



**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](http://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

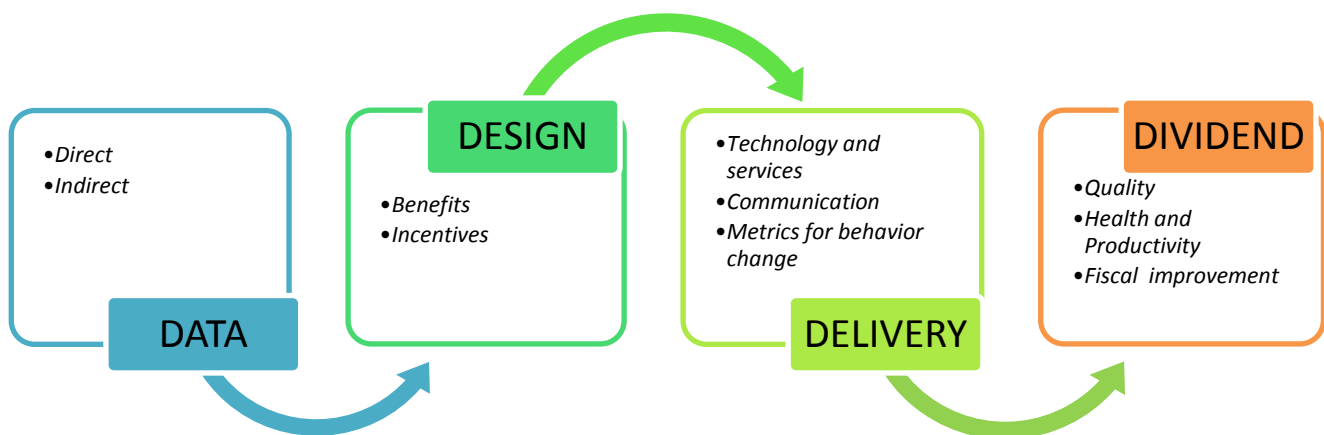
## Public Entities Are Rapidly Adopting Value-Based Designs

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

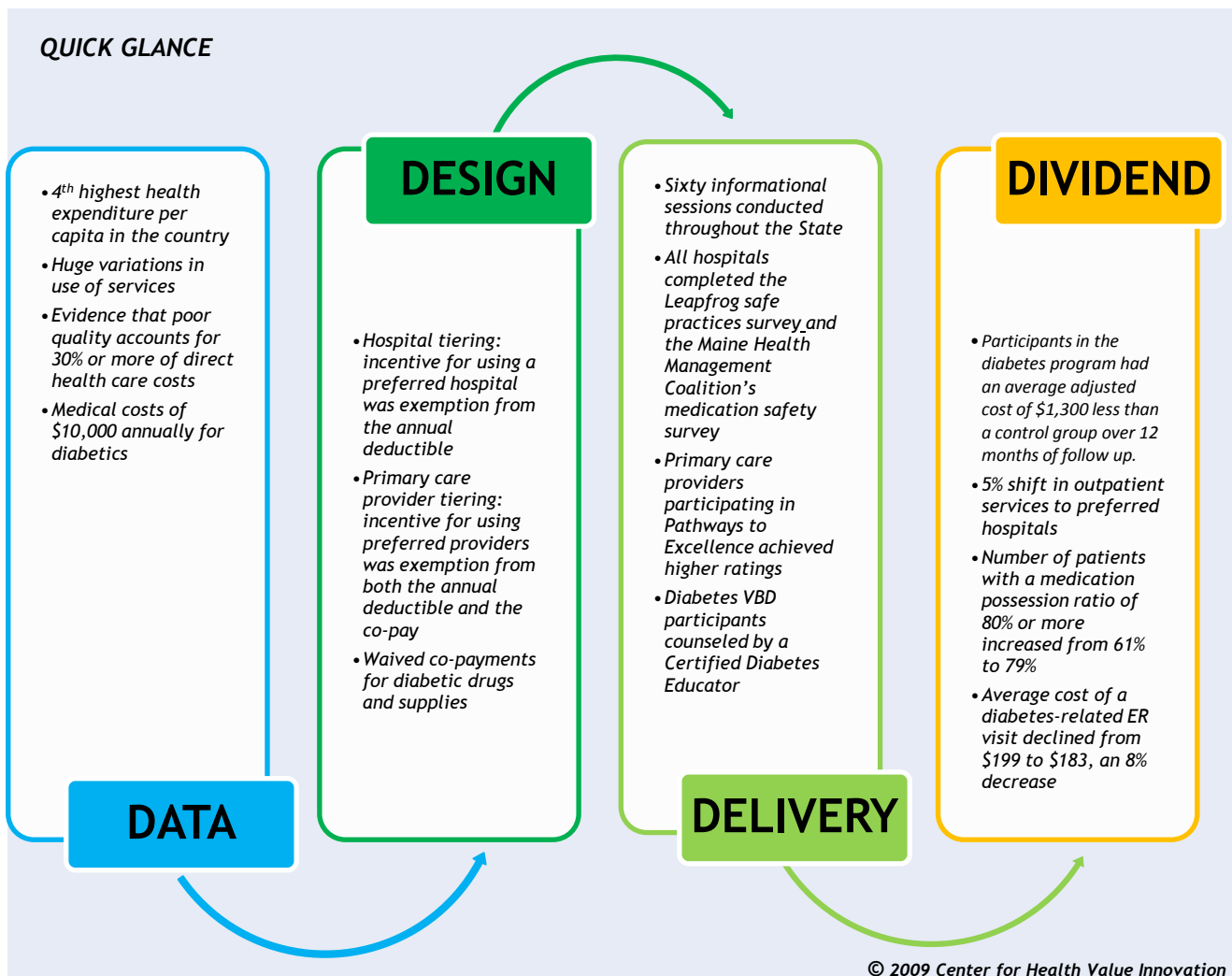
John Riedel  
President  
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## EMPLOYER SNAPSHOT: State of Maine

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.



### MAINE'S STORY

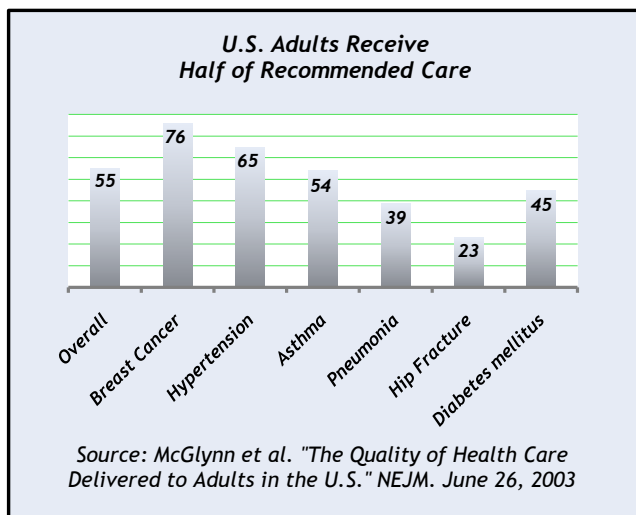
#### DATA

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**

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

*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.”

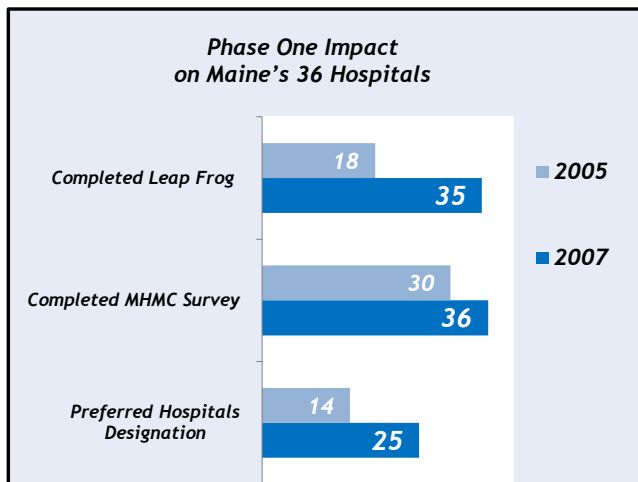
#### **Hospitals Take Action**

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*

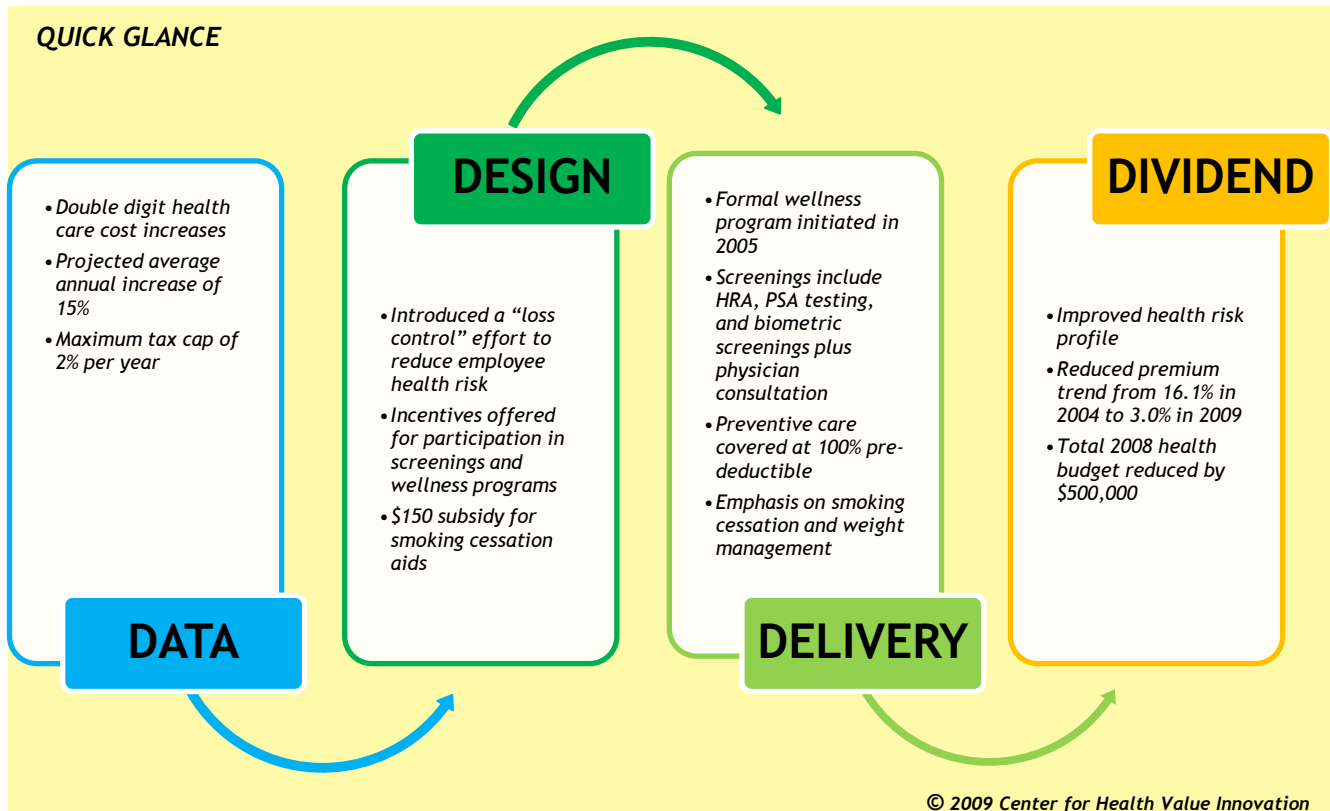
Frank Johnson puts their VBD in perspective, "***Our success will ultimately be measured by an increase in quality and safety at all our hospitals, the efficiency and quality of our clinicians, and the adherence of our patients to appropriate care. The pilot helped us move in that direction.***"

## 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).



### 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

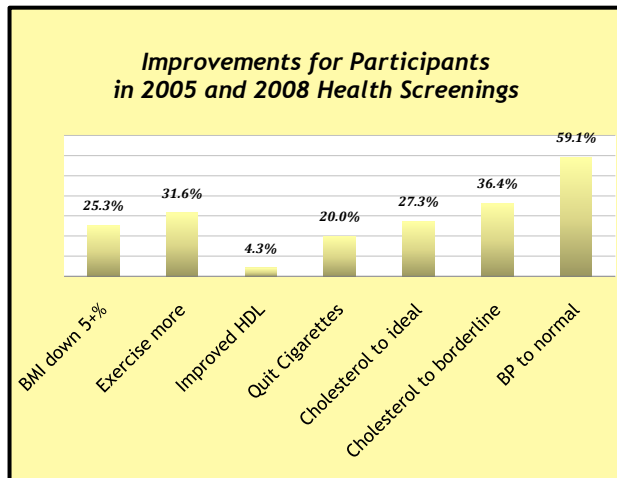
### **SCREENING SAVES LIVES**

*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 PEMP/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**

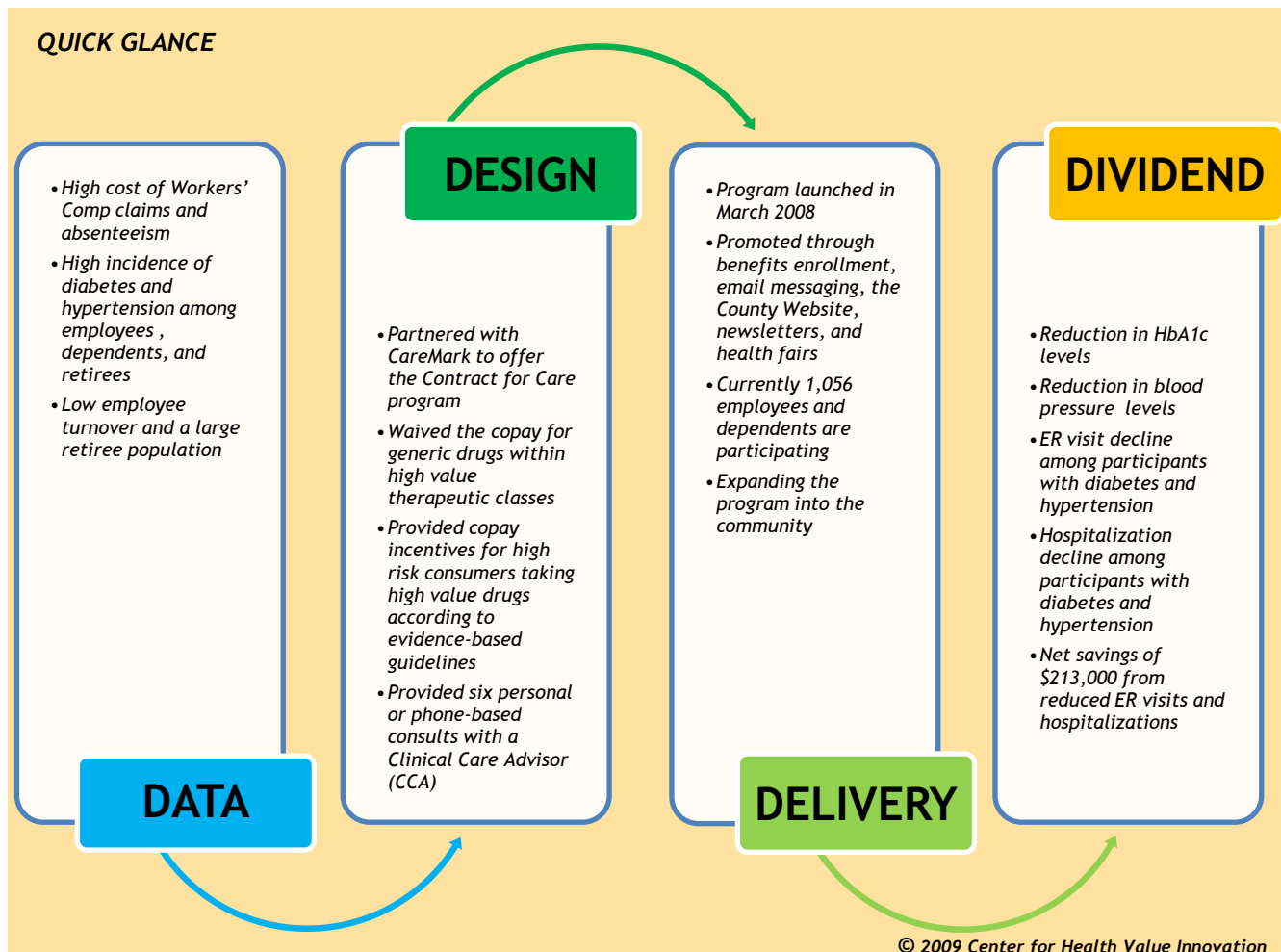
*An employee was taken to the doctor by his co-workers after he noticed his symptoms were similar to those of a heart attack, a fact they had learned in our Value-Based Program.*

*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.



### 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.

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

## 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:

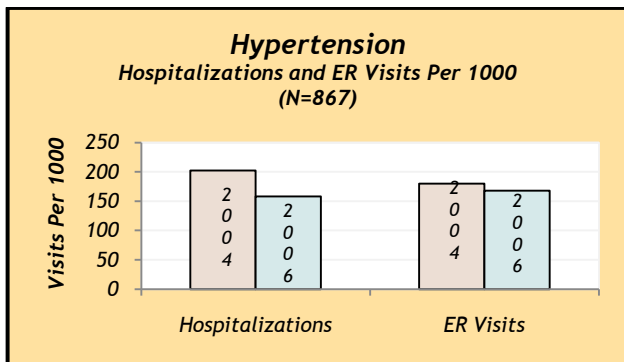
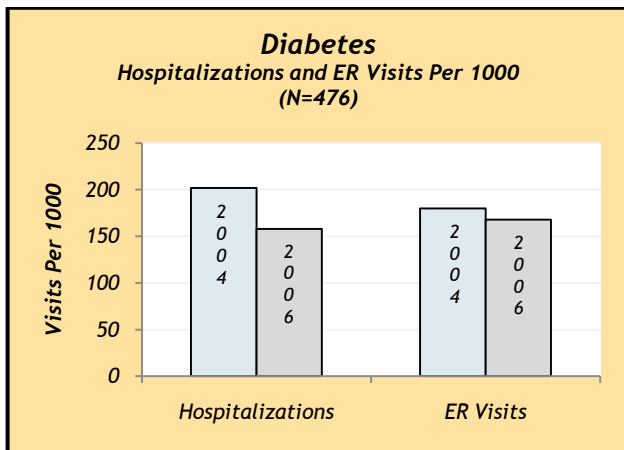
- 67% of participants with high severity diabetes achieved average reduction of HbA1C of 1.51 mg/dl.
- The average reduction in blood pressure for high severity participants was 11/5 mmHg.
- Employees with hypertension have decreased their risk of stroke and heart attack.
- Participants with diabetes 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**

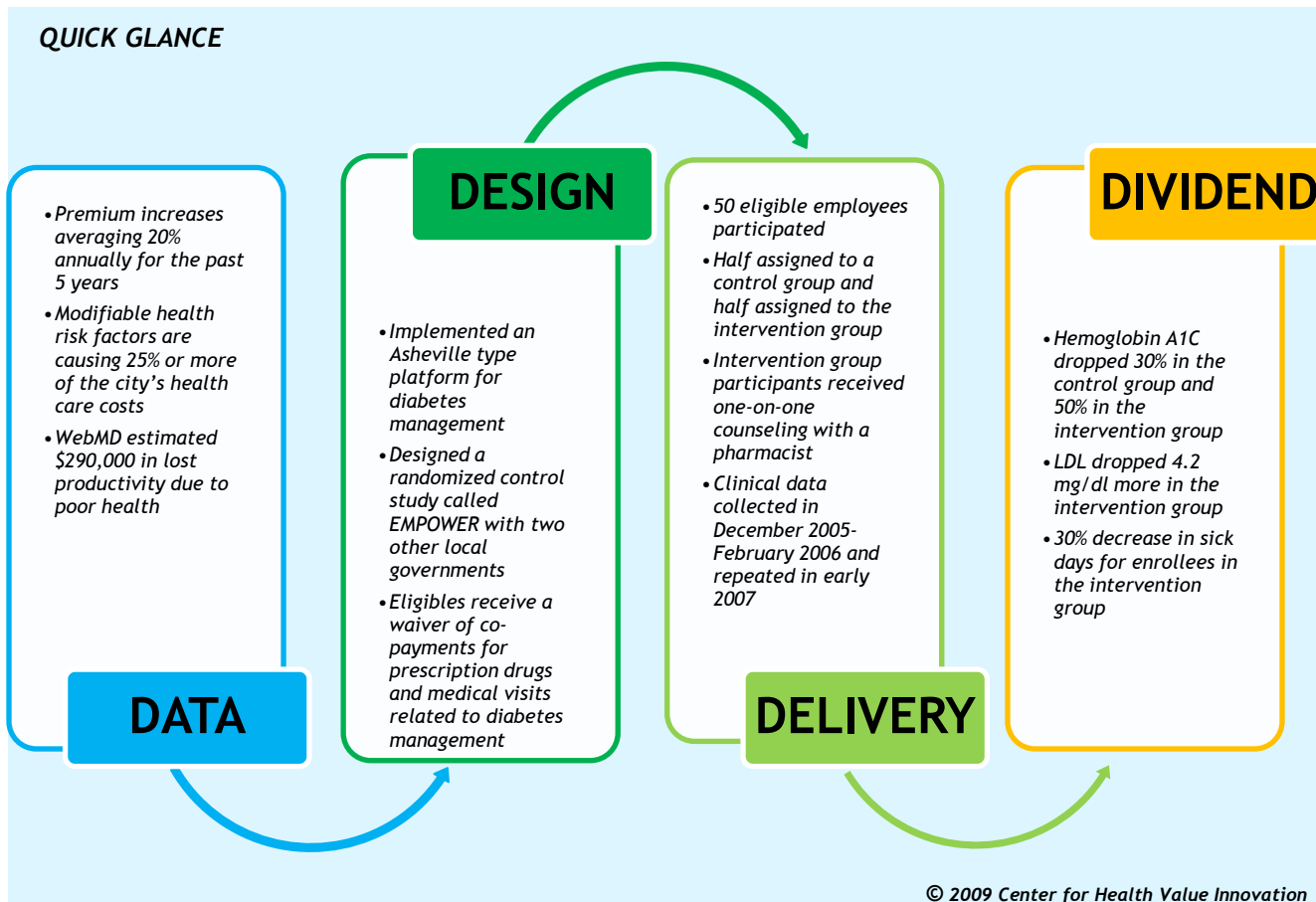
- Member accountability is essential.*
- Appropriate leverage helps drive results.*
- Need to continuously refine, track and assess process and outcomes data.*
- Mechanisms to support office-based practices mitigate inefficiencies.*
- The onsite clinic has proved invaluable as a lab and referral resource.*

## 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.



### 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 Evaluate8 program

from the National Business Coalition on Health. Evaluate8 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. Evaluate8 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](http://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](http://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.

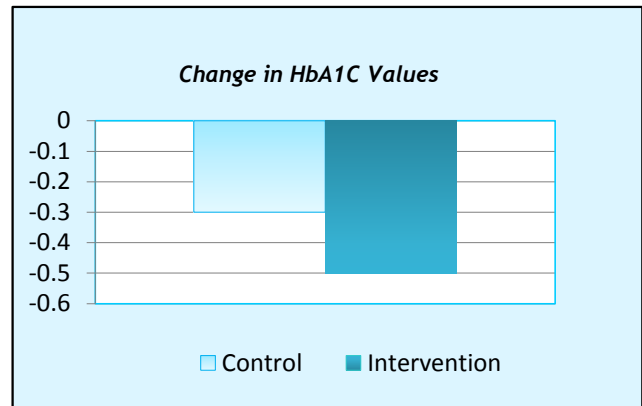
The program has been a lifesaver for many employees. According to one participant:

*"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%."*

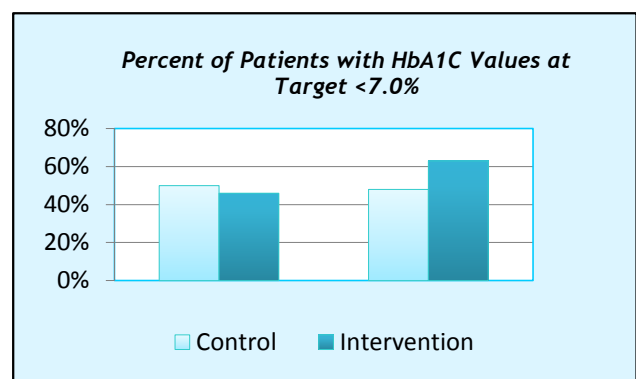
## DIVIDEND

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

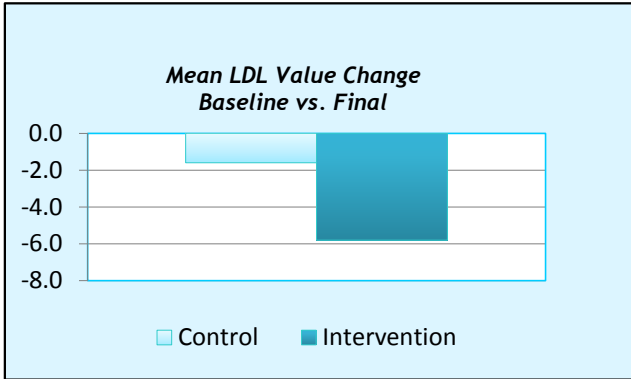
Hemoglobin A1C dropped 30% in the control group and 50% in the intervention group. The financial incentive had significant impact on its own but when coupled with pharmacist counseling the results were much more robust.



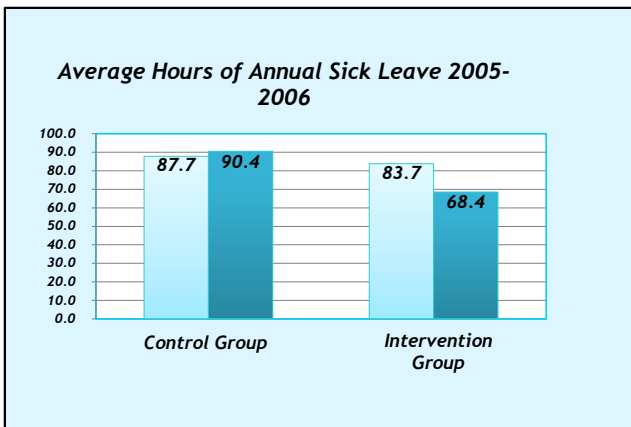
The ADA targets a hemoglobin A1C level of less than or equal to seven for desired diabetes control. The number of employees in the control group who achieved HbA1c levels of seven or below remained static; the number of employees in the intervention group who improved their HbA1C levels at or below seven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

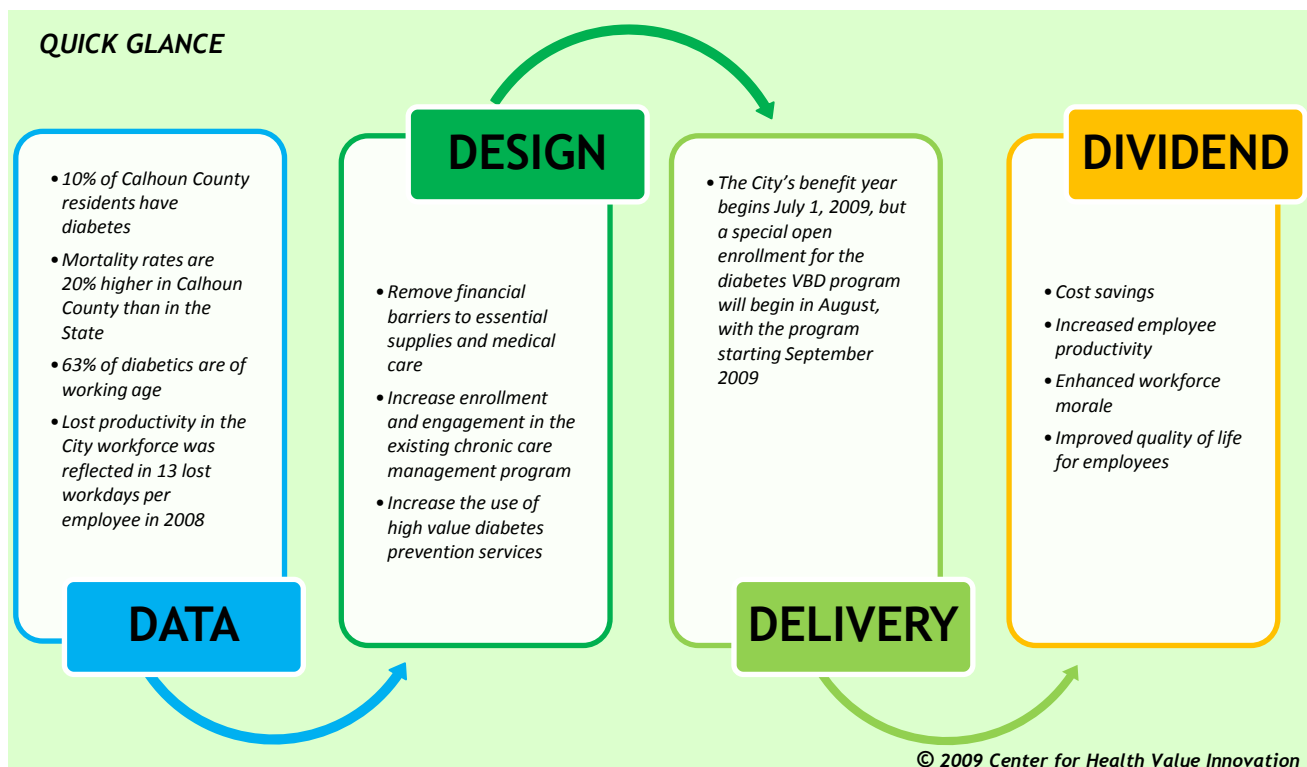
**Positive Outcomes Lead to Expanded Value-Based Design Options**

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.



### 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.