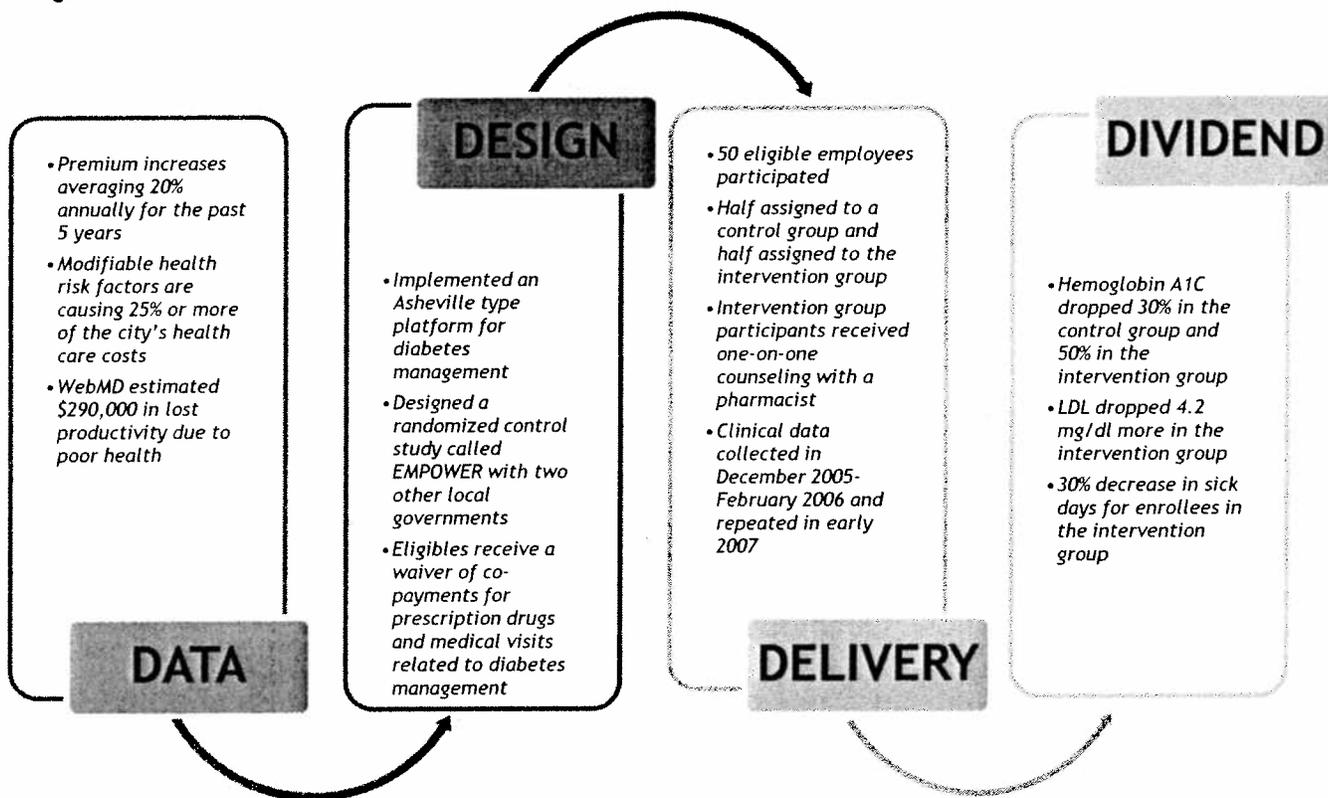
- Member accountability is essential.*
- Appropriate leverage helps drive results.*
- Need to continuously refine, track and assess process and outcomes data.*
- Mechanisms to support office-based practices mitigate inefficiencies.*
- The onsite clinic has proved invaluable as a lab and referral resource.*

EMPLOYER SNAPSHOT: Springfield, Oregon



Springfield is located in Oregon, just a few miles east of Eugene. Incorporated in 1885, Springfield has a Council-Manager form of government that serves over 52,000 residents. Today, over 430 employees provide a range of services including fire and police protection, school administration, and maintenance of the city’s water system. The annual budget for 2007 was over \$262,000,000. The City paid health insurance premiums of \$4.2 million annually for its active employees. The city’s health plan covers 1,100 people including the employees, their dependents, and retirees and costs almost. PacificSource provides the fully insured PPO benefit plan with a 3 tiered drug benefit including generic, preferred brands, and non-preferred brands.

QUICK GLANCE



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SPRINGFIELD’S STORY

A value-based plan boosts health.

“We needed to address the rising costs of diabetes.” It was this issue that led Ardis Belknap, Human Resources Manager for the City, to consider how a Value-Based Design (VBD) could provide the right approach for improving the health of her employees with diabetes while lowering the cost trend related to treatment—a win-win proposition.

Ardis was a member of the Oregon Purchasers Coalition and familiar with the Evalue8 program

from the National Business Coalition on Health. Evalue8 helps employers identify health care that integrates leading edge evidence-based practices at a fair cost. In essence, it is a value-based tool for purchasers. Evalue8 provided a vehicle for making the transition to a Value-Based Design for her employees.

Ardis was familiar with the Asheville community model for diabetes improvement, an approach to disease management whose positive results had been widely published. She was able to enlist the support of the Oregon School of Pharmacy, which

also understood the power of the Asheville model. Thus, EMPOWER was born, a randomized control study of diabetes management that included Eugene, Springfield, and Lane County.

DATA

Modifiable health risks drive health costs.

Ardis knew that the cost of healthcare related to modifiable health risks was high—25% or more of the city’s total healthcare costs. Based on insurance claims and health risk assessment data, she knew the estimated impact of increased risk was almost \$600,000. National data painted a bleak picture of the high cost of diabetes: complicated health issues for the person, increased health costs and lower productivity for the city. A report by the American Association of Clinical Endocrinologists established that annual healthcare costs for a person with Type II diabetes were three times average non-diabetic costs with a range of complications including heart disease, stroke, eye damage, and chronic kidney disease. (www.stateofdiabetes.com 2009)

The American Diabetes Association showed that an increase in absenteeism, reduced on-the-job performance, and higher disability costs accompanied a diagnosis of diabetes. (www.diabetes.org/diabetes-statistics/cost-of-diabetes-in-us.jsp 2008) This finding led to the decision to track sick leave and productivity in order to quantify the total cost of diabetes to the City. Sick leave data was available from Springfield Human Resources data. Productivity was measured using the Stanford Presenteeism Scale.

DESIGN

The Asheville community approach serves as a model.

Design Philosophy and Actions

- Create programs to maintain health rather than waiting until the patient needs acute medical services.
- Provide incentives for employees and providers to encourage patient self-management and collaboration:
 - Waive co-pays and deductibles.
 - Require regular lab tests and physician visits.
 - Provide payment to pharmacists for counseling.

According to Ardis, “We knew the Asheville community model and we worked hard to institute it here in Springfield. But we wanted to do more—we wanted to provide business-based evidence that the model delivered.” So they created a randomized control study to measure the effects.

EMPOWER focused on investing in health rather than paying for illness. The research component was set up to determine the impact of the pharmacist counseling on patient knowledge and, ultimately, better self management.

Here’s how it works:

1. Eligible employees are enrolled based on a diagnosis of Type I or Type II diabetes.
2. Enrollees are randomized into two groups: control and intervention.
3. Clinical data are collected at the onset of the program (December 2005-February 2006) and repeated in early 2007.
4. Waiver of co-payments is provided to all participants for prescription medications and medical visits related to diabetes control.
5. Educational materials (approved by the American Diabetes Association) are provided to the control group enrollees.
6. Face-to-face consultations with pharmacists are provided to the intervention group enrollees.
7. Clinical, financial, and productivity outcomes are tracked over time.

PacificSource created and administers the formulary plan in collaboration with Springfield. The City covers 100% of the cost of medical and pharmacy drugs and supplies when prescribed by a licensed practitioner including: lancets, blood glucose test strips, home glucose testing services, insulin, syringes, diabetic drugs, blood pressure drugs, and lipid lowering drugs. EMPOWER participants in the intervention group had access to a pharmacist consultant up to 12 visits per year. They were required to meet with a consultant once per quarter at a minimum to remain in the program.

DELIVERY

The EMPOWER program addresses employers’ issues.

Employees with diabetes were invited to participate in EMPOWER. A total of 50

participants signed up; they were then randomized into 25 for the intervention group and an equal number for the control group. Clinical data was collected at the outset of the study from December 2005 - February 2006 and repeated in early 2007 for a pre and post comparator evaluation.

Employees in the intervention group had an initial 60 minute appointment with a pharmacist with subsequent 30 minute follow up sessions as appropriate. The pharmacist worked with the participant to determine behavioral changes, create problem solving skills, learn risk reduction measures plus consult, as appropriate, with the person's physician.

Ardis anticipated an increase in cost initially due to the waived co-pays and the cost of providing pharmacy consultations. This amounted to about \$450 per participant for the consultant sessions and about the same amount for the drugs and supplies. The city paid for the pharmacist visits as a part of their health insurance claims. The health care plan waived the participant's out of pocket expenses and reflected that in the claims. The City paid Oregon State University (OSU) School of Pharmacy for managing the pharmacy network and providing the outcomes data.

Specifically, the method for collecting the data was as follows:

- The pharmacist collected clinical data including hemoglobin A1C, cholesterol level, and information from the Stanford Presenteeism Scale and submitted it to OSU.
- The pharmacist submitted attendance records to PacificSource to qualify the participant.
- PacificSource collected cost data and submitted to OSU.
- The city reported sick leave use to OSU.

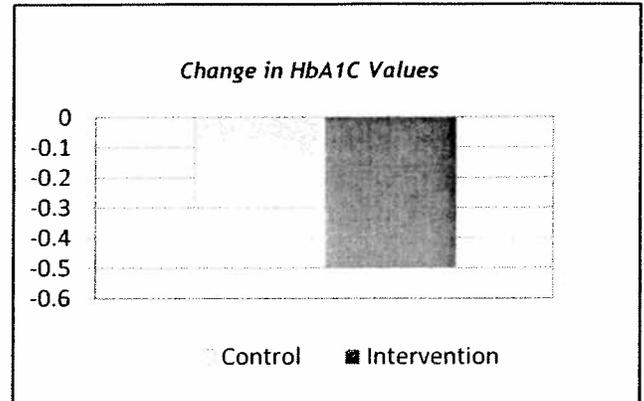
The program has been a lifesaver for many employees. According to one participant:

"I thought I knew what I needed to know about my disease. But I was very wrong. Things started to click once I began seeing a pharmacist who explained things in ways I could understand. My last HbA1c was 5.9%. My primary care physician could hardly believe it. Most importantly, I've reduced my risk for heart disease, stroke, and other complications by 70%."

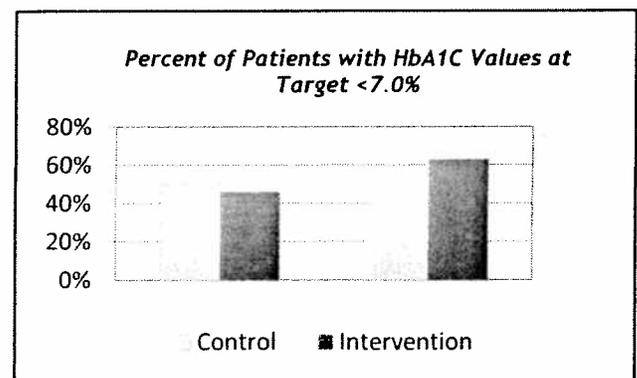
DIVIDEND

Their investment paid off. The clinical results have eclipsed expectations.

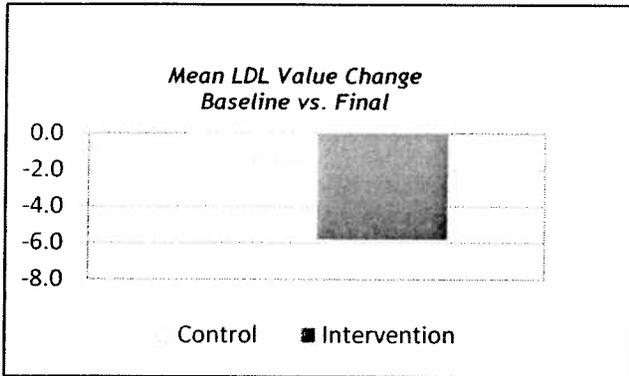
Hemoglobin A1C dropped 30% in the control group and 50% in the intervention group. The financial incentive had significant impact on its own but when coupled with pharmacist counseling the results were much more robust.



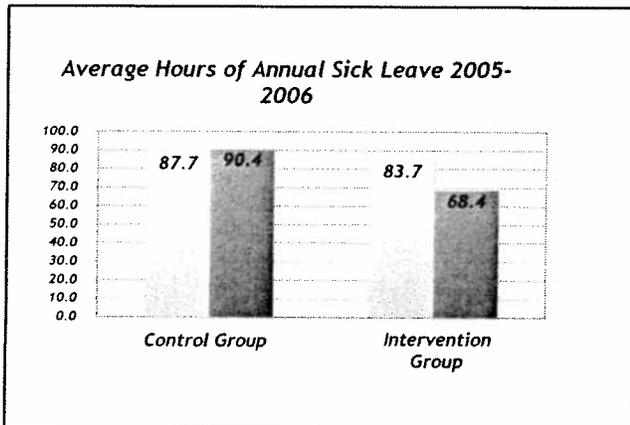
The ADA targets a hemoglobin A1C level of less than or equal to seven for desired diabetes control. The number of employees in the control group who achieved HbA1c levels of seven or below remained static; the number of employees in the intervention group who improved their HbA1C levels at or below seven moved from 46% at baseline to 63% at follow up.



Low density lipoprotein (LDL) cholesterol is the gold standard for estimating cardiovascular risk in patients with diabetes, and an LDL measure of less than 100 mg/dL is the goal. The results are very encouraging: the mean change for LDL was 1.6 mg/dL decrease in the control group but 5.8 mg/dL decrease among those in the intervention group.



The productivity outcome, as measured by average sick leave, is also encouraging. From 2005 to 2006, the average sick leave for employees increased by 2.7 hours in the control group but decreased by 15.3 hours in the intervention group. This change amounts to 18.1 fewer hours lost for those who received the pharmacist counseling.



“The bottom line” says Ardis, “is better care and empowered self-management of chronic disease translates into healthier, happier employees who can and do approach each day with a more positive attitude.”

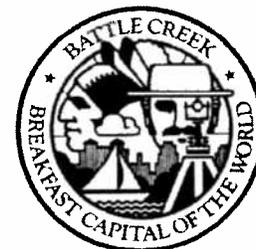
Positive Outcomes Lead to Expanded Value-Based Design Options

The Value-Based Design has made a real difference in the lives of Springfield city employees. A wellness center called Springfield Wellness in Motion (SWiM) was opened in 2009 to provide a central focus for improving the health and care management of employees. The center contracts with a local occupational medicine group to provide workers’ compensation services and a nurse practitioner provides support for wellness and chronic conditions. The program has been steadily building participation. In its first six months of operation the Center had 459 medically related visits and 257 fitness-related visits. Of these, 143 received a blood test to determine their risk of developing diabetes and cardiovascular diseases. Ardis and her staff are now adding depression and heart disease into the value-based design.

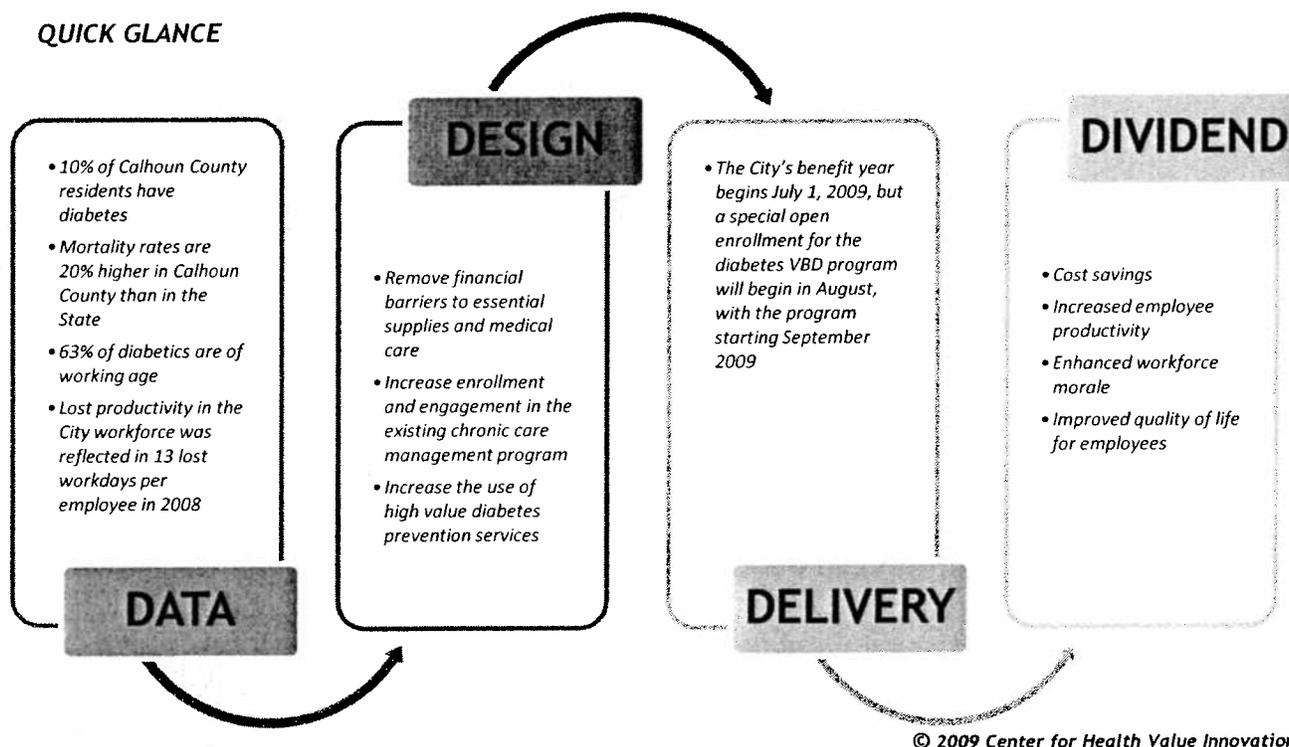
Two employees with serious chronic illnesses applied for a reduced work schedule. The City contracted occupational medicine physician worked with them for reasonable job accommodation and provides medical assistance to both employees. Because of the Center these employees are able to work their full schedules and maintain a high level of on the job productivity.

EMPLOYER SNAPSHOT: Battle Creek, Michigan

The City of Battle Creek is located in Calhoun County in south central Michigan, a short distance east of Kalamazoo. Over 53,000 people live in Battle Creek. The median age is just slightly younger than the U.S. population—34.7 years versus 35.3 years. Battle Creek is home to some of the largest cereal producers in the country, Kellogg, Ralston, and Post. The City budget in 2009 was \$120 million. The City employs 600 people in a range of occupations including firefighters, police, parks and recreation staff, transportation and public works employees. The City’s self-insured health plan is administered by Blue Cross and Blue Shield of Michigan and covers 2,100 employees, retirees and dependents. Annual health care costs exceed \$9 million.



QUICK GLANCE



BATTLE CREEK’S STORY

As a founding member of the Calhoun County “Pathways to Health” initiative, the City of Battle Creek has been part of a value-based chronic care model to improve clinical outcomes and enhance the health of both its employees and the community at large. According to Rick Hensley, the City’s Risk Manager, “We believe our moral imperative is to engage our whole community in a quest for better health.” A reduction in healthcare costs, or at least a downturn in the cost trend, is expected to follow.

The Calhoun County Pathways to Health formed in 2007 as a multi-stake holder initiative comprised of employers, insurers, providers including

hospitals and physicians, and the consumer community whose aim is to close the healthcare delivery gap for diabetes, congestive heart failure, coronary artery disease, and asthma. The City of Battle Creek believed that active participation in Pathways to Health would help make a significant difference in the health of its employees and the community members it serves.

Battle Creek is working with Blue Cross and Blue Shield of Michigan (BCBSM) to implement a Value-Based Design (VBD) that calls for financial incentives such as waived deductibles and co-payments on services that make a difference in improving employee health. Active engagement of patients to help increase self-management of their conditions is an imperative. As Rick Hensley put

it, “We are layering Value-Based Design over the Pathways to Health patient-centered medical home model.”

Battle Creek has been working with the Calhoun County initiative for the past two and a half years gathering data and designing its approach. Open enrollment for the diabetes program will occur in August. Participants will begin their chronic care management journey in September.

“We’re moving beyond an insurance approach and expanding to a fuller circle including preventive care, chronic condition care management, and improved consumer/provider communications.”

DOING THE RIGHT THING

There is a unique tension or balance that a municipal government faces surrounding the often conflicting issues of social consciousness and good financial business sense. City government has a social responsibility not only to the residents it serves, but also to the individuals it employs. City government also has a financial responsibility to its residents to operate in as cost-efficient a manner as is reasonable, but sometimes what makes good financial sense flies against “doing the right thing” from a social responsibility perspective.

Our management philosophy includes a belief that in order for the City organization to best serve the community, employees need to view themselves as not only serving the community, but more importantly that they are part of the community. We believe that if this employee perspective exists, the level of “caring” employees have for the community will likely be higher and the effort they give to serve the community will be higher. Further, our senior managers often use the phrase “thoughtful, caring leadership” to describe the type of leadership we strive to provide. And if one believes that caring behavior breeds caring behavior, then doing things that exhibit the level of caring we have for our employees should breed the same in their service to the community. What is great about VBD is that it provides a means for thoughtful, caring City leaders to do the right thing from both a social and financial responsibility perspective.

*Kenneth H. Tsuchiyama, City Manager
Russell W. Claggett, Employee Relations Director*

DATA

Rick Hensley moved to Battle Creek in his position as risk manager six months after the City joined the Calhoun County Pathways to Health initiative. Rick would become the City’s point person on the Value-Based Design. Rick says, “It took me three to four months to get my arms around what we were trying to accomplish.” Once he became involved with the employer group learning about VBD, he had an “aha moment.” The approach advocated by the city’s team became clear—to engage employees in managing their chronic conditions by providing the right mix of incentives in parallel with a provider network that was focused on re-crafting the patient experience.

Battle Creek’s experience with chronic condition management and health promotion had been frustrating. Though they offered an attractive array of activities to improve employee health, the Wellness Committee of the City recognized that more involvement on the part of the employees was needed. While some employees did participate in the chronic condition management program with Blue Cross Blue Shield of Michigan, engagement just wasn’t at the levels that would improve the City’s health outcomes. “We had low participation, low utilization, and therefore low impact”, said Rick. At the same time, they knew that poor health and chronic conditions were driving health care costs ever higher. The Value-Based Design in conjunction with the Calhoun County Provider initiative provided a solution.

A big advantage of membership in the Pathways to Health initiative was access to the work it had done on identifying costly health issues that were modifiable with a Value-Based Design effort. Statistically, Michigan ranks in the bottom quartile nationally regarding the prevalence of chronic conditions. Calhoun County’s numbers are often worse than the state averages. For instance:

- 10% of County residents have diabetes and 40% of adults (40-74 years old) have pre-diabetes.
- Mortality rates from diabetes are 20% higher in Calhoun County than in the State.
- Years of potential life lost due to diabetes is 50% higher in the County than in the State.

Understanding the total cost of poor health

As an employer, Battle Creek was curious to know the total cost of poor health including productivity loss due to absenteeism and presenteeism. This would provide an even larger target for intervention and ultimately, greater benefit for their investment.

A productivity-loss modeling program called The Health and Productivity (HP) Snapshot was provided by the Center for Health Value Innovation and it showcased some compelling data (the HP Snapshot was developed by the Integrated Benefits Institute and is offered through the Center to its members). Rick learned that employees were losing, on average, 13 days a year. Based on the modeling program an estimated 59% of this loss was due to presenteeism (reduced performance while on the job) and an estimated 41% was due to absenteeism.

The HP Snapshot also provided a model for how much productivity gain the City would experience based on a range of targeted productivity savings levels. A 10% productivity gain would yield almost \$250,000 based on adding 795 workdays not lost due to absence or presenteeism. This would roughly be equivalent to adding 3.1 FTEs to the workforce. Clearly, improving health and reducing productivity loss would be a cost-effective approach, particularly in the economic climate of 2009.

Target Productivity Savings Levels	\$ Productivity Gains	Added Workdays	Equivalent FTEs
1%	\$24,751	79	0.3
5%	\$123,753	397	1.5
10%	\$247,507	795	3.1

Source: IBI Health & Productivity Snapshot

These are sobering statistics. The essential question was whether there was another path to improve these numbers through Value-Based Design. The Pathways to Health coalition had encouraging news. Their research showed that other communities around the country had experienced success at transforming healthcare delivery.

- Management of diabetes decreased hospital admissions 12.9% and hospital lengths of stay by 13.7%.
- Improved diabetic outcomes positively affected quality of life, increased the number of diabetics working, and decreased absenteeism due to health issues.
- Interventions for diabetes and heart disease have shown an 11% decrease in health care cost, while improving disease outcomes.

Diabetes therefore would be the first condition tackled. The City of Battle Creek decided to focus on diabetes in year one of the initiative and then move to asthma and other conditions once there was some experience.

DESIGN

The Value-Based Design initiative has moved data analysis to the employer level. Battle Creek is starting to get actionable information on utilization patterns from Blue Cross and Shield of Michigan that is helping to create baseline measures for program evaluation and to target costly conditions for attention. Analysis by BCBSM's Health Connections program found a startling 230 employees or dependents with diabetes.

The health and cost issues were certainly large. Before the City managers could move the program forward the unions had to be convinced that a Value-Based Design was valuable for its members. The union contracts were clear regarding health benefits—they could engage in creative approaches. So the team made an economic and personal health improvement case. A VBD, if successful, could help with cost containment while providing better care for union members with diabetes. The bottom line in the discussion was that VBD is an innovative approach, not about taking away benefits. It is about improving the health of employees, which would, in turn, have the positive effect of helping to control runaway health care costs.

Basic Premise of the Value-Based Design:

- Remove financial barriers allowing members to access needed care.
- All co-pays for diabetes drugs, cholesterol lowering drugs, and labs, exams, and supplies are waived for people who also participate in the care management program for diabetes.

- Increase enrollment and engagement in the BCBSM disease management program.

In order to qualify for the value-tier enhancement, diabetic employees must participate in condition management at least once per quarter.

- Increase the use of high value services like diabetes prevention among participants.

These services include appropriate screenings and exams, education and lifestyle change.

The Valued-Based Design was crafted to engage folks through an insurance-plan-plus-activity approach to get employees involved and remove barriers to appropriate care. The City’s health benefit is rich but there are some employee expenses that can be leveraged. The cost of drugs for diabetes care is one of them. For participation in the diabetes VBD, employees and dependents receive waived co-pays for diabetic drugs and cholesterol lowering drugs. To receive these cost savings (up to \$400 according to Rick) they have to:

- Meet regularly with a nurse case manager.
- Attend scheduled appointments with their doctor.
- Comply with their drug regimen.

Eligible Benefits for the VBD

<u>CATEGORY</u>	<u>SERVICES</u>
Office Based Services	Preventive Evaluation and Management Office Visits.
Drug Class	Anti-Hypertensive Agents, Lipid Lowering Agents, Hypoglycemic Agents.
Examinations	Periodic Eye Exams.

- Send a letter of invitation including an 800 number.
- Member calls a disease management specialist to enroll and schedule an appointment with a nurse coach.
- Nurse coach outreaches by telephone to engage the member.
- Member agrees to participate and comply with program requirement to complete four calls with the nurse coach.
- BCBSM account manager coordinates with the City to assure compliant members receive the VBD benefits.

DIVIDEND

The program is just beginning, but Rick expects the results to be similar to others around the country: reduced cost trend, improved health quality and health status, and better value for the City, the patient, and the community.

As Rick Hensley put it, “We’re moving beyond an insurance approach and expanding to a fuller circle including preventive care, chronic condition care management, and improved consumer/provider communications.”

He expects that there will be some added costs in the short run as a result of waiving co-pays. But he expects they will see long term savings from better managing chronic conditions. As the ad says it so well, “you can pay me now or you can pay me later.”

The City of Battle Creek believes that paying a little more for better maintenance up front will result in considerable cost savings, increased employee productivity, enhanced workforce morale, and improved quality of life for employees in the long run.

DELIVERY

While the introduction of the program is still a month away, the City and BCBSM have crafted the registration and implementation phase. Here is how it works:

- Identify members with diabetes through disease registry and pharmacy data.



University of Michigan
Center for Value-Based Insurance Design

**Testimony Regarding H.B. 5345
Michigan House of Representatives
Committee on Public Employee Health Care Reform**

**A. Mark Fendrick, M.D.
Professor of Internal Medicine and Health Management & Policy
Co-director, Center for Value-Based Insurance Design
University of Michigan**

October 22, 2009

Thank you, Madame Chair. Members of the Committee, good afternoon, I am Mark Fendrick, Professor of Internal Medicine and Health Management & Policy at the University of Michigan. I am addressing you today, not as a representative of the University, but as a primary care clinician and public health professional. I have devoted much of the past 2 decades studying the clinical and economic impact of health care innovation, and specifically, founded the University's Center for Value-Based Insurance design in 2005 to develop and evaluate value-based insurance design initiatives, an idea that I was happy to see explicitly included in H.B. 5345.

My main point today is that **cost savings should not be the exclusive goal of health care reform efforts; we must not forget that the goal of the health care system is to improve health, not save money.** In order to achieve this goal we propose that appropriate incentives be provided for individuals and clinicians to enhance the use of those medical services that we know will improve the quality and length of life of Michiganders. While containing costs is one essential objective, our health care budgetary target should not be how little to spend, but be a value-driven, goal-oriented, approach similar to that used for education and transportation spending. As an alternative to simply cutting costs, consider a different question, analogous to other crucial budget decisions: "How do we best invest our increasingly scarce resources to improve the health of the people of Michigan? In other words, **let's support programs that produce the most amount of health for the dollars spent.**

Madame Chair, it's no secret to you and this committee that all purchasers of health care – whether in the private or public sector – are struggling to contain rising costs. In my view, our dire economic situation has distracted

us from why we purchase health care benefits in the first place. I, along with the thousands of dedicated and compassionate clinicians in this state did not go to pharmacy, nursing, and medical schools to learn how to save people money. **Our aim is simple, to make the people of Michigan healthier.** As I watch the debate to reform our nation's health care system, in Washington and here in Lansing, I can't help but be struck by the near exclusive attention on cost – with little to no mention of health. Given this irony, **I strongly request that you and the committee place more emphasis on "health" in your deliberations.**

Let's be honest. As the health care cost crisis escalates, payers of all kinds are shifting the growing costs to their beneficiaries – in the form of higher premiums and co-payments when we see a clinician, or fill a prescription. It is now well established that increasing patient cost sharing produces harmful consequences on our health. It is no surprise to anyone in this room to learn that when patients are asked to pay more, they buy less. **Reduced utilization – without considering the health effects – is not a desirable goal.**

There are those around the country and within this chamber that believe that people should and can spend their own money wisely on health care, and that "skin in the game" would encourage individuals to shop around and ultimately do the right thing. Remember, the reason why cost sharing exists is to motivate individuals to carefully consider their discretionary purchases. **Ideally, higher patient co-payments would discourage only the use of low-value care.** Yet, in almost every health plan in Michigan, out of pocket costs have increased in an "across the board" way, such that every doctor visit, diagnostic test, and prescription drug within a formulary tier costs the individual the same, with no consideration of the amount of health those services produce.

Does it make sense that my patients pay the same co-payment for a drug that would save their life as a drug that would make their hair grow back? The same to see a cardiologist for a heart attack as to see a dermatologist for mild acne? This "one size fits all" system lacks any clinical nuance and to me, frankly makes no sense. As a result, as patients are required to pay more – they do buy less of the non-essential services, BUT they also buy less of those potentially life saving services that I "beg" my patients to do, such as immunizations, cancer screenings, and essential therapies for the treatment of chronic diseases. **Efforts to control spending through cost sharing should not produce preventable reductions in quality of care.**

Please do not prematurely conclude that I do not clearly support the use of patient cost sharing as a critical lever in health care cost containment – that could not be further from the truth. I strongly endorse the use of cost-sharing, but feel that it should be implemented in a “clinically sensitive” way. **Patients need a system that removes financial barriers for those clinical services where there is clear evidence of value, and likely underutilization if left to individual spending patterns.** In other words, any plan to increase the consumers’ role in health spending must also include incentives to seek essential, proven preventive care for little or no money of their own. **This concept – one with Michigan origins – is referred to as “value-based insurance design” [VBID]; the basic premise is that patient out-of-pocket cost and clinician payment are tied to value - not just the cost - of health services.** The more clinically beneficial the service is to the patient, the lower the cost-sharing.

VBID plans have been implemented in Michigan [the City of Battle Creek, Whirlpool and my own employer the University of Michigan have been national leaders] and by numerous private and public payers around the country. Research published by our Center and other investigators concluded that VBID plans significantly increase the use of recommended services and therefore lead to improvements in population health.

Madame Chair, in anticipation of a frequently asked question: “Does the VBID approach save money?” The answer is – it depends. **The financial impact of VBID plans depends on the level of clinical targeting and the extent of the changes in co-payments.** “Value-based” does not necessarily mean less expensive, particularly in the short term. The savings associated with improved health are usually measured by reductions in future adverse events – such as keeping people out of the ER or the hospital – which may offset the added costs of collecting lower co-payments and the increased use of high-value services. For example, the increased costs of lower patient cost-sharing for asthma control medications would be at least partially offset by savings from fewer emergency room visits for acute asthma attacks. Our own research would suggest that when carefully targeted, the return on investment for VBID programs far exceed many commonly employed cost containment strategies.

In addition to the direct financial benefits of improved health on medical spending, it is very important to note that additional return on investment [ROI] to the payer accrues when the “non-medical” benefits, such as

reduced disability and absenteeism, and enhanced productivity are included. It is my opinion, that when both medical and non-medical benefits of enhanced health are combined, that a positive ROI will likely result from VBID programs in many disease conditions.

Finally, I think it's important to note that the VBID concept is gaining substantial momentum among policymakers. Governor Granholm included VBID principles in her Michigan First Healthcare Plan and several states have incorporated VBID standards into the benefit design for their employees. On the federal level, this May, Senators Stabenow and Hutchison introduced legislation to implement VBID demonstration projects in the Medicare population. The U.S. House of Representatives health reform legislation includes VBID as a means to allow for modifications in cost sharing and payment rates. Most noteworthy, is that legislation introduced by the Senate Finance Committee this past Monday explicitly codified VBID as "a methodology under which clinically beneficial preventive screenings, lifestyle interventions, medications, immunizations, diagnostic tests and procedures, and treatments are identified and cost-sharing is reduced or eliminated to reflect the high value and effectiveness of the items and services." The idea is catching on.

Madame Chair, I am delighted to see that you are considering a role for expertise in value-based insurance design in your deliberations on H.B. 5345. Cost savings should not be the exclusive goal of health care reform efforts. **It is critical to develop strategies that simultaneously address spending growth and aim to improve population health.** Compared to the archaic "one size fits all" benefit design that does not acknowledge that clinician visits, diagnostic tests, and prescriptions differ, the VBID approach can contain costs while mitigating the adverse health effects associated with patient cost sharing. The alignment of incentives would encourage the use of high-value care, and **ultimately produce more health at any level of health expenditure.** By adopting a "clinically sensitive" approach, we can ensure that two critical goals of health reform – containing costs and improving quality – are met.

For more information please visit www.vbidcenter.org

**Testimony to the
State of Michigan, Michigan Health Benefits Program Committee**

by
Keith Bruhnsen
University of Michigan
Assistant Director, Benefits Office
Manager, Prescription Drug Plan
Ann Arbor, MI 48109

October 22, 2009

Chair Byrnes and members of the Committee. My name is Keith Bruhnsen and I'm the manager of the Prescription Drug Plan at the University of Michigan. I thank you for the opportunity to present to this joint committee regarding the Dillon proposed Michigan Health Benefits Program to pool and manage public employee health benefits, including prescription drugs. I will restrict my comments to the challenges and opportunities of managing prescription drug programs.

The purpose of this testimony is three fold:

- 1) to demonstrate how our experience at the University of Michigan with a carve-out drug plan allows us to achieve greater involvement in prescription drug benefit management for cost control while improving the quality of the drug benefit;
- 2) to share some of the best practice approaches today in drug management and discuss how these practices can potentially conflict with the business model of large pharmacy benefit managers (PBMs) and the health plans that administer prescription drug benefits; and
- 3) to suggest the type of administrative operational structure that would likely be needed if Speaker Dillon's proposal is enacted.

The management of prescription drugs is one of the most complex areas of health care. We see employees and their families tending to use more medications each year for more conditions, drug prices continue to climb, we are influenced by direct-to-consumer pharmaceutical advertising, and new drugs and new indication for existing drugs are approved each month. High-cost specialty drugs with annual trends rates and price increases far exceeding other drugs represent an area of great concern in drug management today, and such escalating cost pose a threat to maintaining affordable coverage in the future.

The U-M Prescription Drug Plan

Here are the highlights of the U-M drug plan and the key elements of the approach we have used over the past six years along with some of our lessons learned:

- As you know, the University of Michigan is a top ranked, public research university with a large academic medical center. As such, we have access to world-class internal resources.

- U-M consolidated its drug benefit by removing the management of drug benefits from its medical plans in 2003. After years of double-digit price increases, we lacked data to understand our costs and the validity of the increases, and we suspected that our health insurance plans were not applying best practices to manage drug cost and utilization. Our health insurance plans opposed this change, warning that we were unlikely to be able to successfully consolidate and administer drugs to produce a savings. Our experience has proven this warning to be inaccurate, and we have achieved significant savings by employing strong cost-containment strategies.
- We cover more than 88,000 employees, retirees and their dependents for outpatient prescription drugs. Our plan is self-insured and self-administered. We contract with a PBM for specific services, including claims processing, a select network of retail pharmacies in Michigan, rebate administration, a plan member and pharmacy help desk, and certain clinical programs. The drug formulary, preferred drug list, utilization management programs, and data analysis are all administered internally by the University's Benefits Office, with the guidance of two expert committees that I will describe later in this presentation. Plan administration required additional staffing of a manager, clinical pharmacist, part-time data analyst, and a staff member to handle urgent eligibility and escalated claim problems. Similar levels of staffing are recommended if the State decides to pursue a self-administered benefit and capitalize on the best practices to reduce cost.
- Our plan design includes a broad formulary of drugs. We provide the same level of coverage for all members, which includes a three-tier design with flat-dollar-amount member copays that increase with each tier from generic drugs to preferred drugs to the greatest member copay for brand-name non-preferred medications. Three union groups have negotiated copay amounts that differ.
- Because of our successful financial outcomes, we have been able to maintain lower than market average member copays and avoid cost shifting to our plan members. The share of total plan costs borne by the members has dropped from 18.5 percent in 2003 to just over 15 percent in 2008. National averages for member retail copays are in the mid 20-percent range¹.
- We contract with a separate vendor for mail order pharmacy services in order to avoid the conflicts of interest of a PBM owned mail order pharmacy. Mail order programs offers some additional drug discounts and the savings achieved are shared with our members who use the service by way of reduced copays for 90-day supplies of medications. Many members enjoy the convenience of home delivery, but the rate of member complaints is higher than retail pharmacies and delayed delivery of medications can create challenges. The sum total of our challenges with mail order pharmacy services is great enough that we would be unlikely to offer a mail order pharmacy if we were to design a new prescription drug benefit today.

¹ 2009-2010 Prescription Drug Benefit Cost and Plan Design Report , Page 12, Pharmacy Benefit Management Institute

- As mentioned earlier, two committees guide and advise our drug plan. One is an oversight committee of University representatives focusing on customer satisfaction, member privacy, endorsement of vendors, clinical programs, research, and the drug formulary. The second committee is comprised of physicians and pharmacists and convenes monthly to select formulary best-value medications for members and prescribers. They review new drugs, monitor claim utilization and cost data, assign drugs to specific copay tiers and suggest utilization management programs.
- Our strategy values evidence-based decision making to achieve optimal and safe utilization based on sound clinical evidence. Since not all drugs offer good value, our analysis looks at net cost to identify “best value” medications based on clinical value and cost-effectiveness, often eliminating newer high-cost and low-value branded medications that offer no superior advantage over older brands and generic medications.
- A good effectiveness indicator for drug plan management is the metric of a drug plans annual Per Member Per Year (PMPY) trend increase over the prior year’s plan cost. In 2004, U-M’s PMPY increase during the 2003 calendar year was 12.6 percent. That was our first year of the plan’s operation. In 2008, our trend rate was negative 2.22 percent for the 2007 year. The dramatic decline can be attributed to use of multiple strategies, innovative practices and aligning drug plan design and formulary coverage for best-value purchasing.
- We have measured our annual plan cost increase compared to national averages and conclude that we have saved about \$54 million dollars, or about 16 percent of the cost we would have incurred over the six-year period, had we not moved to an actively managed self-insured and self-administered drug plan.
- Our strong emphasis on use of lower cost generic drugs has created greater savings to the plan and reduced member out-of-pocket cost more than any other drug plan action we’ve taken. We have increased our generic dispensing rate from 42 percent in 2003 to more than 73 percent today for all medications used, and with minimal member disruption. In general, we experience a 1 percent decrease in drug plan cost for every one percent increase in the generic dispensing rate. Today, the average 30-day generic drug cost is between \$20-30 and a single-source brand drug cost averages over \$200 for the same 30-day supply. We have seen no better opportunity to lower drug plan cost than increasing the use of generic medications, where appropriate. Plan sponsors are often enticed by rebates on brand drugs that are offered by PBMs and pharmaceutical companies, but the rebates do not equal the lower cost of using generics.
- Examples of strategies and programs used at U-M include: limitations on quantities and supplies based on FDA approved indications; use of pill splitting for cholesterol lowering medication; dose optimization; prior authorizations; step therapies; and switch programs that transition members to generics, with physician approval. Most of our programs are documented on our web site and are sometimes accompanied with published research. Therefore if you control plan design and formulary and can implement various clinical management programs, you can by extension address cost control.

Principles of Plan Management

Three important principles guide our drug plan management:

- 1) Managing toward the lowest net cost using evidence-based decision making. By using the right science we have high physician support and a low number of appeals.
- 2) Focusing on “appropriate use” of medications – meaning the right drug, in the right amount, at the right time for that member. This helps to eliminate waste, overuse, misuse and abuse.
- 3) Being sensitive to member and prescriber disruption through continually educating members and prescribers on the rationale for our decisions and individual opportunities to lower their cost when new generics are released, when a change in a drug class occurs, or when an equivalent drug becomes available over-the-counter.

Our Preferred Drug List (PDL) is intended to suggest first-line therapy agents to members and prescribers. Only one of 19 drug classes on our PDL, which covers about 80 percent of all dispensed medications, has a branded medication as the preferred agent. We have found that our members are price sensitive when drugs are assigned as non-preferred or when a generic is available.

Our success required we identify and contract with a PBM that contractually gives our plan the flexibility and control to implement plan design and drug formulary changes as often as necessary. I raise this important issue because there are competing interest between PBM profitability and plan sponsor cost. The PBM industry has been widely criticized and subject to litigation by plan sponsors regarding their pricing and rebate practices with pharmaceutical manufactures. PBM services today have evolved beyond being purely drug claims processors. I believe there are inherent conflicts of interest where PBMs have entered into the drug delivery distribution channel as owners of mail order and high-cost specialty drug pharmacies where they not only purchase products but also set the prices for the plan sponsor.

Transparency

Requiring transparency from PBMs is necessary in order to validate that a plan sponsor’s interest is being well served. You have a right to know how the PBM is making money on your drug claims, have the opportunity to negotiate sharing in revenues they receive, and at the same time hold the PBM accountable for adjudicating your drug claims on the plan design you pay them to administer. We found there tend to be many more errors in drug claim pricing and payments than originally known because there can be a lack of adequate testing of plan designs and monitoring of claims by PBMs.

Understanding the level of cost reduction opportunities in your proposed purchasing pool would require a careful analysis of the current claim utilization and plan designs for the various plan sponsors being considered. With that information you could then identify:

- savings in obtaining larger market competitive drug discounts;
- potential saving through adopting new strategies and programs;
- whether you have a fair and equitable cost sharing with members; and

- evaluate the effectiveness of the plan designs and drug formularies for best-value purchasing and for incenting greater generic drug use.

Billions of dollars of savings have been available through new generic market entries over the past few years and billion more will be available over the next 3-5 years if you are properly positioned to capitalize on them.

If your drug plan coverage is consolidated with one health plan vendor, I believe it to be unlikely that any significant savings would occur because their current pricing and management practices will likely continue into the future. Given the size of your proposed pool, I believe your best opportunity to manage prescription drug cost is to carve away the drug plan from your medical plans and design it to be self-insured and self-administered.

In summary, we believe a carve-out approach can control drug spending. You must review your strategies and seek innovative designs to manage use and shape behavior of physicians and members.

Appendix

Pharmacy Program Intervention Matrix

<p style="text-align: center;">Patient Based</p> <ul style="list-style-type: none"> • Compliance Programs • Disease Management • DAW Penalties • Patient Education <ul style="list-style-type: none"> ○ Web ○ Print ○ Onsite or phone consultation ○ Personal letters ○ Vendor outreach • Copay Incentive Programs 	<p style="text-align: center;">Drug Based</p> <ul style="list-style-type: none"> • Formulary and PDL • Rebate Administration • Dose Optimization • Tablet Splitting • Benefit Based Co-Pays • Contingent Therapy • Step Therapy • Quantity Limits (MDD) • Prior Authorization • Generic Incentives • Therapeutic Interchange • Mail Order • Drug specific lettering
<p style="text-align: center;">Physician Based</p> <ul style="list-style-type: none"> • Retrospective Drug Utilization Review • Physician Profiling • Physician Education • E-Prescribing • Electronic Support (ePocrates) 	<p style="text-align: center;">Pharmacy Based</p> <ul style="list-style-type: none"> • Network Administration • Concurrent Drug Utilization Review • Electronic Messaging at POS • Network Reimbursement • MAC Pricing • 340B Specialty Drug Pricing • Own-use pricing • Audits

U-M Drug Plan Key Cost Factors

Key Cost Factors	2003	2004*	2005	2006	2007	2008	% Increase 2007-2008
Total # of Claims	859,319	888,890	867,139	878,169	905,456	923,896	2.04%
Total Drug Spend	\$53.2M	\$60.1M	\$67.1M	\$70.1M	\$73.8M	\$76.3M	3.42%
U-M Contribution	\$43.4M	\$49.4M	\$55.7M	\$58.4M	\$61.7M	\$64.7M	5.00%
Member Contribution	\$9.8M	\$10.7M	\$11.4M	\$11.8M	\$12.2M	\$11.6M	-4.97%
Member Share %	18.50%	17.90%	17.00%	16.76%	16.49%	15.15%	-1.34%
Avg. Total Drug Cost/Script	\$61.98	\$67.66	\$77.39	\$80.56	\$81.53	\$82.64	1.36%
Avg. Member Drug Cost/Script	\$11.48	\$12.08	\$13.12	\$13.50	\$13.44	\$12.52	-6.80%
PMPY Total Drug Cost	\$676.73	\$762.30	\$848.60	\$877.36	\$902.56	\$882.49	-2.22%
PMPY Plan Cost	\$551.45	\$626.20	\$704.71	\$730.31	\$753.76	\$748.25	-0.73%
PMPY Member Cost	\$125.28	\$136.10	\$143.90	\$147.05	\$148.80	\$133.68	-10.16%
Actives: Eligible member Util rate/year (30Day Rx's)	7.4	8.0	8.4	10.2	10.7	10.5	-1.87%
Retiree: Eligible member Util rate/year (30Day Rx's)	24.8	27.6	29.5	36.2	37.0	37.8	2.16%
Generic Dispensing Rate	46.30%	49.00%	53.20%	57.45%	63.12%	69.20%	6.08%
Avg. Ingredient Cost Paid/Generic Per Rx	\$21.81	\$21.95	\$27.09	\$24.08	\$24.78	\$26.02	5.00%
Avg. Ingr Cost Paid/Single Source Brand per Rx	\$98.51	\$114.43	\$135.47	\$156.40	\$177.91	\$210.68	18.42%
Avg. Ingr Cost Paid/Multi Source Brand per Rx	\$46.23	\$49.65	\$68.15	\$79.33	\$80.41	\$92.66	15.23%
Average Days Supply per Rx	31	33	36	36	37	38	2.70%
% Dispensed as Non-Formulary	8.40%	9%	9.30%	10.84%	13.51%	11.25%	-16.67%

Glossary of Metrics:

Eligible Member Util Rate - number of prescriptions paid by the plan averaged over the number of eligible members who had prescriptions paid by the plan. "/Year 30 Day Rx's" represents all prescriptions paid "normalized" to a 30 day supply.

Formulary Prescription - those prescriptions that paid at Tier 1 (generic) and Tier 2 (preferred brand) co-pay.

Non-Formulary - those prescriptions that paid at Tier 3 (non-preferred) co-pay.

Generic Dispensing Rate - the percentage of generic prescriptions dispensed and paid.

Ingredient Cost - Cost of the medication without added dispensing fees or co-pay reduction.

MAC (Maximum Allowable Cost) - an upper payment limit based on average generic price. When multiple generics are available for a medication, a MAC is usually established for all sources of the same medication in the same strength. For example, the per-capsule reimbursement for amoxicillin 500mg is the same regardless of manufacturer.

Member (Mbr) - An eligible person covered by the plan: cardholder, spouse, child, or other eligible dependent.

MS Brand (Multi-Source Brand) -brand products have generic equivalents available.

PMPM (Per Member Per Month) - monthly total divided by the number of eligible members.

PMPY (Per Member Per Year) - annual total divided by the number of eligible members.

SS Brand (Single Source Brand) - Medication available from only one manufacturer. Single source brand products do not have generic equivalents available.

Utilizing (Util) - Includes only eligible members who had one or more prescription paid by the plan during the reporting period.