Chronic Conditions: What are the Policy Options? Private-Sector Role

*Rising Rates of Chronic Health Conditions: What Can Be Done?*  
*Center for Studying Health System Change (HSC)*  
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U.S. Business Concerns About Healthcare

• The United States spent $2.25 trillion in healthcare in 2007.

• Private sector share is 53.7%

• National health expenditure growth trends are expected to average about 6.6% per year through 2015.

• Health expenditures as percent of GDP:
  – 15.3 percent in 2003
  – 16.0 percent in 2006
  – 19.7 percent in 2017 (est)
  – 25.0 percent by 2030 (est)

Source: Poisal et al., *Health Affairs*, 21 February 2007
Annual Per Employee Costs for Active Employees

Includes all medical, dental, and other health benefits for all covered employees and dependents. Includes employer and employee contributions.

Why is health care so expensive?

• **Rise in spending for treated diseases (37%)**
  – *Innovation/advancing technology*
    • Pharmacologic, devices, treatments
      – Newborn delivery costs – five-fold increase from 1987-2002 (NICU, incubators, ventilators, C-sections)
    • New/better medicines for treating disease
      – Depression –
        • SSRI introduction -- 45% treated in 1987 to 80% treated in 1997
      – Allergies (Claritan, Allegra,…)
    • New treatment thresholds
      – Blood pressure
      – High blood glucose
      – Hyperlipidemia
    – *Waste* – the more doctors do the more money they make

• **Solution: Make the system more efficient and effective**
Why is health care so expensive? (Thorpe - Part 2)

• Rise in the prevalence of disease (63%)
  – About ¾ of all health care spending is focused on patients who have one or more chronic health conditions
  – Chronically ill patients only receive 56% of clinically recommended preventive health services

• And 27% of the rise in healthcare costs is associated with increases in obesity rates
What To Do?

- Manage disease
- Manage disability and absence
- Manage health and demand
- Manage stress
- Strengthen employee assistance programs
- Re-engineer
- Reorganize
- Create incentives
- Cut pharmacy benefits
What To Do – National Business Group On Health
Ten Steps to Easing Health Care Costs -- 2008

1. Establish comprehensive strategy to control costs, improve quality and safety

2. Actively promote health improvement programs and resources

3. Use co-insurance and point-of-care cost sharing

4. Provide employees tools & information to become better consumers

5. Explore the benefits of consumer directed health plans

6. Aggressively manage prescription drug use

7. Manage utilization in evidence-based, doctor and patient friendly ways

8. Insist on transparency – buy on performance

9. Audit eligibility

10. Vigorously manage retiree costs
It seems so logical…

…if you improve the health and well being of your employees…

…quality of life improves

…health care utilization is reduced

…disability is controlled

…productivity is enhanced
The Evidence


  • Improvements in the health risk profile of a population can lead to reductions in health costs (Edington et al., 2001, Goetzel et al., 1999).

Diseases Caused (at Least Partially) by Lifestyle

- **Tobacco Use**: Cerebrovascular Disease, Coronary Artery Disease, Osteoporosis, Peripheral Vascular Disease, Asthma, Acute Bronchitis, COPD, Pneumonia, Cancers (Bladder, Kidney, Urinary, Larynx, Lip, Oral Cavity, Pharynx, Pancreas, Trachea, Bronchus, Lung)

- **Lack of Exercise**: Coronary Artery Disease, Diabetes, Hypertension, Obesity, Osteoporosis

- **Poor Nutrition**: Cerebrovascular Disease, Coronary Artery Disease, Diabetes, Diverticular Disease, Hypertension, Oral Disease, Osteoporosis, Cancers (Breast, Colorectal, Prostate)

- **Obesity**: Cholesystitis/Cholelithiasis, Coronary Artery Disease, Diabetes, Hypertension, Lipid Metabolism Disorders, Osteoarthritis, Sleep Apnea, Venous Embolism/Thrombosis, Cancers (Breast, Cervix, Colorectal, Gallbladder, Biliary Tract, Ovary, Prostate)

- **Alcohol Use**: Liver Damage, Alcohol Psychosis, Pancreatitis, Hypertension, Cerebrovascular Disease, Cancers (Breast, Esophagus, Larynx, Liver)

- **Stress, Anxiety, Depression**: Coronary Artery Disease, Hypertension

- **Uncontrolled Hypertension**: Coronary Artery Disease, Cerebrovascular Disease, Peripheral Vascular Disease

- **Uncontrolled Lipids**: Coronary Artery Disease, Lipid Metabolism Disorders, Pancreatitis, Peripheral Vascular Disease
Poor Health Costs Money

Drill down…

• Medical
• Absence/work loss
• Presenteeism
• Risk factors
Top 10 Physical Health Conditions

Medical, Drug, Absence, STD Expenditures (1999 annual $ per eligible), by Component

The Big Picture: Overall Burden of Illness by Condition

Using Average Impairment and Prevalence Rates for Presenteeism
($23.15/hour wage estimate)

Source: Goetzel, Long, Ozminkowski, et al. JOEM 46:4, April, 2004
Incremental Impact of Ten Modifiable Risk Factors on Medical Expenditures

Percent Difference in Medical Expenditures: High-Risk versus Lower-Risk Employees

N = 46,026

Case Studies
Citibank, N.A.  
Health Management Program Evaluation

• **Title:** Citibank Health Management Program (HMP)  
• **Industry:** Banking/Finance  
• **Target Population:** 47,838 active employees eligible for medical benefits  
• **Description:**
  – A comprehensive multi-component health management program  
  – Aims to help employees improve health behaviors, better manage chronic conditions, and reduce demand for unnecessary and inappropriate health services,  
  – And, in turn, reduce prevalence of preventable diseases, show significant cost savings, and achieve a positive ROI.  
• **Citations:**
Citibank Health Management Program ROI

- Program costs = $1.9 million*
- Program benefits = $8.9 million*
- Program savings = $7.0 million*

ROI = $4.7 in benefits for every $1 in costs

Notes:
- 1996 dollars @ 0 percent discount
- Slightly lower ROI estimates after discounting by either 3% or 5% per year.
- Results very similar to RCT conducted of same Healthtrac program, by Fries, et al.
Johnson & Johnson
Health and Wellness Program Evaluation

• **Title:** J & J Health and Wellness Program (H & W)
• **Industry:** Healthcare
• **Target Population:** 43,000 U.S. based employees
• **Description:**
  – Comprehensive, multi-component worksite health promotion program
  – Evolved from LIVE FOR LIFE in 1979
• **Citations:**
Johnson & Johnson (N=18,331 – Ozminkowski et al, 2002)
Health & Wellness Program Impact on Medical Costs

<table>
<thead>
<tr>
<th>Utilization Type</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER Visits</td>
<td>($10.87)</td>
</tr>
<tr>
<td>Outpatient/Doctor Office Visits</td>
<td>$45.17</td>
</tr>
<tr>
<td>Mental Health Visits</td>
<td>$70.89</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>$118.67</td>
</tr>
<tr>
<td>OVERALL SAVINGS</td>
<td>$224.66</td>
</tr>
</tbody>
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$225 Annual Medical Savings/Employee/Year since 1995

($50.00) $0.00 $50.00 $100.00 $150.00 $200.00 $250.00
Procter & Gamble:
Total Annual Medical Costs For Participants and Non-Participants In Health Check (1990 - 1992) (N=8,334)

Adjusted for age and gender; Significant at p < .05
*In year 3 participant costs were 29% lower producing an ROI of 1.49 to 1.00

Highmark, Inc:
Estimated annual savings after four years of follow-up -- participants versus non-participants – adjusted for confounders

<table>
<thead>
<tr>
<th>Participants versus Non-participants</th>
<th>Net Payments β Estimate</th>
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</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-964.51†</td>
</tr>
<tr>
<td>All participants, n=1892</td>
<td>-176.47*</td>
</tr>
<tr>
<td>Male gender</td>
<td>497.09‡</td>
</tr>
<tr>
<td>Age, per year</td>
<td>46.05‡</td>
</tr>
<tr>
<td>Heart disease at baseline</td>
<td>576.59‡</td>
</tr>
<tr>
<td>Diabetes at baseline</td>
<td>1704.01‡</td>
</tr>
<tr>
<td>Group 1 comorbidity</td>
<td>1133.20‡</td>
</tr>
<tr>
<td>Group 2 comorbidity</td>
<td>397.80‡</td>
</tr>
<tr>
<td>4-year savings estimate from participation (β*n)</td>
<td>$333,881</td>
</tr>
<tr>
<td>Per person estimate</td>
<td>176.47</td>
</tr>
</tbody>
</table>

Source: Naydeck, Pearson, Ozminkowski, Day, Goetzel.
The Impact of the Highmark Employee Wellness Programs on Four-Year Healthcare Costs. *JOEM*, 50:2, February 2008
Annual growth in net payments – for matched-participants and non-participants over four years – ROI of $1.65 to $1.00 (N=3790)
Policy Implications

• Pass Tom Harkin’s Healthy Workforce Act (S.1753)
  – Companies that spend $400 per employee on wellness would earn a tax credit of up to $200 per employee for the first 200 employees and $100 per employee for the rest of the payroll.

• Provide wellness program tax credits for employers and employees (HR 853, Knollenberg; HR 3717/S 1753/S 1754, Udall/Harkin; S 158, Collins).

• Sponsor venues for public recognition of exemplary programs and business leaders supporting these programs (e.g., Koop Awards).

• Identify and disseminate best practices.

• Establish public-private technical assistance and consulting services to support employer efforts.

• Increase funding of “real world” research demonstrations.
Other Policy Options

• Introduce federal legislation promoting workers’ health, e.g., smoke-free workplace policies.

• Initiate pilot studies at local/state/federal agencies that test innovative models of health promotion among public employers.

• Make available tools and resources that employers can use to run programs, e.g., evaluation instruments, financial modeling programs.

• Establish ongoing measurement and performance tracking systems specific to workplace health promotion and reporting relevant metrics related to employer efforts, e.g., “healthiest places to work.”

• Assure a clear focus on workplaces as part of the strategic planning for health policies and programs.
Summary

- Focusing on improving the health and quality of people’s lives will improve the productivity and competitiveness of our workers and citizens.

- A growing body of scientific literature suggests that well-designed, evidence-based Health and Productivity Management Programs can
  - Improve the health of workers;
  - Lower their risk for disease;
  - Save businesses money by reducing health-related losses and limiting absence and disability;
  - Heighten worker morale and work relations;
  - Improve worker productivity; and
  - Improve the financial performance of organizations instituting these programs.
Thank You!

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