

**Benefit Design-  
Aligning Incentives to Engage the  
Patient and Lower Total Healthcare  
Costs**

Terry A. McInnis, MD, MPH  
Medical Director- Health  
Management Innovations  
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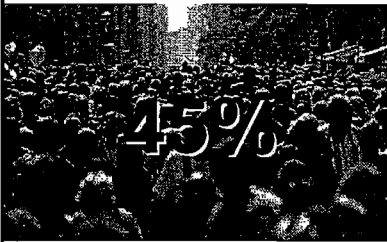
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**Americans with chronic disease  
133 million in 2005**



**Percent having  
one or more  
chronic  
diseases:**

- 69% elderly
- 50% middle aged
- 25%+ young adult

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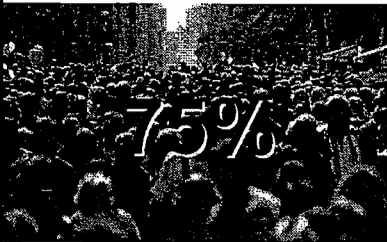
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**Cost of chronic disease to America**



**Total US  
healthcare  
spend in 2005  
= \$2.0 trillion  
...or \$6,697  
per person**

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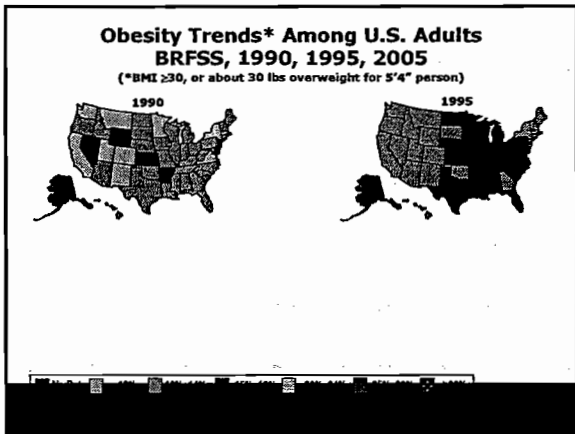
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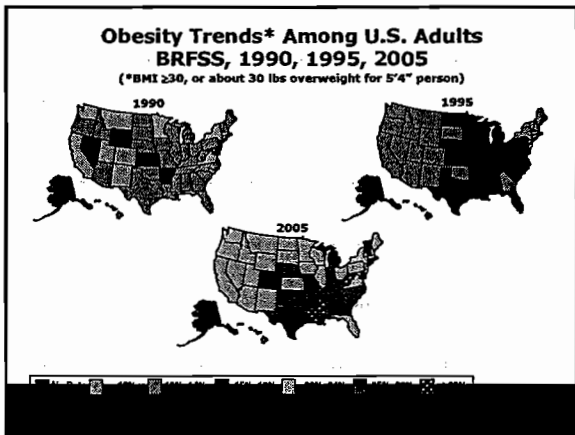
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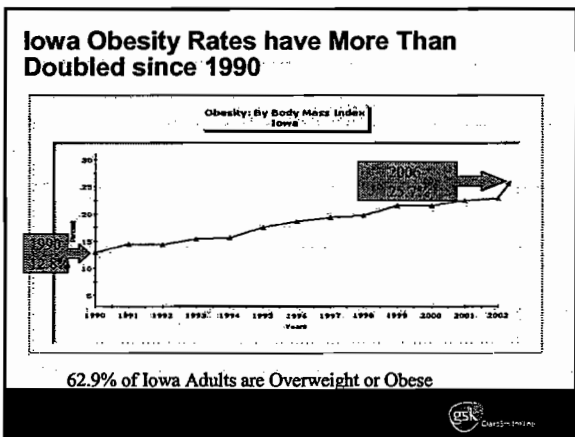
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**The storm of diabetes is brewing  
Diagnosed Diabetes Among Adults Trends 1995**



Missing Data    < 5%    5-5.9%  
 6-6.9%    7-7.9%    8+ %

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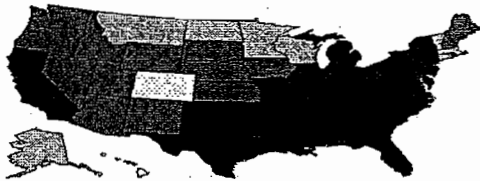
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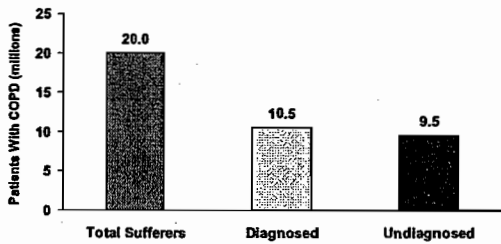
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**Prevalence of COPD in the US**



Of patients who have been diagnosed, research shows that nearly 40% are not being treated with prescription medications.

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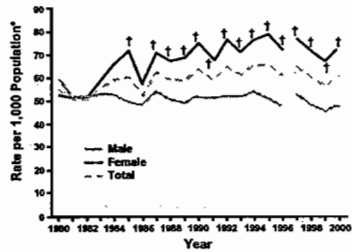
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### Prevalence of COPD in the US



Since 1987, the prevalence of COPD among women has been significantly higher than that among men

\* Age adjusted to 2000 US population

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### Chronic Obstructive Airway Disease- Preventable and Treatable, but deadly

- 346 deaths per day from COPD
- 203 deaths per day from diabetes
- 115 deaths per day from breast cancer

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### Sound solutions to rising costs



Prevention



Intervention



Innovation




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**Sound solutions under way ...**

- Iowa
  - > Health Education must be taught at each grade level in elementary and middle school to receive accreditation<sup>1</sup>
  - > The Iowa Youth Tobacco Survey found that the percent of high school students who use tobacco has decreased from 39% in 2000 to 34% in 2002. <sup>2</sup>
  - > Over 7,000 Iowa teens have become members of the youth anti-tobacco movement "Just Eliminate Lies" (JEL) since its creation in 2000. <sup>2</sup>

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**World Health Organization <sup>1</sup>**

**"Adherence to long-term therapy for Chronic Diseases in Developed Countries averages 50%"**

**"The Consequences of poor adherence to long-term therapies are poor health outcomes and increased health care costs"**



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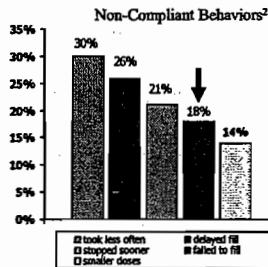
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**HealthCare Landscape**

**65.7% of physician office visits generate a prescription medicine, with multiple drugs prescribed 39.5% of the time<sup>1</sup>**

*But what happens to those prescriptions?*



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### Why Didn't They Take Their Medication?

- 10% difficulties in getting the prescription filled
- 14% decided they didn't need the drug
- 17% medication was too costly
- 20% undesirable or debilitating side effects
- 24% forgetfulness




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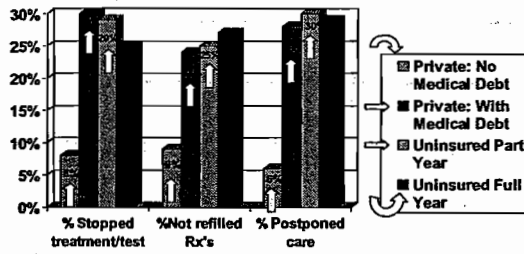
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### HealthCare Landscape- Behaviors related to Medical Cost




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### Cost Sharing Is Increasing- The "Medically Underinsured"

- 1 in 6 or >17.6 million non-elderly privately insured individuals had substantial trouble paying their medical debt in 2003<sup>1</sup>
  - Mostly middle class full time workers
  - Almost twice as likely to have a serious medical problem as those that do not have problems paying their medical bills (38% vs. 21%)
  - Twice as likely to report their health status as fair or poor
- Almost as many in this category as those without health insurance for a full year- 22.9 million




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## Unintended Consequences

- 47% that postponed care stated that it caused a significant loss of time at work or other important life activities
- 53% said the problem caused a significant temporary disability that resulted in significant pain or suffering
- 1 in 6 (17%) said the unmet need resulted in a long-term disability




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## Medication Adherence and Total Health Costs

- Caremark™<sup>1</sup>
  - Compliance and Persistency research in 19 chronic conditions-
  - Result- IN ALL 19 CONDITIONS STUDIED-
    - Plan participants with lower adherence scores had HIGHER TOTAL HEALTH CARE COSTS
- Medco™<sup>2</sup>
  - Diabetes study- Adherence and Total Health Costs
  - Result-
    - Plan participants with lower adherence had HIGHER TOTAL HEALTH CARE COSTS

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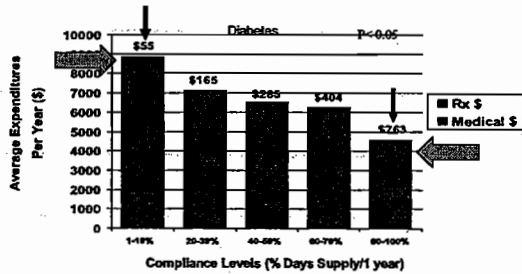
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## Improving medication compliance is a key driver in decreasing medical costs




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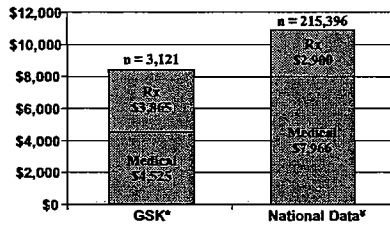
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## GSK Cost of Diabetes in 2005

GSK spends proportionally more on medications but less overall as compared to national data even though GSK diabetes population is slightly older.

Total Cost of Diabetes Per Patient Per Year



\*GSK data: claims data for employees/dependents and retiree/dependents  
 † National Data: claims data from National Managed Care Benchmark Database (EMCS, Waltham, Mass.)




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## Health Plans and Employers- Changing the Paradigm

- Polk County School Board, FL<sup>1</sup> (2002-present)
  - 11,000 employees, nearly 18,000 covered lives, largest employer in the county
  - Self-funded, uses BCBS of FL as their medical ASO
  - Identified diabetes as a primary driver in escalating medical costs
  - Partnered with providers, pharmacists, and the PBM with the leadership of a dedicated Wellness Team




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## Health Plans and Employers- Changing the Paradigm

- Polk County School Board, FL<sup>1</sup> (2002-present)
  - Initiated a comprehensive Diabetes Disease Management Program
    - participants must keep required appointments
    - required medical and dietary education and self-monitoring
  - Incentives for participation included a 50% reduction in established co-pays for diabetic medications and waived fees for selected interventions/visits.

\$500 savings per participant in 2003-04 versus prior year.




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**Health plans and employers  
Changing the paradigm**

• **Baptist Health South, FL**

- Emphasizes fitness, good diet, weight management, screenings and smoking cessation for 11,000 employees
- Healthy, balanced "advantage meals" offered each day for \$3 in employee cafeteria
- Some chronic disease medications available for a \$5 co-pay from internal pharmacy - projected to dispense 20,000 scripts this year

Wellness initiatives saved est. \$1.9 million in 2004



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**Changing the Paradigm**

- The Asheville Project- lower costs in exchange for patient engagement and accountability
- Pitney Bowes- making medications affordable to lower the financial barriers and increase adherence

**The Result- Healthier Employees, Greater Productivity, and Lower Healthcare Costs - a win-win**



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