

Achieving Medicare Savings through Reduction of Chronic Disease Risk Factors

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What's the value of an ounce of prevention?

A New Actuarial Analysis
Published July 2009

Key Findings

The U.S. Currently Spends
\$174,018 per person
Present Value Lifetime Cost of Each Medicare Beneficiary

\$6.5 Trillion total
Total Present Value Lifetime Cost of all Medicare Beneficiaries

By preventing or slowing health risk progression, the U.S. could save
\$652 Billion
to
\$1.4 Trillion
Over 10 Years

While Extending the Life of Each Individual by
2.4-5.7 Years

Now, there's a way to model and score the value of

- Prevention
- Health Promotion
- Chronic Care Management

Get the report at www.healthways.com/trillions

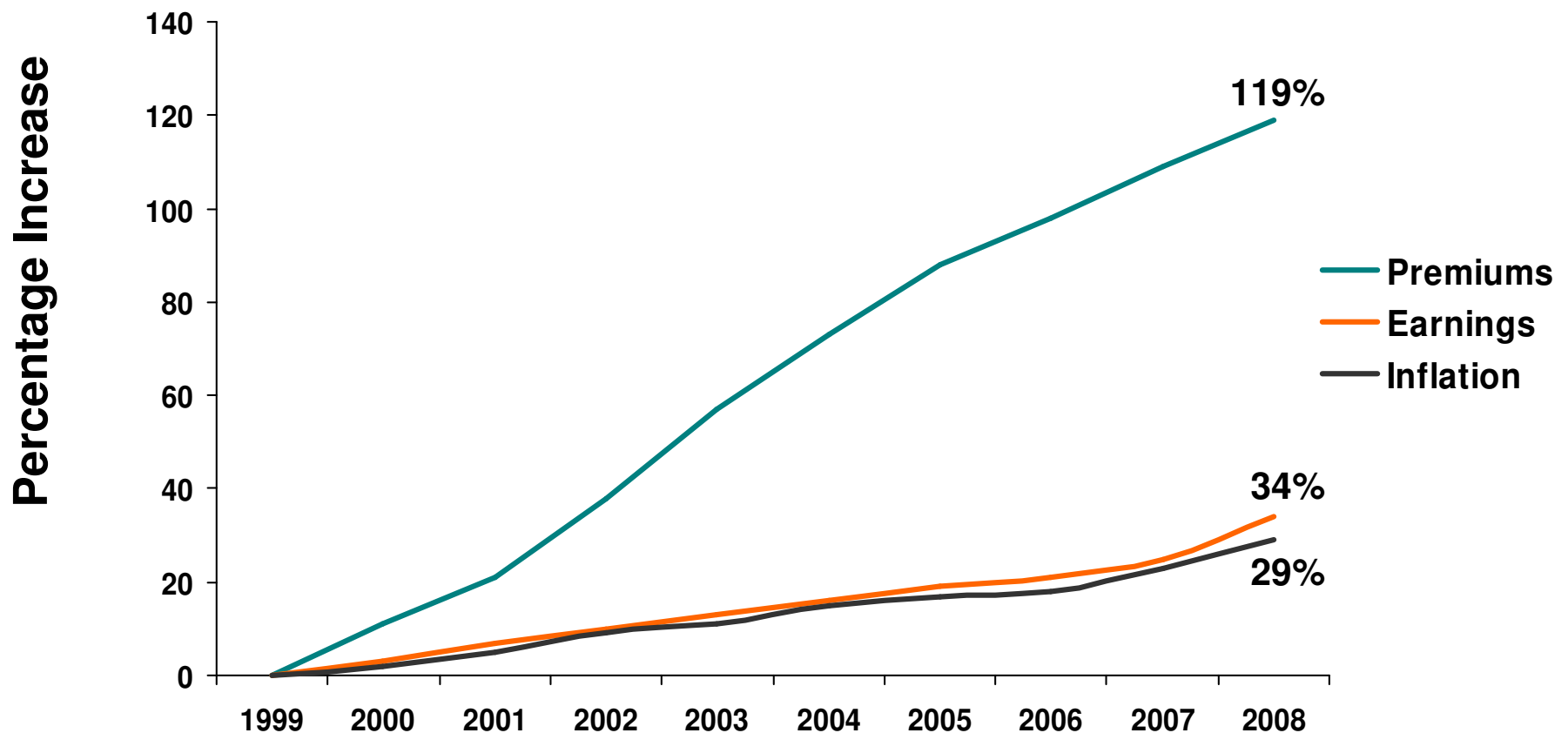
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The Well-Being Improvement Company

Setting the Stage

- Crisis in the cost and quality of healthcare
 - \$2.4 trillion in 2009 and projected to be \$4+ trillion by 2016
 - 55% chance of receiving proper care for acute or chronic condition
- Population is getting older, more obese and less healthy
 - Shift in demographics with 19.6% over age 65 by 2030
 - Alarming trends in obesity and onset of chronic disease
- An ounce of prevention is worth pounds of cure....

The Problem: Health Care Costs are Skyrocketing

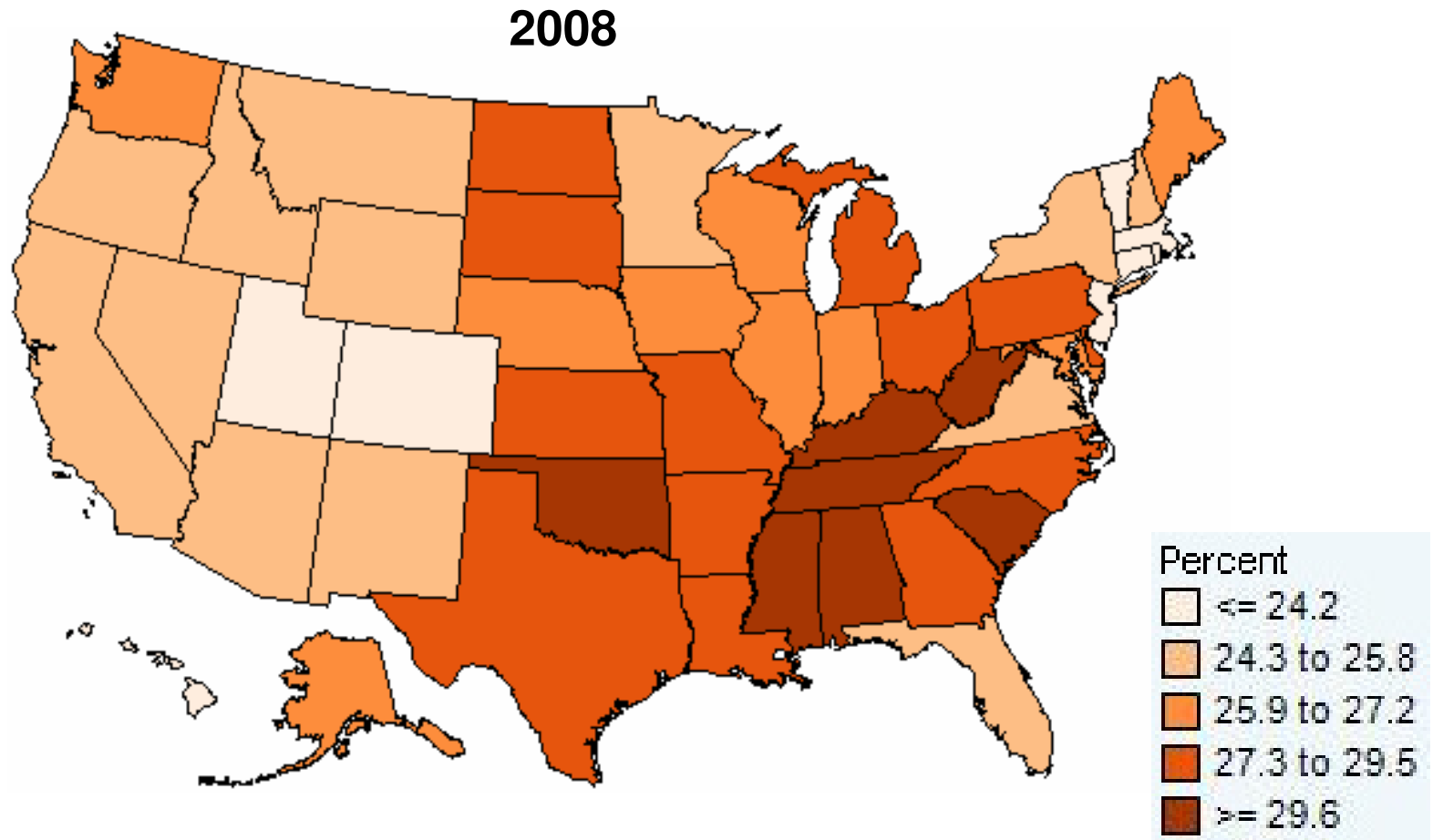
Cumulative Changes in Health Insurance Premiums, Inflation and Workers' Earnings, 1999-2008



Kaiser Family Foundation, 2009 http://www.kff.org/insurance/upload/7692_02.pdf

Fueling the Fire: Obesity in America

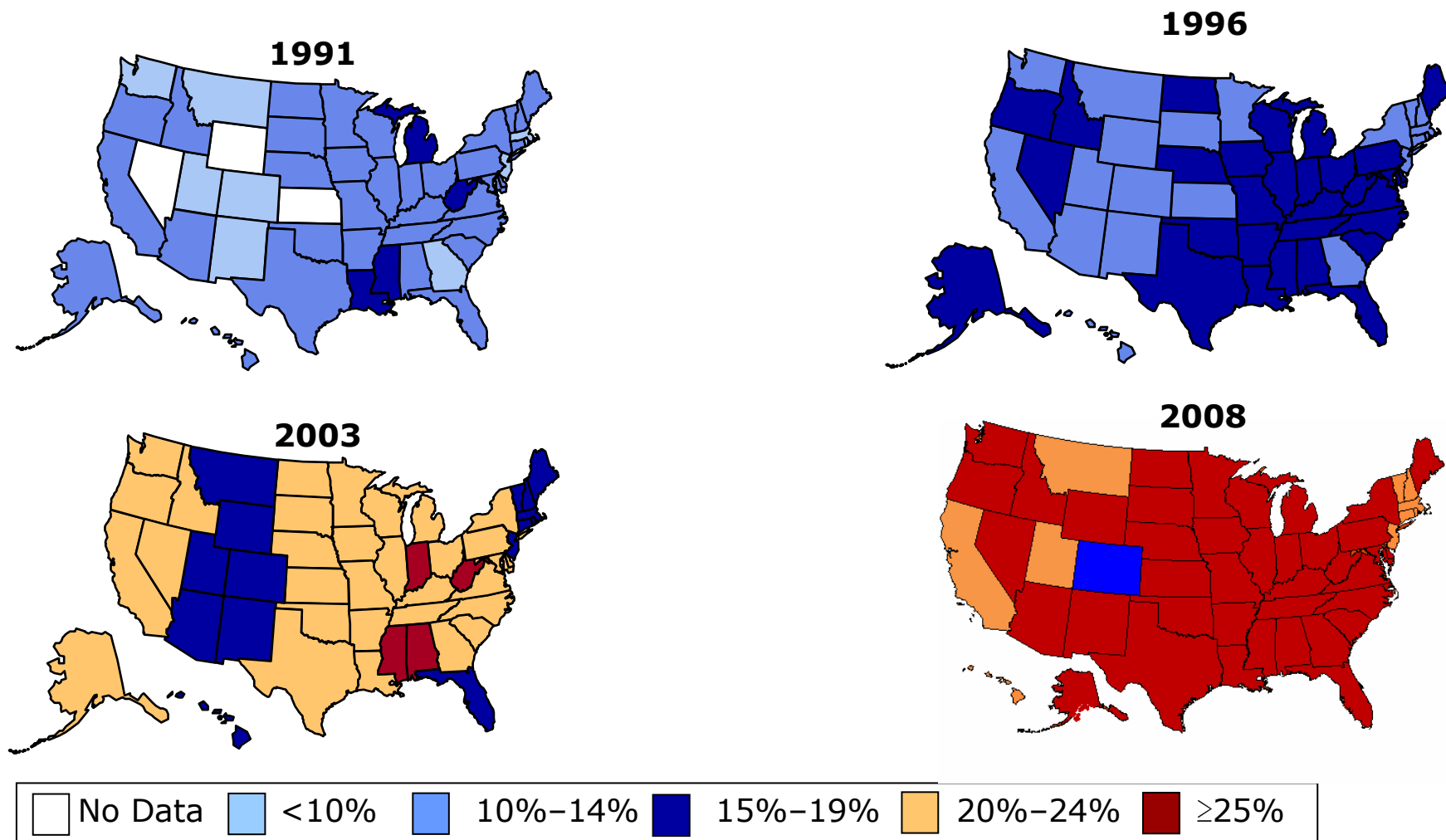
Behavioral Risk Factor Surveillance System, CDC.



*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person

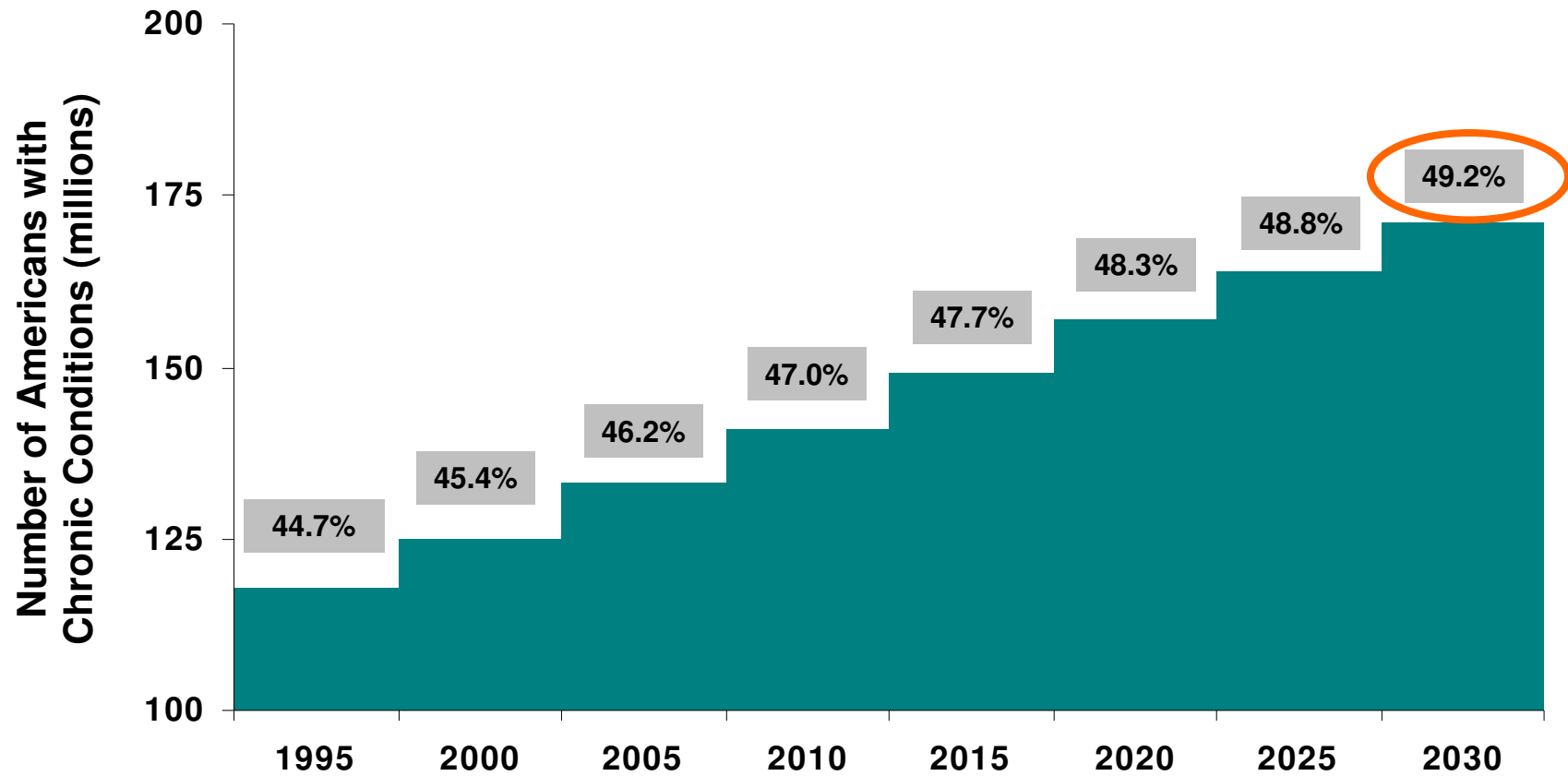
Obesity Trends* Among U.S. Adults

Behavioral Risk Factor Surveillance System, CDC.



*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person

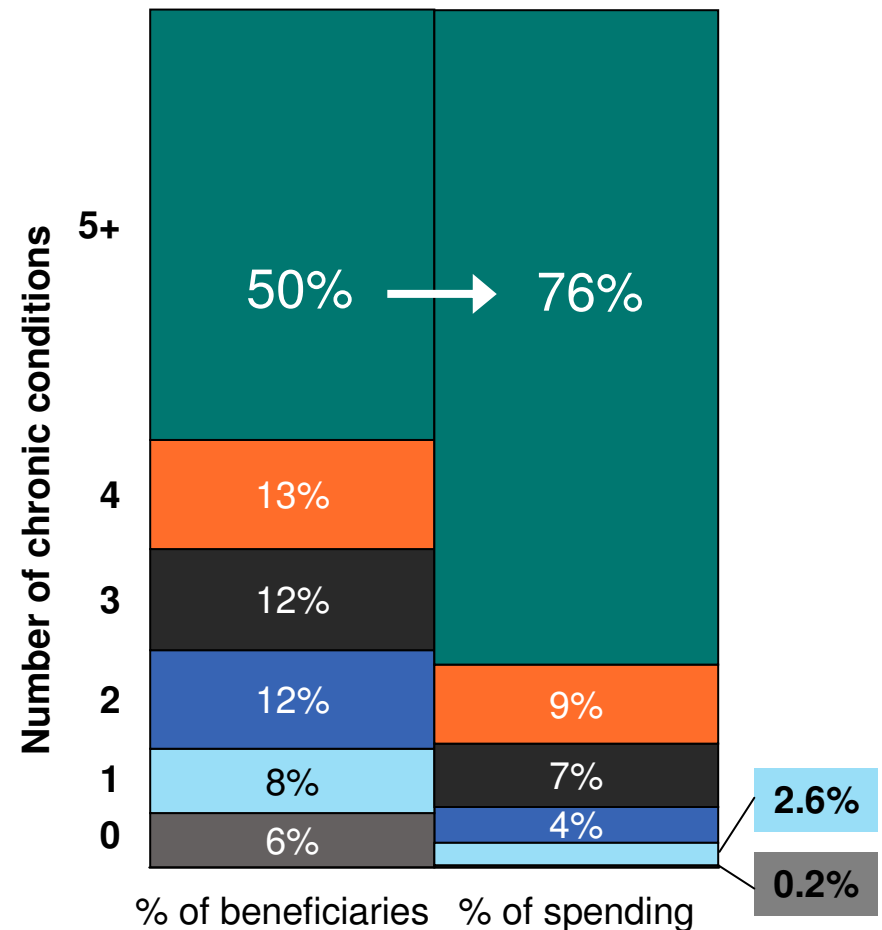
Cost is Driven By Increased Prevalence of Chronic Disease



Source: Wu, S and Green, A. Projection of Chronic Illness Prevalence and Cost Inflation. RAND Corp, October 2000.

Challenges Medicare Faces

- **Chronic disease burden**
 - Over 75% of spending is on the 50% of beneficiaries with 5 or more chronic conditions
- **Growing enrollment**
 - The aging “baby boomers”
 - 2008 enrollment of 45 million will increase to 80 million by 2030 – a 75% increase
- **Solvency**
 - If present trends continue, the Hospital Insurance Trust Fund will be depleted by 2017



Can Reduced Disease Burden Lead to Savings?

Current Health Care Debate:

- Acknowledges the need to reduce risk factors driving preventable disease but controversy remains...

Need to answer key questions:

- What would be the projected savings created by reasonable reductions in
 - risk burden prior to entering Medicare?
 - risk progression after entering Medicare?
- Are there net savings over a lifetime after factoring in increases in longevity?

The Medicare Lifetime Cost Model

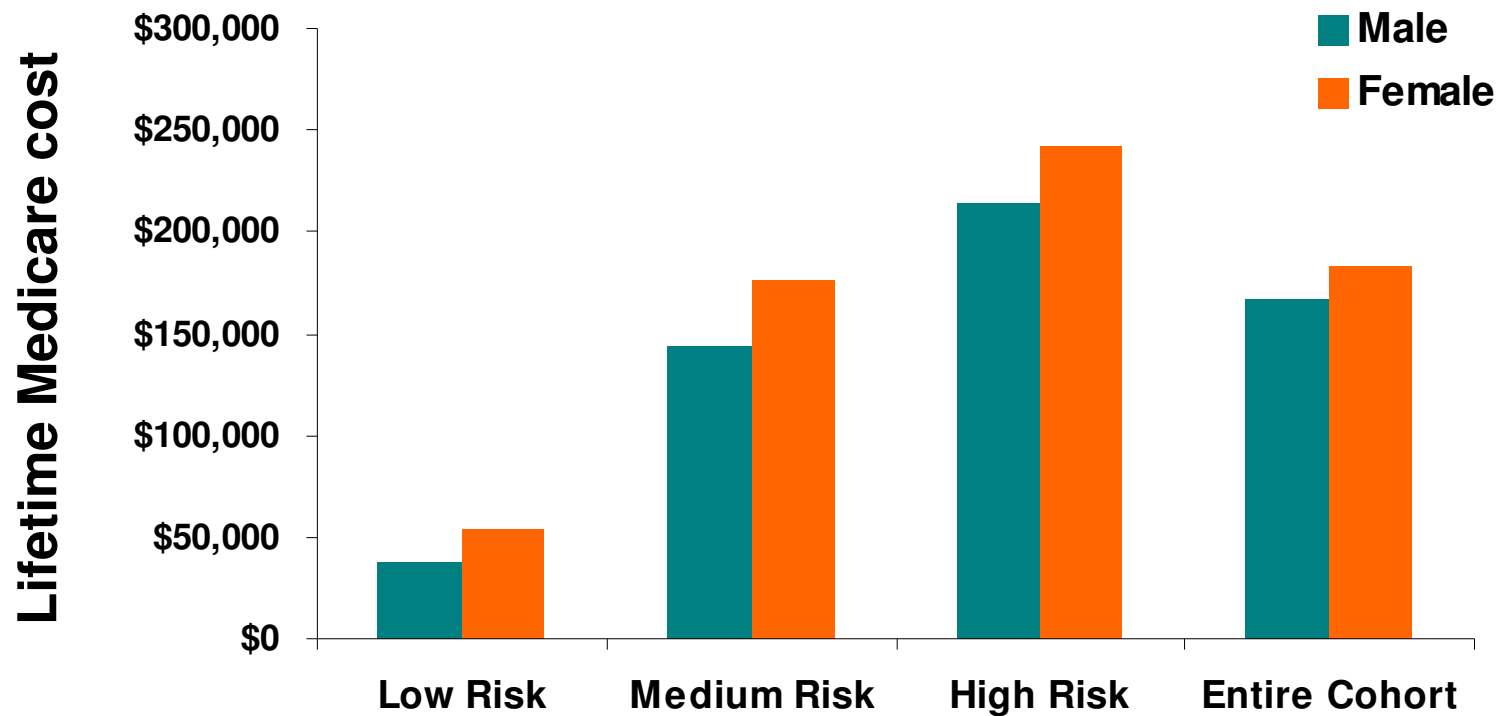
- Actuarial model built by Ingenix that projects the costs of a cohort of 878,700 individuals from age 65 until death based on risk level
- Determines the cost impact of user-defined scenarios defining health risk levels and progression to determine potential savings from wellness and care management programs

Model Development:

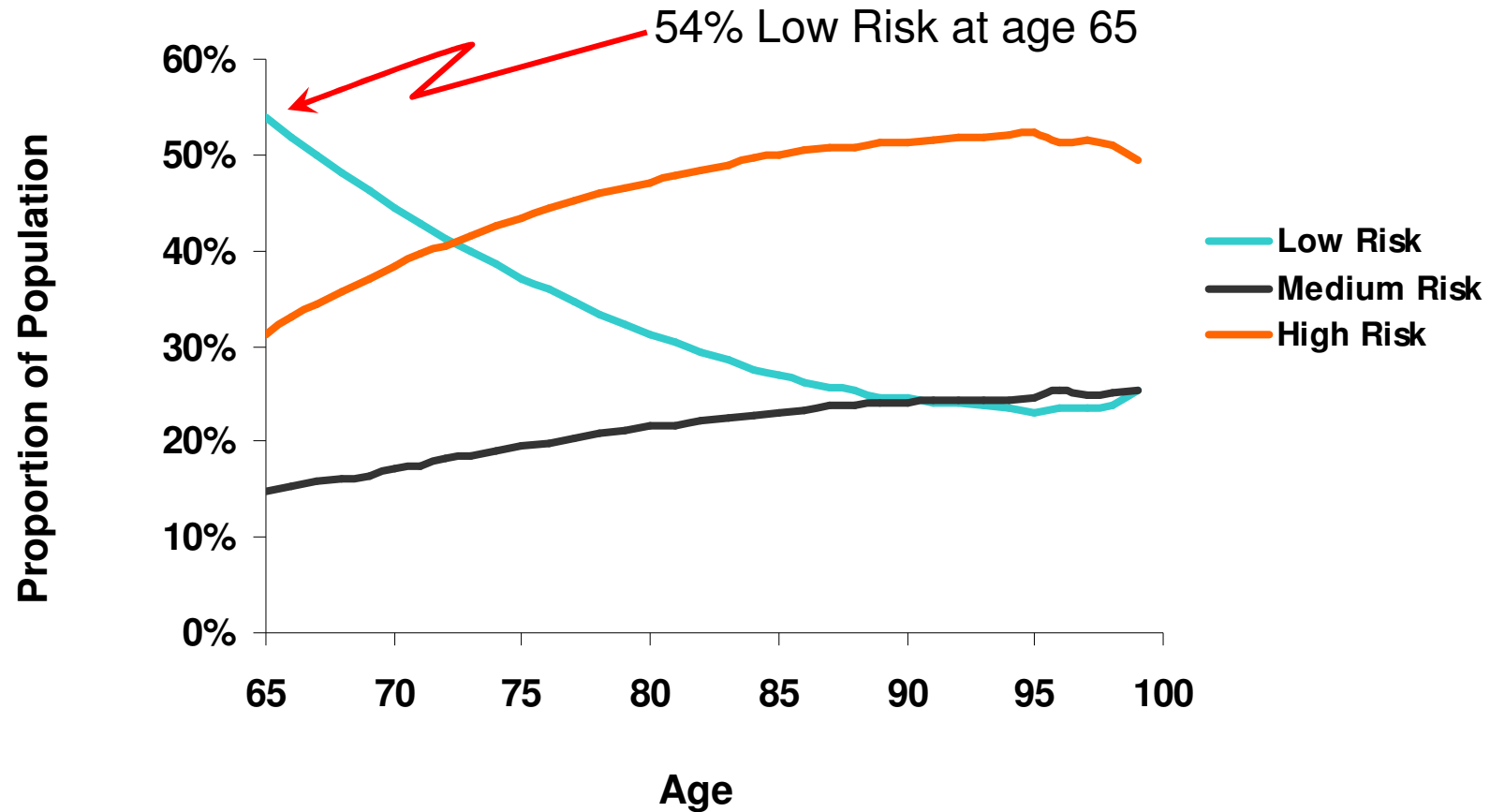
- Data source – Medicare 5% Sample, fee-for-service (Parts A & B), 2002-2006 (trended to 2008 dollars)
- Risk stratification – CMS Hierarchical Conditions Categories (HCC)
- Probabilities of death – National Vital Statistics Reports

Model Findings: Baseline Cost

Average cost to Medicare over a lifetime: \$174,018



Model Findings: Risk Progression

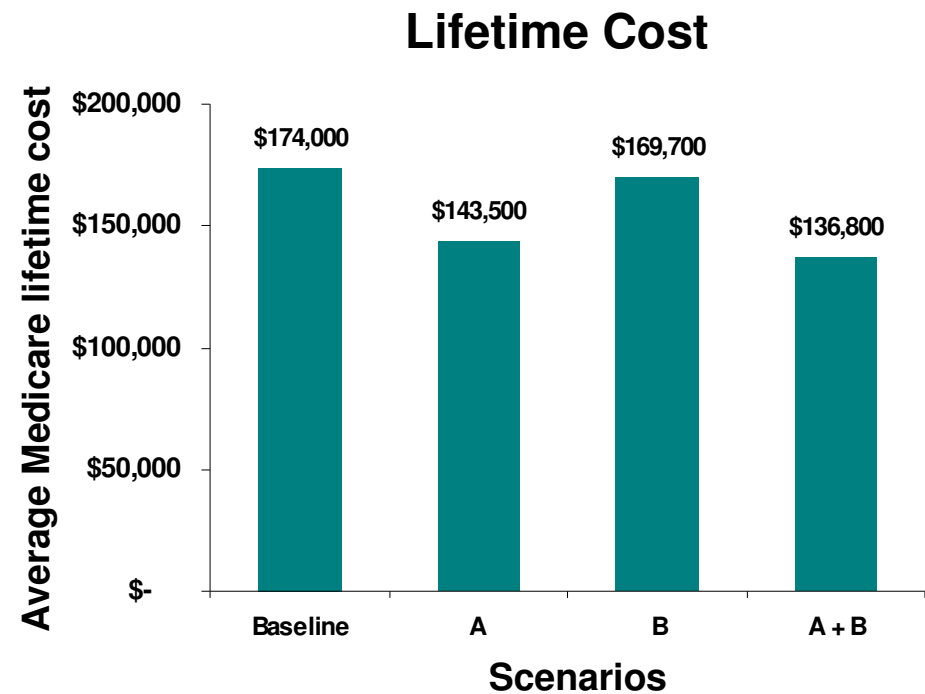


What is the Impact of Changing Natural Risk Progression?

- Reducing risk prior to Medicare eligibility
 - **Baseline:** 54% Low Risk at age 65
 - **Scenario A:** 65% Low Risk at age 65
- Reducing risk progression during Medicare
 - **Scenario B:** 10% decrease in upward transitions
- Combined Scenario
 - **Scenario A + B:** 65% Low Risk at 65 AND
10% decrease in upward transitions

Life Expectancy and Lifetime Costs

Within each risk reduction scenario, longevity increases yet lifetime costs are reduced

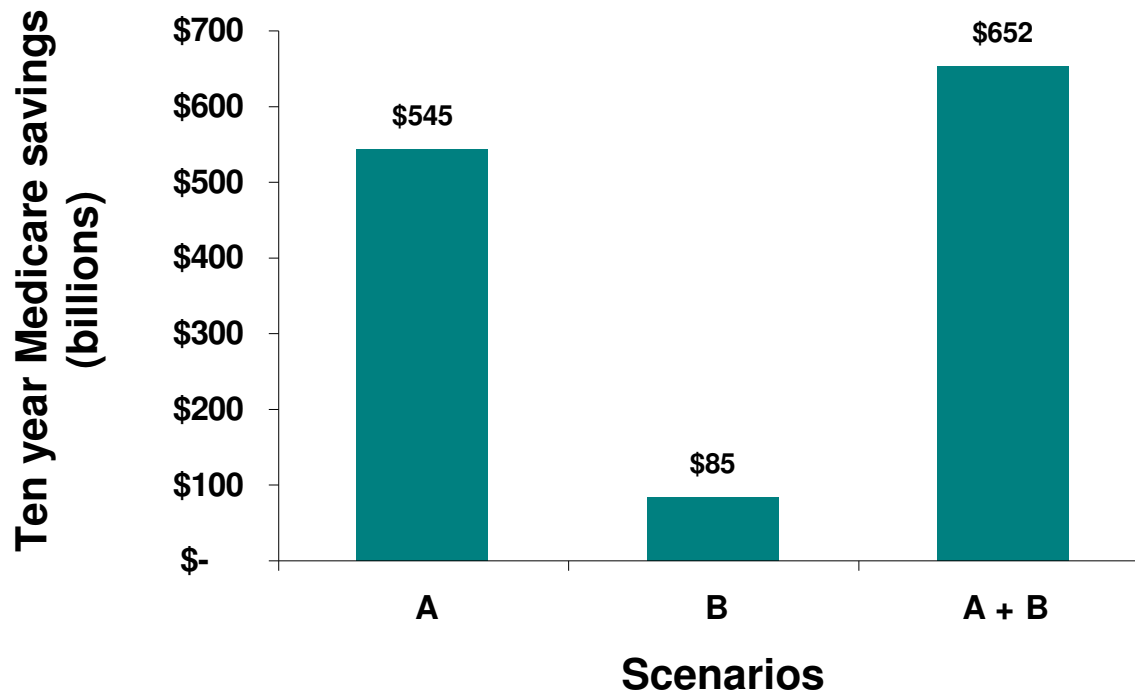


Scenarios:
upward transitions

A: 65% Low Risk at 65

B: 10% decrease in

Impact on Ten Year Medicare Spend



Scenarios:
upward transitions

A: 65% Low Risk at 65

B: 10% decrease in

What is the Impact of a More Aggressive Scenario?

- **75% Low Risk at 65 AND**
50% reduction in upward transitions
- **Longevity: 89.7 Years**
- **Lifetime Cost: \$79,961 (a 54% decrease)**
- **Medicare Savings: \$1.4 trillion**

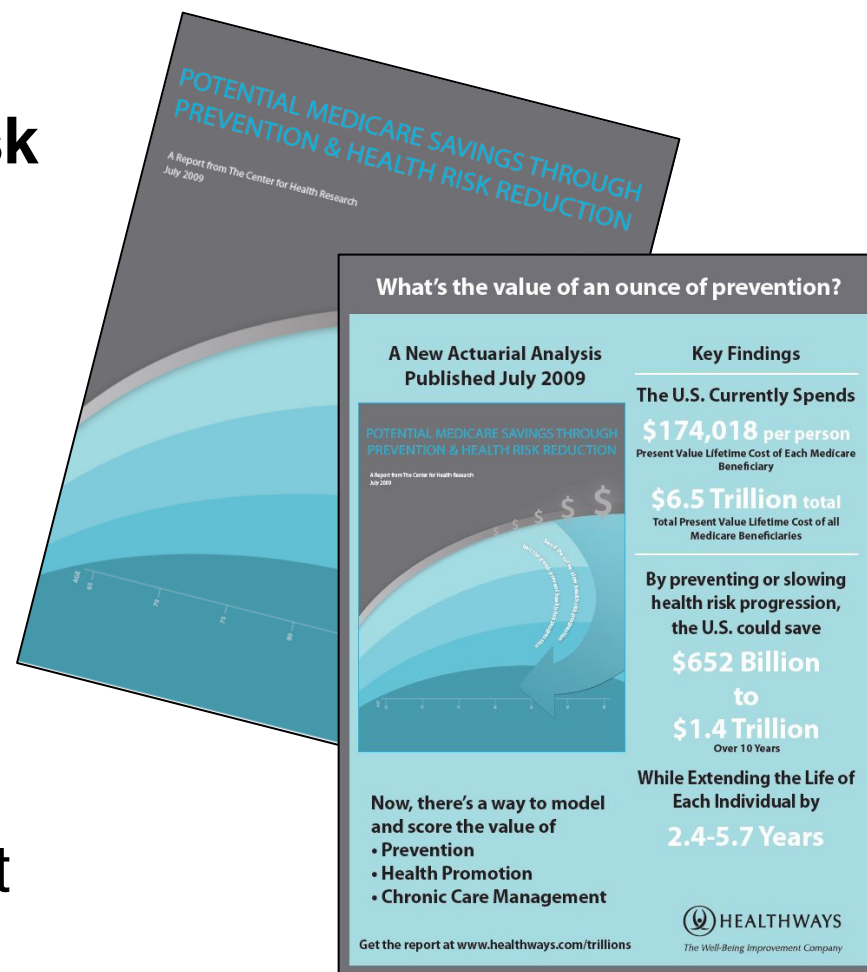
Conclusions, Policy Implications

Reducing risk progression prior to or during the years of Medicare eligibility can lead to between \$652 billion and \$1.4 trillion in cost savings over 10 years - despite increasing longevity

- Solutions to healthcare cost escalation are predicated on whether savings are possible – the work confirms this
- Strategies to reduce health risk among Medicare beneficiaries should be considered as a means of cost containment
- The provision of prevention, wellness and chronic care management programs prior to Medicare eligibility should be considered as a long-term strategy to reduce costs

Potential Medicare Savings Through Prevention and Health Risk Reduction

- **Actuarial model that can score the value of health risk reduction**
- **Demonstrates the potential savings to Medicare from:**
 - Prevention
 - Health Promotion
 - Chronic Care Management





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