The UnitedHealthcare Diabetes Health Plan

Agenda

• Market Health Trends- declining health status and increase disease prevalence
• Optimal Decisions and Opportunity for Improvement
• Value Based Plan Design Overview and Considerations
• UHC approach to this challenge- Diabetes Health Plan
  • Early Models and the addition of a stick
  • Research in support of the approach
  • What incentive motivates?
  • Components of Diabetes Health Plan
  • ROI assumptions
• Early Results - Case Studies
• Where do we go from here?
Market Trends
U.S. Population Disease Statistics

Heart disease is the leading cause of death in the U.S.
In 2009, heart disease is projected to cost more than $304.6 billion, including health care services, medications, and lost productivity.

In 2003, approximately 37% of adults reported having two or more of six risk factors for heart disease and stroke (high blood pressure, high cholesterol, diabetes, current smoking, physical inactivity, and obesity).

One-third of adult Americans aged 20 years or older have hypertension or are taking hypertension medications.
Almost one fifth (21.3%) of those with high blood pressure don’t know that they have it.
An estimated 90% of middle-aged adults will develop high blood pressure in the remainder of their lifetime.
About 28% of American adults have pre-hypertension.

18.4% of adults aged 18 years or older who are current cigarette smokers.
Approximately 39.5% of adults aged 18 or older who engage in no leisure time physical activity (2006).

More than a third of American adults are considered obese.

Estimated diabetes (direct and indirect) costs in the U.S. in 2007 totaled $174 billion.
Average medical expenditures among people with diabetes are 2.3 times higher than what expenditures would be in the absence of diabetes.

Source: Center for Disease Control [http://cdc.gov; Sept 2009]
Market Trends
Net number of diabetics is growing by 1 million annually

The Diabetic Population
10.7% of U.S. adults over age 20, or 23.6 million people, are diabetic
• 18 million of those Americans are diagnosed diabetics
• 5.6 million, or 24% of the total, are undiagnosed

Trends Driving the Increase in Diabetes
• Higher percentage of obese Americans
• Improved or enhanced detection
• A growing elderly population
• Growth in minority populations

SOURCE: 1) American Diabetes Association. 2) Ingenix, Reden&Anders Commercial Database - Charges
Optimal Decisions
Every day, individuals make decisions that impact their health and health care costs

- Decisions are made by people, not populations
- Individual decisions are the main drivers of workforce health and health care costs
  - Personal health decisions drive 50% of an individual’s health status
  - People make sub-optimal decisions about their health 46% of the time
- Average cost of an employee with diabetes is about 13 times the cost of an average “healthy” employee

 Major Disparity in Costs for Diabetic vs. Non-Diabetic

<table>
<thead>
<tr>
<th>Avg. yearly cost: diabetic employee</th>
<th>Avg. yearly cost: healthy employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>$22,512</td>
<td>$1,721</td>
</tr>
<tr>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>$5,000</td>
<td></td>
</tr>
</tbody>
</table>

1. Covered charges from Ingalls national database
2. Covered charges from UnitedHealthcare Consumer Activation Index database

National Center for Disease Control and Prevention, 2006
UnitedHealthcare Client Claims Analysis of 2 million claims, 2007

A sub-optimal health care decision is defined as one in which, for the member, there was at least one alternative decision that could have resulted in improved cost savings and/or health outcomes over time.
Value Based Plans
Not just a plan design…

An integrated benefits strategy that inspires healthy behavior and the achievement of specific health goals.

**How it works**

- **Analytics**: To define opportunity
- **Economic rewards**: To remove barriers and integrate clinical measures
- **Consumer Activation**: To support decisions

**Better Outcome**

**Better Health**
**Better Cost**
Reinforce a culture of health at the workplace

In two separate 2008 studies – one conducted by Forrester and one by UHG (through a third-party), these factors were cited as necessary to enhance compliance, engagement, and healthcare economics.

**Value Based Plan Design**

**Start with knowledge:**
- Consumer Activation Index pinpoints the opportunity
- Biometric screening identifies potential health issues

**Remove financial barriers with designs that:**
- Integrate medical and pharmacy
- Include incentives and plan provisions

**Remove non-financial barriers:**
- Ensure members understand the options available
- Educate members on how to stay healthy

**Encourage and reward compliance:**
- Reinforce optimal health care decisions

**Provide access to the right doctors:**
- Encourage use of UnitedHealth Premium physicians and facilities

**Reinforce a culture of health at the workplace:**
- Apply Change Management principles
- Integrate health and wellness across company operations

Value Based Plans
Creating Value
Structure the economics for health ownership and deliver information and support to take charge
Value Based Plans
Influence consumer behavior to help improve health and reduce costs

Value Based Plans are designed to influence consumer behavior.

- Targeted financial incentives
- Clinical sophistication into benefit design
- Technology support

Personalized Health Plans can offer an important VBID opportunity that may help:

- Drive consumer behavior by incorporating self-management into a benefit design
- Improve health outcomes and cost with compliance requirements
- Provide meaningful ROI

Value-Based Design Continuum

“VBID – lite” approaches

Communication efforts:
- Target mailings to promote services

Unilateral Service Reduction
- Isolated specific service co-pay Reduction (i.e., anti-hypertensives)

Value-Based Plan Design

Personalized Health Plan:
- Significant benefit design enhancements linked to targeted evidence-based behaviors
Employees showed interest in Value Based Plans

Consumers confirmed their interest; the majority of respondents said they would be “Extremely Likely” or “Very Likely” to enroll in a health plan designed to encourage and support health care self-management using incentives.**

Initial interest was 60% but it went up 12% -- after they learned more.

**UnitedHealth are proprietary study based on a 2008 survey with close to 400 respondents with Type II Diabetes**
Research
What Motivates?

Co-pays and opportunity to save identified as key to member engagement

Research indicates that reduced co-pays and free diabetic supplies are most desired by members. But it’s up to the employer which ones are chosen.

Because employers will determine which point on the savings continuum makes most sense for their employees, we determined that $500 is sufficient incentive for up to 97% of eligible members to enroll in the plan.

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### What Rewards Would Motivate You to Comply?

| Reward Description               | Motivation
|----------------------------------|-------------
| Reduced doctor visit co-pays     | 7.8         |
| Reduced pharmacy co-pays         | 7.7         |
| Free supplies                    | 7.3         |
| Reduced deductible               | 6.5         |
| Reduced co-insurance             | 6.5         |
| Save on new things¹              | 5.7         |
| Weight loss classes              | 4           |
| Gym memberships                  | 3.9         |
| Health coaching                  | 3.4         |
| Support groups                   | 2.3         |

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### Yearly Savings Levels to Encourage Participation

- **$250:** 81% likelihood of enrollment at the stated savings level
- **$500:** 97% likelihood of enrollment at the stated savings level
- **$750:** 98% likelihood of enrollment at the stated savings level

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¹ Items specific to those with diabetes, e.g., diabetic socks and insulin cases.

# Diabetes Health Plan

## Components of the Diabetes Health Plan

**Goal:** Avoid complications of diabetes through early identification and incentives for compliant behaviors

### Diabetes and Pre-Diabetes Screening Model
Identifies diabetics and pre-diabetics through:

- Historical Claims Analysis
- Health Assessment
- Biometric Screening

### Diabetes Specific Benefit
For the diabetic and pre-diabetic employees. These include:

- Reduced or eliminated physician office out-of-pocket expenses (for diabetes-related visits)
- No charge for selected diabetes self-monitoring training and supplies
- Reduced or eliminated out-of-pocket expenses for certain diabetes-related drugs and drugs prescribed for co-morbid conditions

### Compliance Requirements
Designed to help consumers modify their behavior, improve health and reduce costs. These include:

- Tracking Web site with personalized care compliance plans
- Automatic re-enrollment in year two for members who adhere to evidence-based requirements
- Compliance Monitoring System
- Access to the UnitedHealthcare Personal Health Record

### UnitedHealth Premium Program
Provides access to UnitedHealth Premium designated physicians and facilities that follow national evidence-based quality of care guidelines and market-based cost-efficiency guidelines
Diabetes Health Plan
Balancing incentives and greater compliance

Primary Goals: To learn about diabetes, know diabetes ABCs, manage diabetes and have routine care to avoid problems

To remain in the program, the diabetic member must follow these guidelines which include:

- Lab evaluation: HbA1c (6months), LDL, microalbuminuria/creatinine
- Professional Services: Regular primary care visits, retinal exam
- Preventive Care: Cancer screening (mammography, colonoscopy)
- Wellness: Advocacy: Medical management program participation, health risk assessment

The pre-diabetic member must follow these guidelines which include:

- Lab evaluation: LDL
- Professional Services: Premium primary care
- Preventive Care: Cancer screening (mammography, colonoscopy)
- Wellness: Weight management program participation, health risk assessment

• Supports diabetics, pre-diabetics and their non-diabetic family members
• Integrates condition-specific features for diabetic and pre-diabetic members
• Reduces out-of-pocket costs for routine diabetic services, medications and supplies
• Provides financial incentives for compliance, not just participation
Diabetes prevalence consists of three primary groups of people:

- Pre-Diabetics (those with elevated blood sugar, but not yet high enough to be classified diabetic)
- Known diabetics (those who have already been diagnosed with the illness)
- Unknown diabetics (those who have yet to be diagnosed with the illness)

This illustration assumes:

- Pre-diabetics are estimated at 20% of the total population
- Diabetic employees comprise about 8% of the total population
- Total cost for pre-diabetics/diabetics is about 43% of total covered medical costs¹
- About 66% of all diabetic employees do not follow treatment guidelines
- Assumed medical costs trend of 8%

Estimated Prevalence and Costs for an Average Large-sized Employer²

<table>
<thead>
<tr>
<th>Employee Category</th>
<th>Percent of Adults</th>
<th>Headcount Adults</th>
<th>2009 Estimated Medical + Rx Cost (After Plan Design) PMPY³</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Diabetics</td>
<td>20.0%</td>
<td>2,000</td>
<td>$3,672</td>
<td>$7,344,000</td>
</tr>
<tr>
<td>Known Diabetics (Three Types):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. No Complications</td>
<td>2.1%</td>
<td>207</td>
<td>$4,585</td>
<td>$941,997</td>
</tr>
<tr>
<td>2. Complications: Hypertension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complaint</td>
<td>1.0%</td>
<td>96</td>
<td>$5,880</td>
<td>$564,480</td>
</tr>
<tr>
<td>• Non-Compliant</td>
<td>1.4%</td>
<td>143</td>
<td>$6,570</td>
<td>$1,368,510</td>
</tr>
<tr>
<td>3. Complications: All other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complaint</td>
<td>0.6%</td>
<td>62</td>
<td>$13,626</td>
<td>$844,812</td>
</tr>
<tr>
<td>• Non-Compliant</td>
<td>0.9%</td>
<td>92</td>
<td>$24,162</td>
<td>$2,222,904</td>
</tr>
<tr>
<td>Sub-Total Known Diabetics</td>
<td>6.0%</td>
<td>600</td>
<td></td>
<td>$5,942,703</td>
</tr>
<tr>
<td>Unknown Diabetics</td>
<td>2.0%</td>
<td>198</td>
<td>$7,920</td>
<td>$1,568,160</td>
</tr>
<tr>
<td>Total Diabetics &amp; Pre-Diabetics</td>
<td>28.0%</td>
<td>2,798</td>
<td></td>
<td>$14,854,863</td>
</tr>
<tr>
<td>Non-Diabetics &amp; Non-Pre-Diabetics</td>
<td>72.0%</td>
<td>7,202</td>
<td>$2,784</td>
<td>$20,050,368</td>
</tr>
<tr>
<td>Grand Total</td>
<td>100.0%</td>
<td>10,000</td>
<td>$3,490</td>
<td>$34,905,231</td>
</tr>
</tbody>
</table>

¹ Covered charges from Ingenix National Database and UnitedHealthcare Consumer Activation Index
² Source: UnitedHealthcare Book of Business 2008
³ PMPY: Per member per year.

These results are based on the assumptions used to generate them and may not be indicative of the actual return on investment. Actual results may vary significantly based on the facts and circumstances of a particular case including, but not limited to, demographics and utilization trends.
Key Conclusions
• There is a positive result in year one, which grows over the three-year period.
• The larger the number of enrollees, the greater the ROI: For illustrative purposes, conservative enrollment rates have been used; actual enrollment rates could be much higher, resulting in larger savings rates per enrolled member.

Sources of Savings
• Identification of unknown diabetics and pre-diabetics
• Increased compliance for diabetics without complications
• Earlier identification and detection of cancer
• Increased use of disease and case management
• Additional savings from productivity gains via fewer lost work days, lower disability costs, etc. are above and beyond this calculation.

Costs
• Plan costs: Waived co-pays, loss of cost sharing for those already using services, additional utilization
• Administrative costs: Biometric screenings, member compliance portal, monitoring and reporting

Illustrative Financial Statement

<table>
<thead>
<tr>
<th>Projections</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Medical Costs¹</td>
<td>$37,945,004</td>
<td>$41,247,747</td>
<td>$44,836,081</td>
</tr>
<tr>
<td>Total Number of Adult Members</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Enrollment in Diabetes Health Plan</td>
<td>541</td>
<td>585</td>
<td>629</td>
</tr>
<tr>
<td>Gross Medical Savings</td>
<td>$236,698</td>
<td>$434,265</td>
<td>$697,296</td>
</tr>
<tr>
<td>Total Costs</td>
<td>-$172,419</td>
<td>-$198,928</td>
<td>-$229,887</td>
</tr>
<tr>
<td>Net Savings</td>
<td>$64,279</td>
<td>$235,337</td>
<td>$467,409</td>
</tr>
<tr>
<td>Cumulative Savings</td>
<td>$64,279</td>
<td>$299,616</td>
<td>$767,025</td>
</tr>
<tr>
<td>Per Enrolled Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Savings</td>
<td>$438</td>
<td>$742</td>
<td>$1,109</td>
</tr>
<tr>
<td>Total Costs</td>
<td>-$319</td>
<td>-$340</td>
<td>-$365</td>
</tr>
<tr>
<td>Net Savings</td>
<td>$119</td>
<td>$402</td>
<td>$744</td>
</tr>
</tbody>
</table>

¹ Baseline medical costs shown are assumed to be year end costs.

These results are based on the assumptions used to generate them and may not be indicative of the actual return on investment. Actual results may vary significantly based on the facts and circumstances of a particular case including, but not limited to, demographics and utilization trends.
### Diabetes Health Plan
#### Case Studies

<table>
<thead>
<tr>
<th>Employer</th>
<th>Eff Date</th>
<th>Incentives/Design Strategy</th>
<th>Marketing</th>
<th>Screening Model</th>
<th>Lessons Learned</th>
</tr>
</thead>
</table>
| Technology Firm -            | 4/1/2009 | **Rx copay reduction**  
| 8 Locations                  |          |  
| Eligibles - 9,927            |          |  
| Screened - 746 (194 Pre-Diabetics) |          |  
| Enrolled - 334 (115 Pre-Diabetics) |          |  
| Auto Parts Firm -            | 4/1/2009 | **Rx copay reduction**  
| 2 Locations                  |          |  
| Eligibles - 500              |          |  
| Screened - 0 (No break out data) |          |  
| Enrolled - 66 (No break out data) |          |  
| Global Conglomerate -        | 7/1/2009 | **Rx copay reduction**  
| One market                   |          |  
| Eligibles - 8,152            |          |  
| Screened - 1,348 (268 Pre-Diabetics) |          |  
| Enrolled - 609 (No break out) |          |  
| **Incentives/Design Strategy** |          |  
|  
| **Marketing**                |          |  
|  
| **Screening Model**          |          |  
|  
| **Lessons Learned**          |          |  
|  
| **Rx copay reduction**       |          |  
| **HRA contributions**        |          |  
| **Enrollment kits mailed to employee’s home** |          |  
| **Pre-enrollment on-site biometric screening** |          |  
| Health coaches should be present at the screening. |          |  
| **Enrollment kits to diagnosed eligible's homes** |          |  
| **Quarterly promotion in "all employee" mtgs** |          |  
| Annual screening events held in fall. Occ. Health Nurse on site available to conduct screening by appointment |          |  
| Biometric screening in conjunction with enrollment facilitate greater plan promotion |          |  
| **Enrollment kits to diagnosed eligible's homes** |          |  
| **Quarterly promotion in "all employee" mtgs** |          |  
| Biometric screening held multiple days in multiple locations to accommodate all employees and most shifts |          |  
| 1. Offer enrollment into DHP at point of screening.  
2. Gas Card incentive increased screening participation.  
3. Monday screenings resulted in lowest participation |          |  

Enrolled Members to Date

- Actual Enrollment vs. Estimated Enrollment:
  - 39% of Estimated Pre-Diabetic Enrollment
  - 104% of Estimated Diagnosed Diabetics
  - 61% of Estimated Undiagnosed Diabetics

Graph showing:
- Total Membership To Date: 620
- Estimated Enrollment: 833
- Qualified: 5372 (5372)

Legend:
- Undiagnosed Diabetics
- Pre-Diabetics
- Diabetics

Diabetes Health Plan
Compliance to ADA Standards of Care for Diabetics & Pre-Diabetics

Percentage of DHP Members Conforming to Recommended Health Actions as Compared to Non-DHP Members

Based on claims data as of 8-31-2009
Where do we go from here?

- New Engagement
  - Patient Centered Medical Home
- New Conditions- Musculoskeletal
- New Analysis- Cohorts
In 2009, UnitedHealthcare introduced the Diabetes Health Plan, a new type of benefit that offers financial rewards to patients who manage their disease properly. Three companies, including General Electric, are testing the plan, and 15 more workplaces signed on to roll it out in 2010. Employees who participate in the UnitedHealthcare plan must adhere to specific treatment guidelines and agree to be tracked by the insurer to make certain they are sticking with the program. In return, co-pays on their diabetes drugs are waived, along with other fees related to managing their disease.

The United plan is part of a larger trend in managed care called “value-based insurance design.” The idea is to contain costs by giving financial incentives to patients based on their particular health issues rather than offering one-size-fits-all plans. “One issue in the health-reform debate is that we’re paying an awful lot for health care and yet we don’t have the healthiest outcomes,” says Dr. Edmund J. Pessala, national medical director for pharmacy management at Aetna, which is also experimenting with value-based insurance design. “There are things providers and patients can do together to achieve better outcomes.”

The impact of tailoring plans to employees with specific diseases could be significant. United estimates that diabetes costs the health-care system $25-50 billion a year.