



# *The Value of* **MEDICINES**

**The Triple Solution to Improving Health and Lowering Healthcare Costs**

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# Medicines in Development

<b>Cancer</b>	<b>682</b>	<b>HIV/AIDS</b>	<b>95</b>
<b>Neurological disorders</b>	<b>531</b>	<b>Arthritis</b>	<b>88</b>
<b>Infections</b>	<b>341</b>	<b>Diabetes</b>	<b>62</b>
<b>Cardiovascular disorders</b>	<b>303</b>	<b>Asthma</b>	<b>60</b>
<b>Psychiatric disorders</b>	<b>190</b>	<b>Alzheimer's disease and dementia</b>	<b>55</b>

Source: Pharmaceutical Industry Profile 2006, PhRMA, Adis R&D Insight (database), Adis International, (12 January 2006). <http://www.phrma.org/files/2006%20Industry%20Profile.pdf>



# Americans with Chronic Disease (133 million in 2005)



## Percent having one or more chronic diseases

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

1. Rundall T, et al. As good as it gets? Chronic care management in nine leading U.S. physician organizations. *BMJ* 2002;325:958-961. 2. Anderson G, Knickman J. Changing the chronic care system to meet people's needs. *Health Aff.* 2001; 20 (6): 146-160; Hoffman, C., Rice, D. & Sung, H., Persons with chronic conditions: their prevalence and costs. *JAMA.* 1996; 276 (18): 1473-1479.



# Cost of Chronic Disease to America



**Total US  
healthcare spend  
in 2004**

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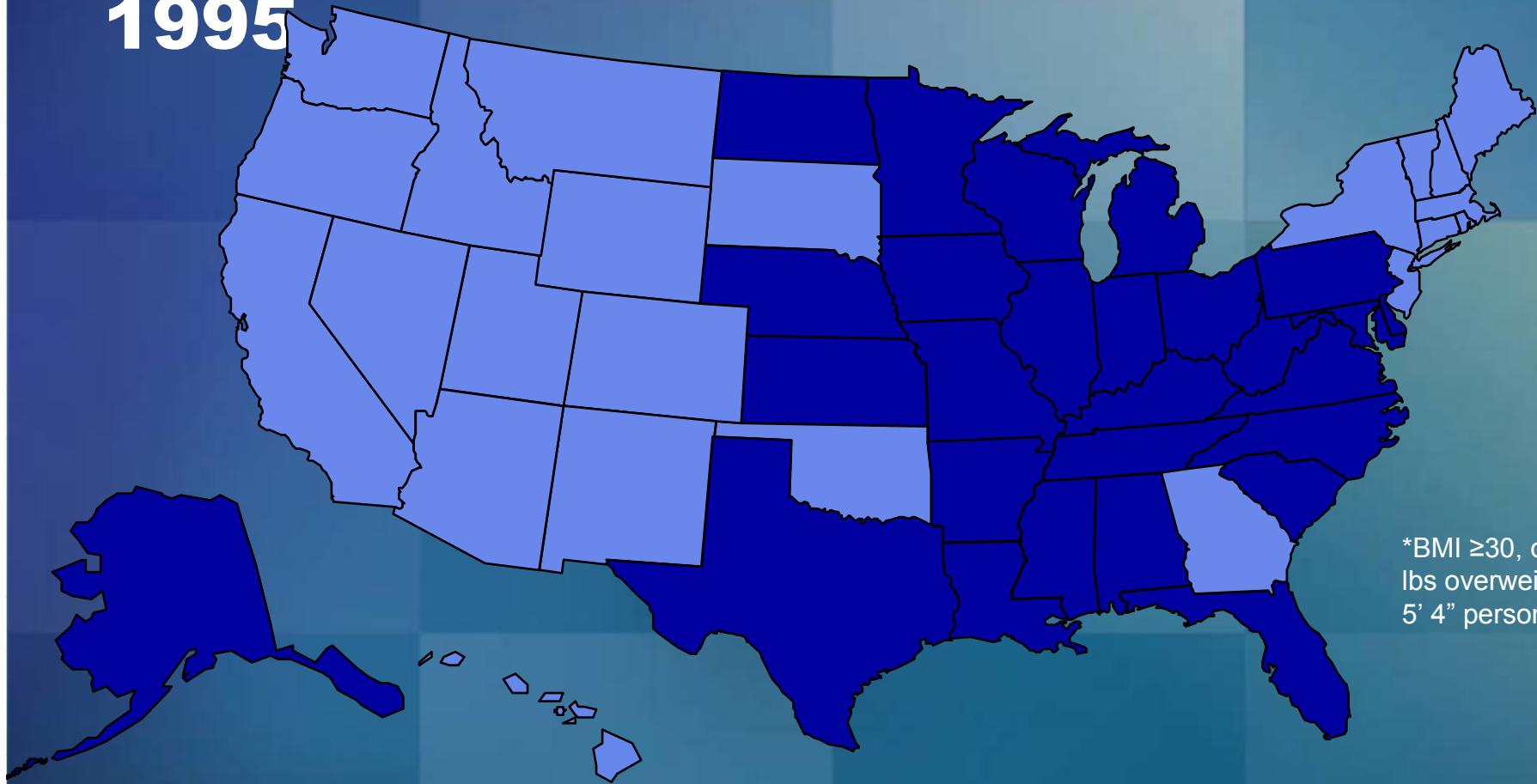
**\$1.9 trillion**  
(\$6,280 per person)

1. Rundall T, et al. As good as it gets? Chronic care management in nine leading U.S. physician organizations. *BMJ* 2002;325:958-961. 2. Anderson G, Knickman J. Changing the chronic care system to meet people's needs. *Health Aff.* 2001; 20 (6): 146-160.

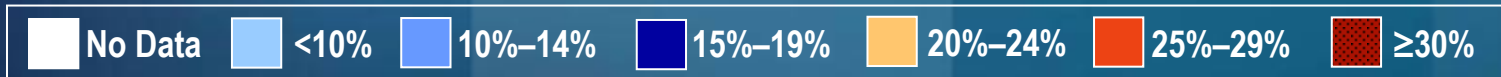
# The Storm of Obesity\* is Brewing

## Obesity Trends Among US Adults<sup>1</sup>

### 1995



\*BMI  $\geq 30$ , or ~30 lbs overweight for 5' 4" person

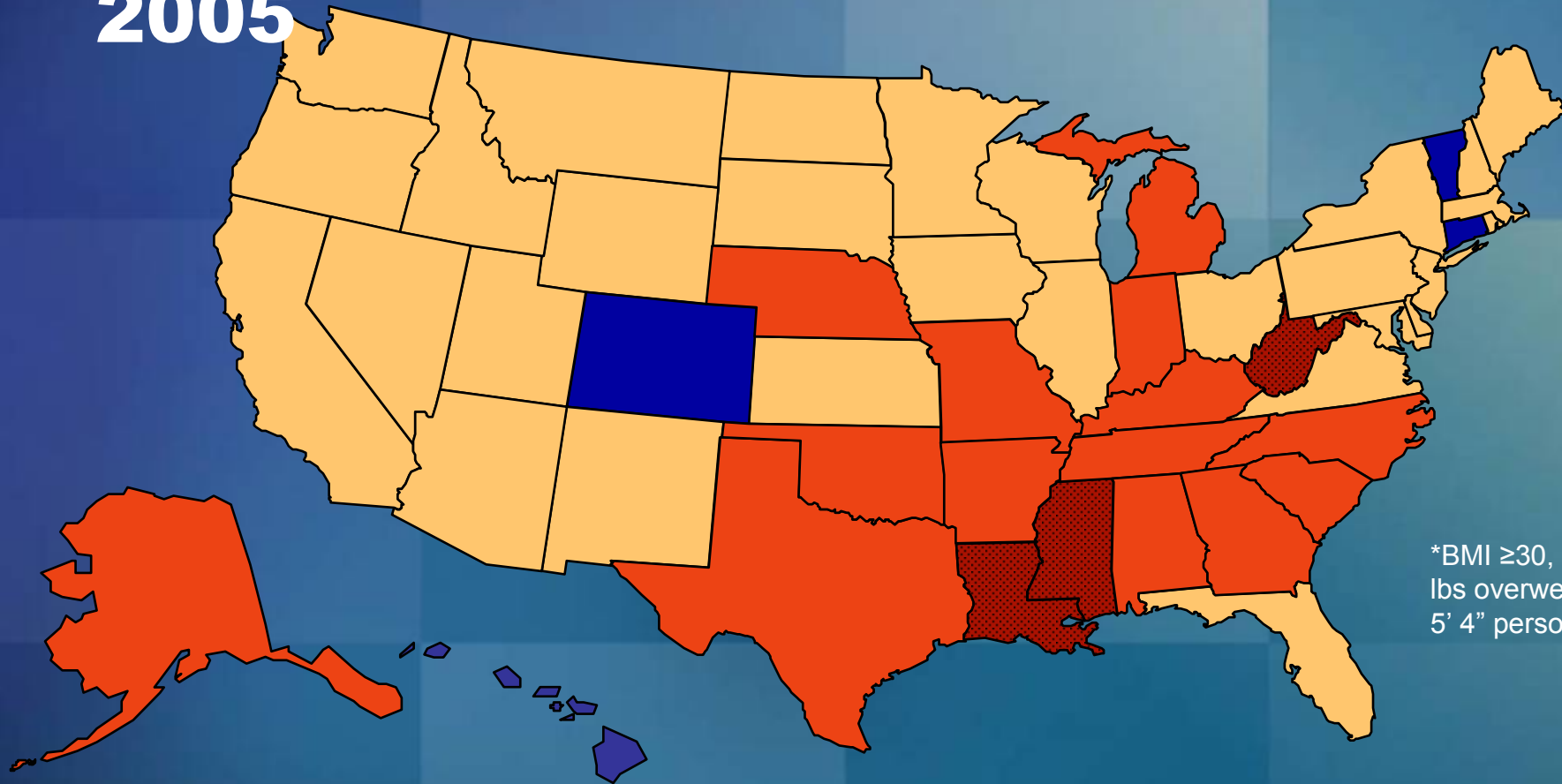


<sup>1</sup> CDC, "Overweight and Obesity: Obesity Trends: U.S. Obesity Trends" (2006)

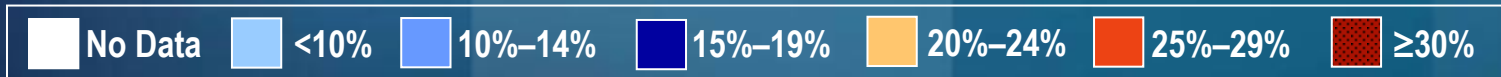
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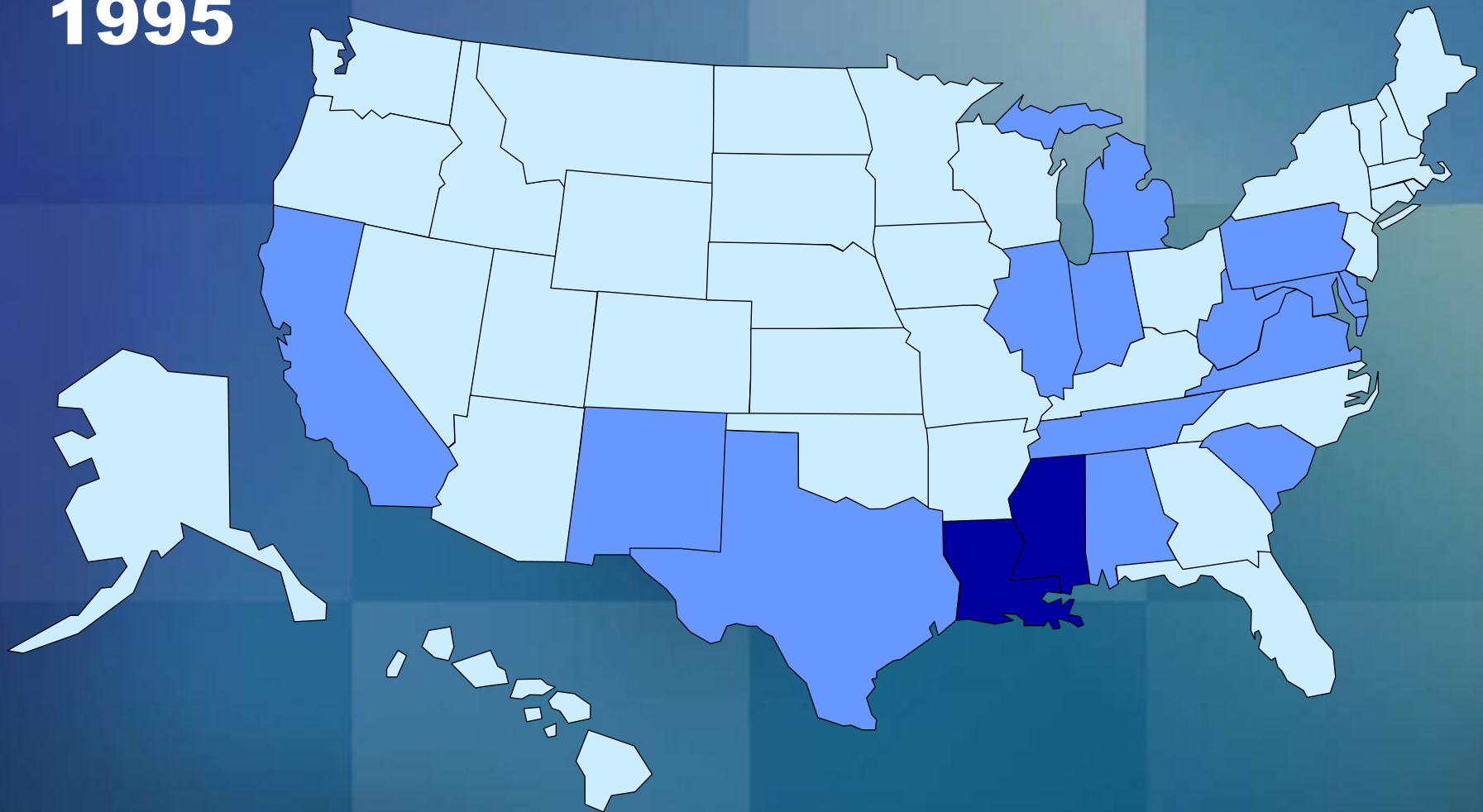


<sup>1</sup> CDC, "Overweight and Obesity: Obesity Trends: U.S. Obesity Trends" (2006)

# The Storm of Diabetes is Brewing

## Diagnosed Diabetes Among Adults Trends<sup>1</sup>

### 1995



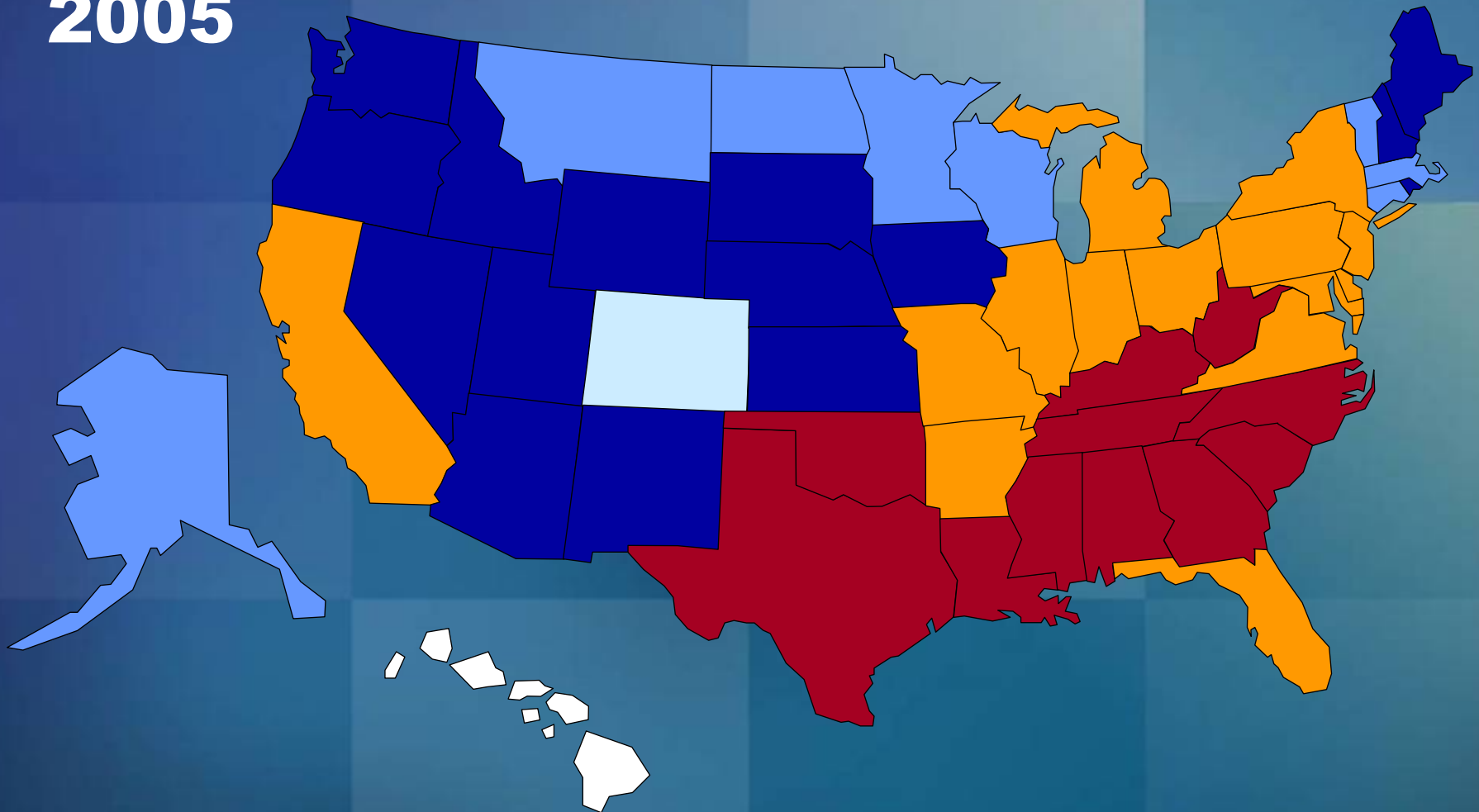
<sup>1</sup> CDC, "National Diabetes Surveillance System".



# The Storm of Diabetes is Brewing

## Diagnosed Diabetes Among Adults Trends<sup>1</sup>

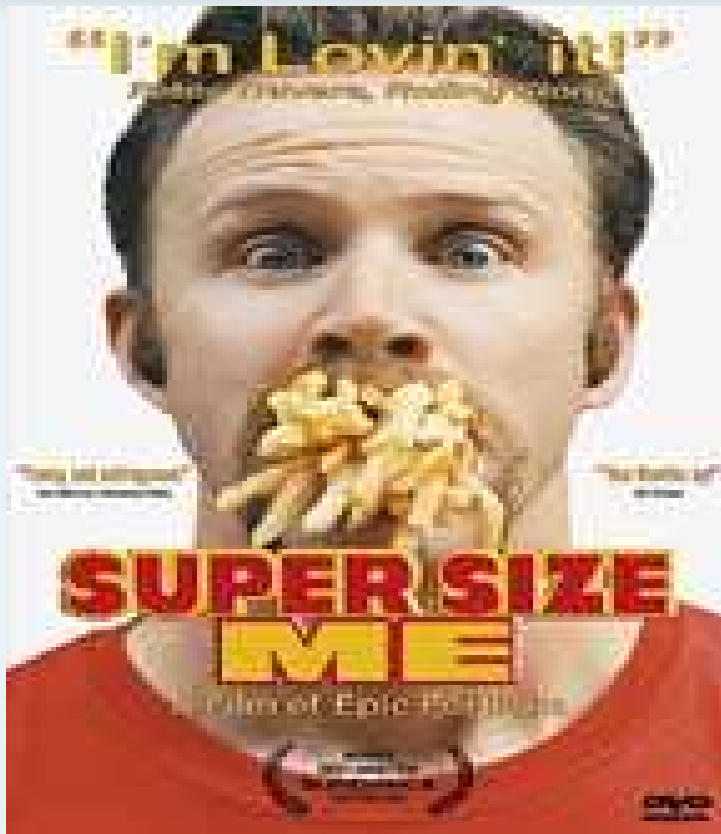
### 2005



<sup>1</sup> CDC, "National Diabetes Surveillance System".



# Challenges to Effective Prevention



Over **64%** of US adults are either overweight or obese.

Source: 1999-2000 National Health and Nutrition Examination Survey (NHANES),  
[http://www.naaso.org/statistics/obesity\\_trends.asp](http://www.naaso.org/statistics/obesity_trends.asp)



# The Storm of Diabetes is Brewing

- **Everyday in the US, diabetes causes an estimated:**
  - 225 amputations
  - 33-66 people lose their eyesight
  - 117 people start therapy for end-stage kidney disease
- **Rates of Type 2 diabetes in children increased as much as 10-fold over the past 2 decades**

National Center for Chronic Disease Prevention and Health Promotion, National Centers for Disease Control and Prevention.  
"Chronic Disease Overview," [Http://www.Cdc.Gov/nccdphp/overview.Htm](http://www.Cdc.Gov/nccdphp/overview.Htm), Accessed October 14, 2004.

National Diabetes Fact Sheet 2003," Koro CE, et al., "NGlycemic Control from 1988 to 2000 Among U.S. Adults Diagnosed with Type 2 Diabetes," *Diabetes Care*, 27(1):17-20 (Jan. 2004).

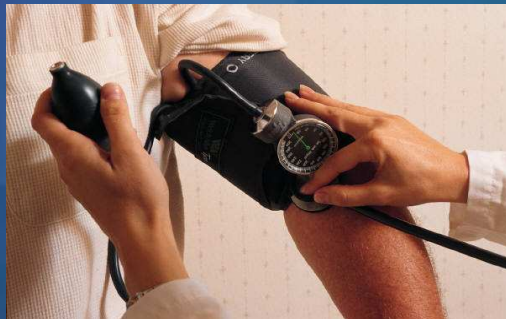
Type 2 Diabetes Mellitus in Children Primary Care and Public Health Considerations, Davod S. Ludwig, MD, PhD; Cara B. Ebbeling, PhD.  
*JAMA*. 2001;286:1427-1430.



# Sound Solutions to Rising Healthcare Costs



Prevention



Intervention



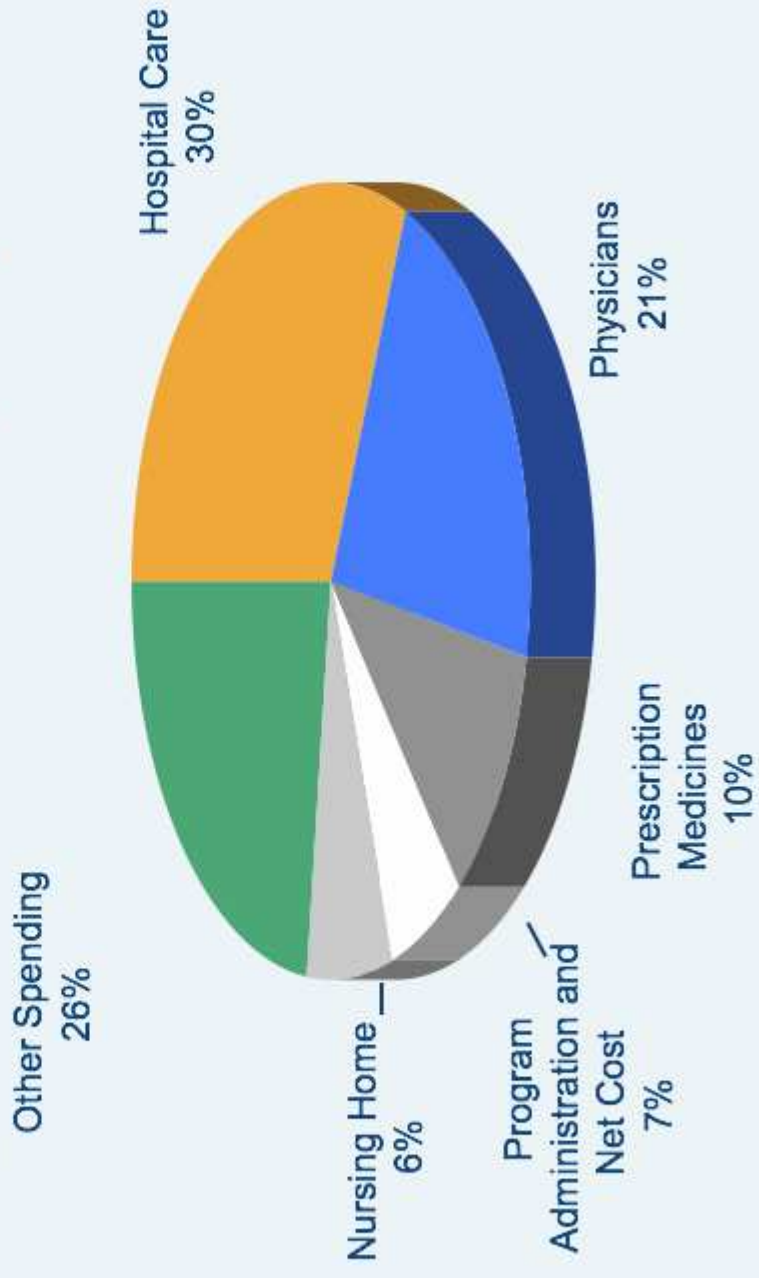
Innovation



# HOW MUCH DOES THE U.S. SPEND ON MEDICINES?

Total national healthcare expenditures for 2004: \$1.9 trillion

Prescription medicines account for about 10¢ of every healthcare dollar.



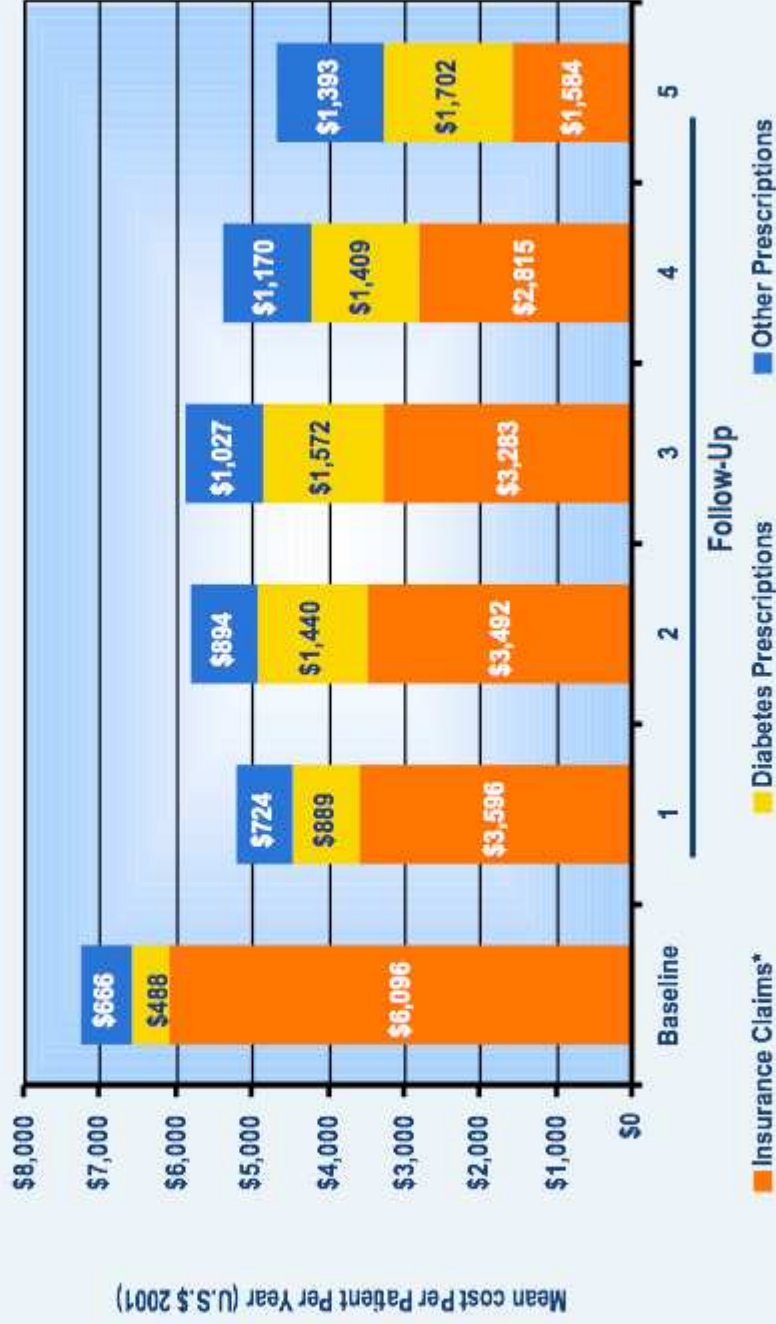
Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, 2006, available at [www.cms.hhs.gov](http://www.cms.hhs.gov).





# ASHEVILLE PROJECT: CONTROLLING MEDICAL COSTS

The Asheville Project: Direct Medical Costs Over Time



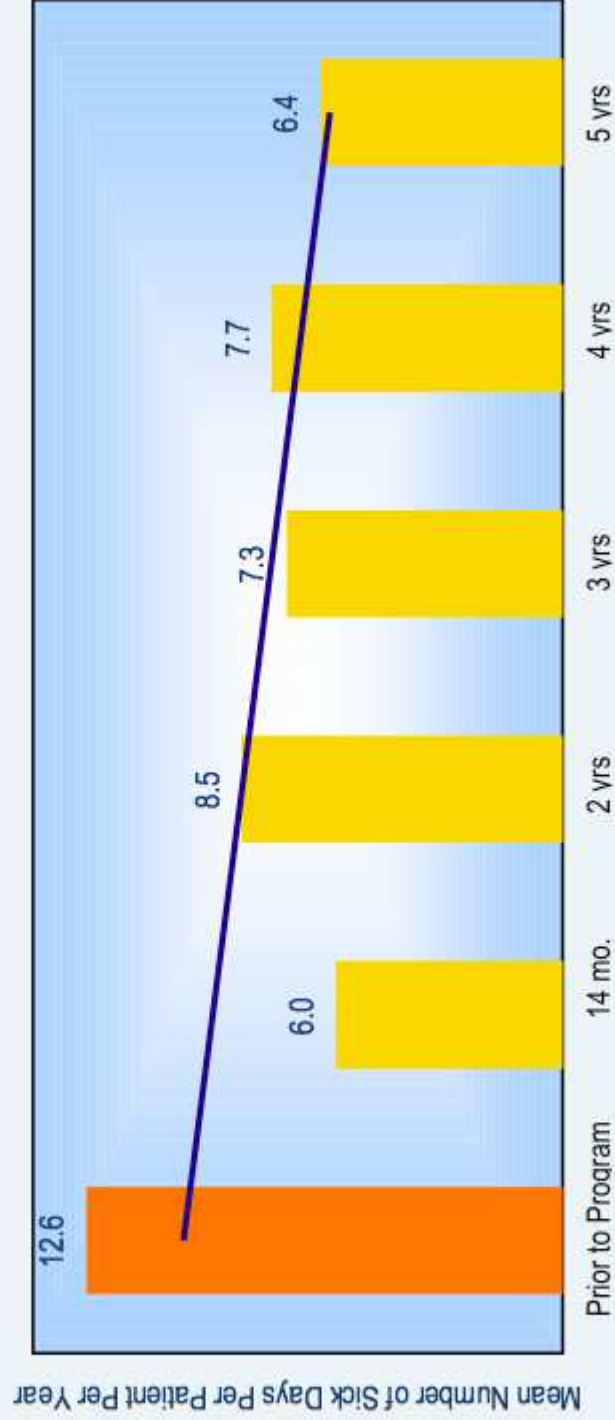
\* Includes physician visits, hospitalizations, emergency room visits, and lab tests.

Source: Cranor CW, Bunting BA, Christensen DB. "The Asheville Project: Long-Term Clinical and Economic Outcomes of a Community Pharmacy Diabetes Care Program." J.Am.Pharm.Assoc. 2003; 43(2):149-59.





# ASHEVILLE PROJECT: SICK DAYS



Source: Cranor CW, Bunting BA, Christensen DB. "The Asheville Project: Long-Term Clinical and Economic Outcomes of a Community Pharmacy Diabetes Care Program." J.Am.Pharm.Assoc. 2003; 43(2):149-59.

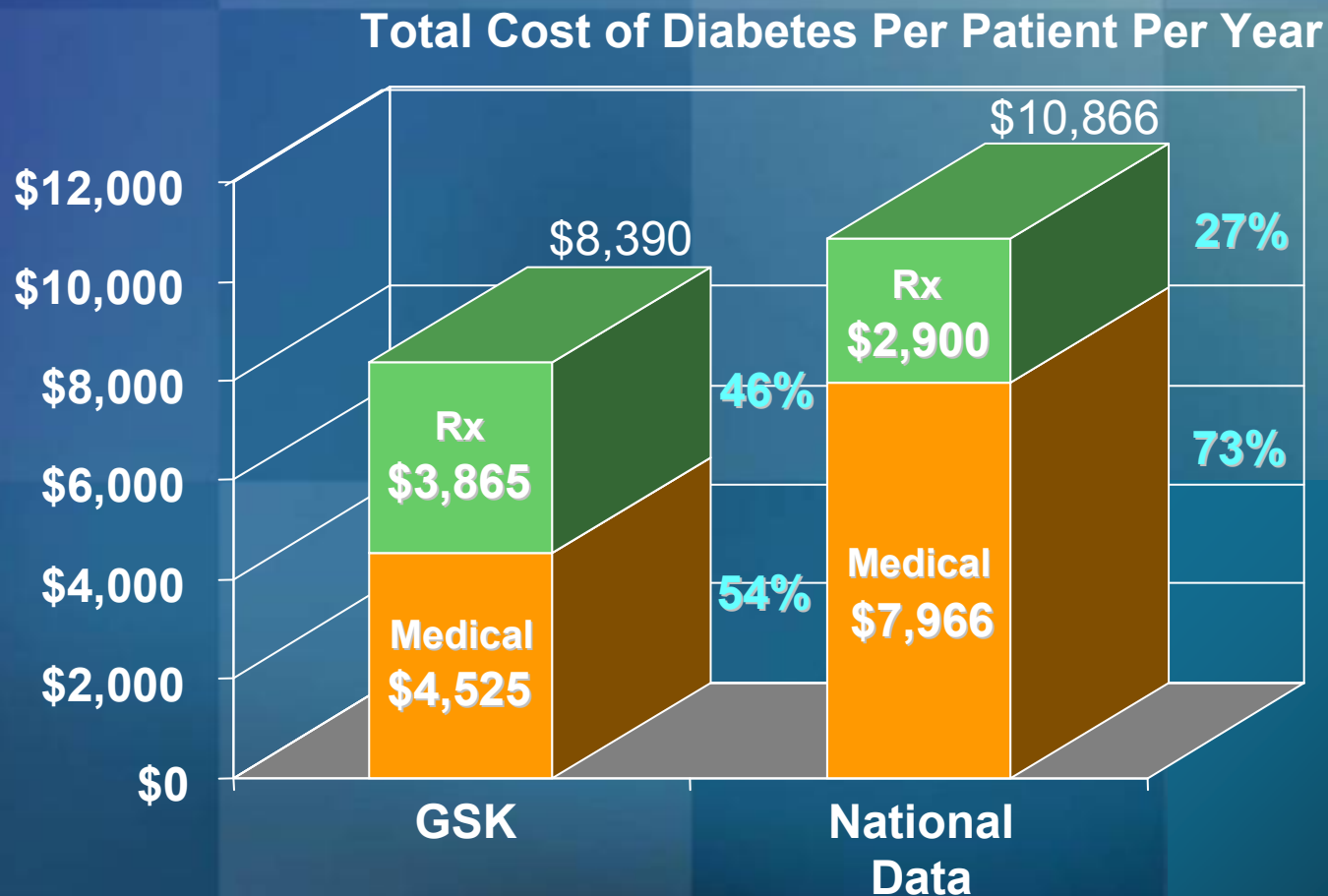


# 10 City Challenge



# Diabetes Cost Drivers

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



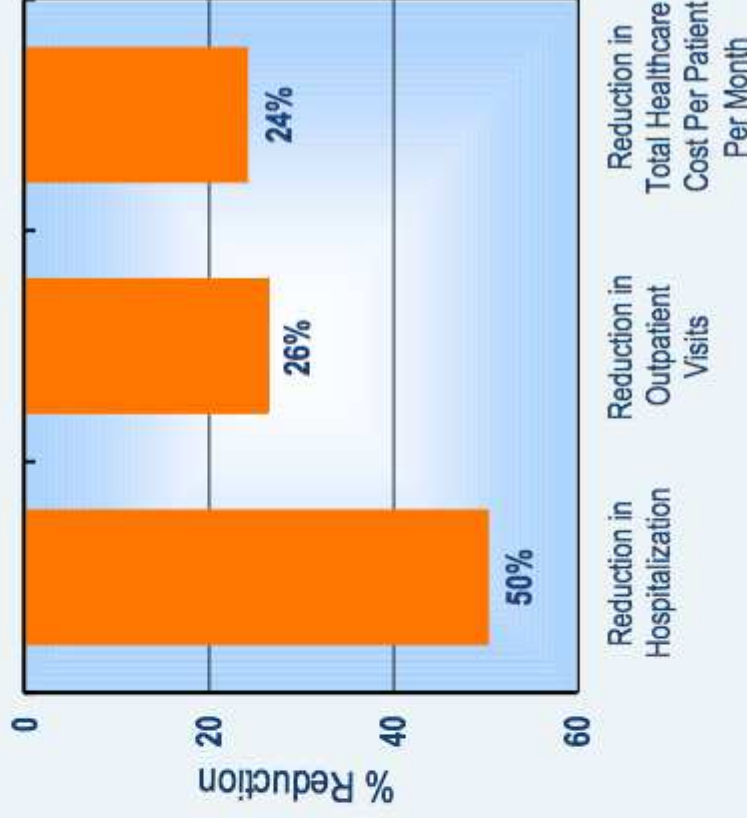


# WHAT VALUE DO MEDICINES PROVIDE?

## Benefits of Rx Therapy

Use of newer inhaled corticosteroids for 1 year reduced...

- risk of hospitalization by 50%
- outpatient visits by 26%
- total healthcare cost/patient/month by 24%



Source: Balkrishnan, R. et al., "Outcomes and Cost Benefits Associated with the Introduction of Inhaled Corticosteroid Therapy in a Medicaid Population of Asthmatic Patients," *Clinical Therapeutics* 20(3), 1998.










# Private Industry Asheville Project Model

## Pitney Bowes Company

At a time when healthcare costs were rising, the company reduced co-insurance rates to 10% for medicines that treat diabetes and asthma, both chronic diseases.

### Result:

Lower co-pays led to better treatment of disease and a better bottom line!

- Compliance with medicine 
- Median medical cost per employee with diabetes  12%
- Median medical cost per employee with asthma  15%
- Emergency Room visits:
  -  35% diabetes patients
  -  20% asthma patients

Source: WSJ Online, May 10, 2004; pg. R3

# Programs to Support People (Without Prescription Insurance)



1-800-444-4106

[www.togetherrxaccess.com](http://www.togetherrxaccess.com)

➤ Discounts on brand name and generic medicines from 10 of the world's leading pharmaceutical companies

➤ Who can't get Medicare coverage

➤ Who earn:

- \$30,000 or less (*single person*)
- \$40,000 or less (*family of two*)

- \$50,000 or less (*family of three*)
- \$60,000 or less (*family of four*)

- \$70,000 or less (*family of five*)



1-888-4PPA-NOW

[www.pparx.com](http://www.pparx.com)

❖ Access to over 475 public & private patient assistance programs

- *Over 180 programs offered by pharmaceutical companies*

❖ Who can't get Medicare coverage



1-800-MEDICARE

[www.medicare.gov](http://www.medicare.gov)

✦ Insurance coverage for prescription medicines

✦ Pays for both brand name and generic medicines

✦ Open to anyone eligible for Medicare