The Cost of Chronic Disease

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The Data

- Healthcare spending growth can be decomposed into:
  - Change in treated prevalence
  - Change in spending per treated case
  - Interactions

- About 60% growth linked to treated prevalence increases between 1987 and 2008. Includes both rising clinical incidence (diabetes) and increased treatment intensity (lipids, anti-hypertensives)

Treated Prevalence by Medical Condition, 1987-2008, Adults 18+

	1987	2008
Hyperlipidemia	1.3%	19.1%
Mental Disorders	4.9%	13.9%
Diabetes	3.9%	9.1%
Hypertension	13.1%	23.9%
Arthritis	7.2%	14.8%
Heart Disease	7.4%	9.7%
Cancer	3.6%	6.6%
Pulmonary Disease	8.1%	12.9%

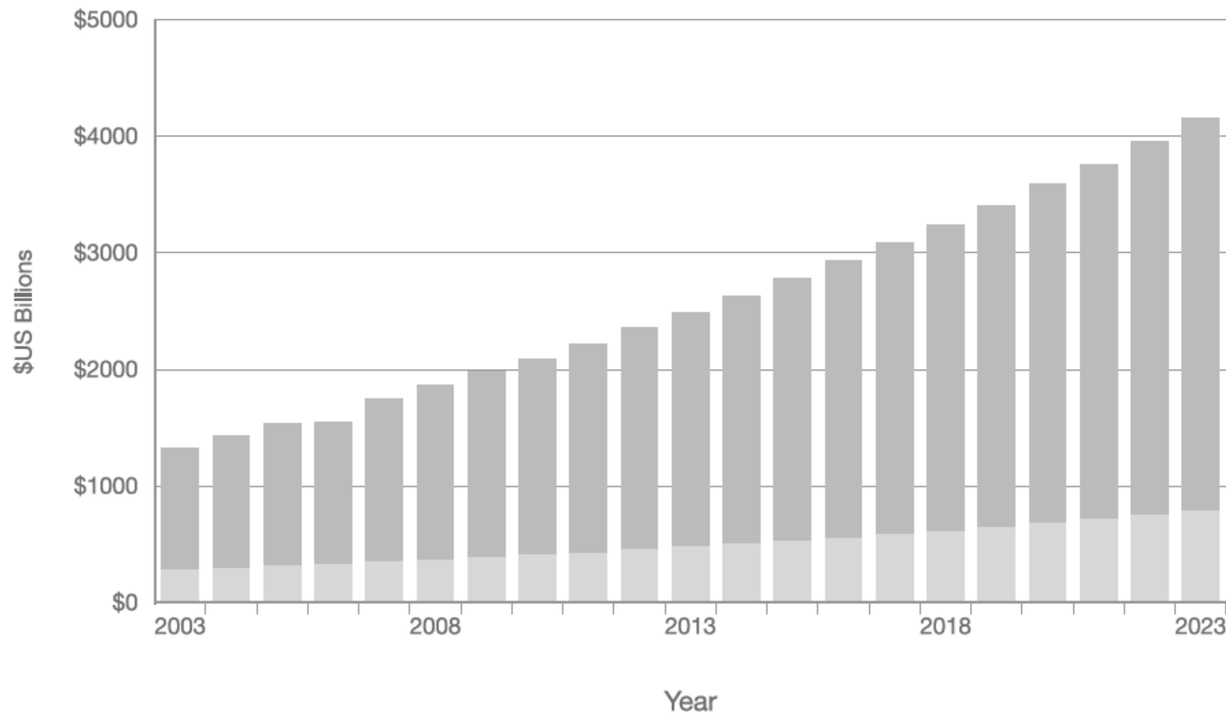
The Challenge: Identifying programs and approaches that avert, better detect disease and provide more effective approaches for keeping chronically ill patients healthy.

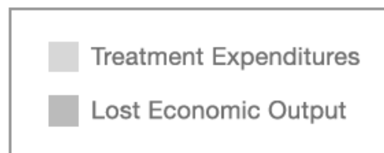
The Opportunities:

Medicare will spend over $500 Billion on potentially preventable readmissions over the next decade

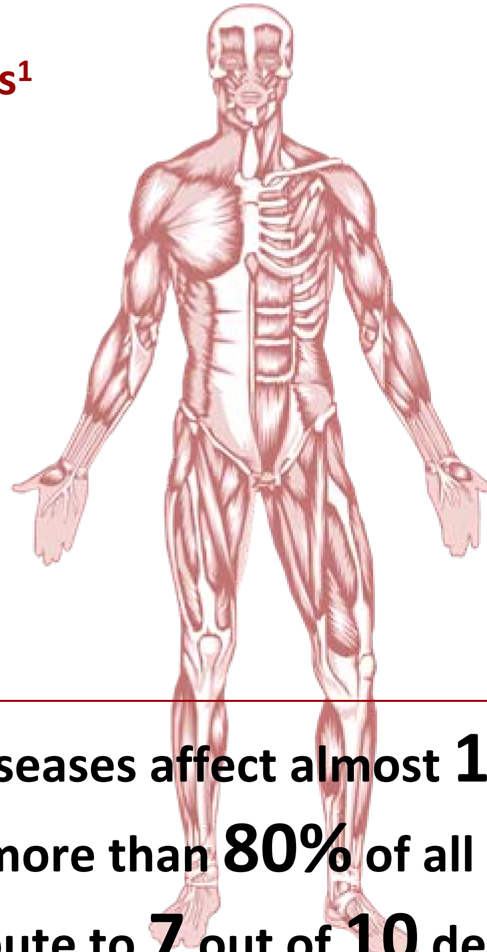
Six conditions—diabetes, and other CV related conditions account for 40% of the growth in Medicare spending

Chronic Diseases Have Also Driven Up Indirect Costs (i.e., Absenteeism and Presenteeism)





Chronic Disease Drives U.S. Healthcare Costs



Mental Illness[1]
$317 billion

Alzheimer's[2]
$183 billion

Arthritis & Other Rheumatic[3]
$128 billion

Chronic Lung Diseases[4]
$173 billion

Heart Disease & Stroke[5]
$444 billion

HIV/AIDS[6]
$22 billion

Diabetes[7]
$174 billion

Cancer[8]
$228 billion

Chronic diseases affect almost 1 in 2 people, account for more than 80% of all health spending, and contribute to 7 out of 10 deaths in the U.S.

Sources: 1 American Journal of Psychiatry June, 2008; 2 Alzheimer's Association; 3 Centers for Disease Control and Prevention; 4 American Lung Association; 5 Centers for Disease Control and Prevention; 6 AIDS – the Official Journal of the AIDS Society and the Office of National AIDS Policy; 7 Centers for Disease Control and Prevention; 8 American Cancer Society

Key Drivers of Rising Healthcare Costs

- Doubling of obesity since 1987 accounts for 8 to 20% of the rise in healthcare spending (varies by time period)
- Six chronic conditions are key drivers of rising healthcare spending in Medicare (account for 40% of the recent growth)
  - Diabetes (5% of growth)
  - Arthritis (5%)
  - Heart Disease (9%)
  - Hypertension (5%)
  - Mental disorders (5%)
  - Cancer (9%)

Some costs can be avoided altogether by averting disease through reducing or eliminating risk factors

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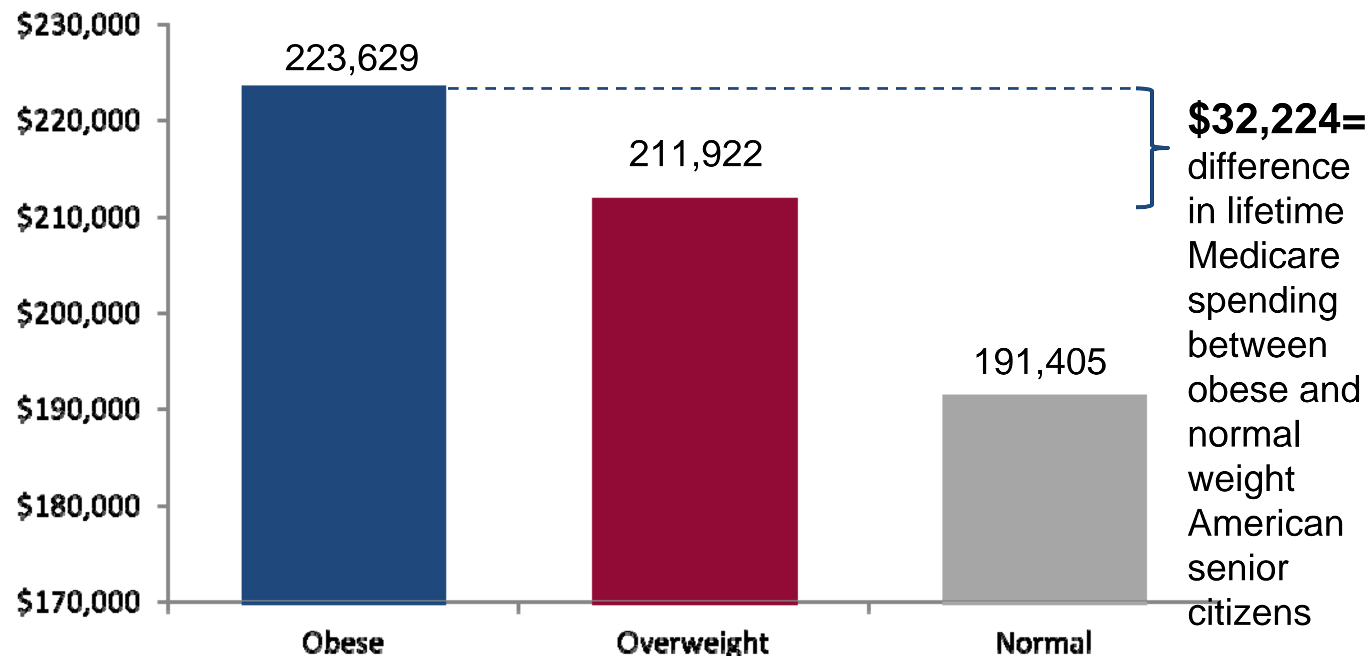


$32,224= difference in lifetime Medicare spending between obese and normal weight American senior citizens

FACT:

Medicare will spend about 17% more on an elderly obese person over their lifetime* than on someone of normal weight, even though they will live about as long.

*Lifetime costs refer to costs incurred between Medicare enrollment and death

Source: Health Services Research, Yang and Hall

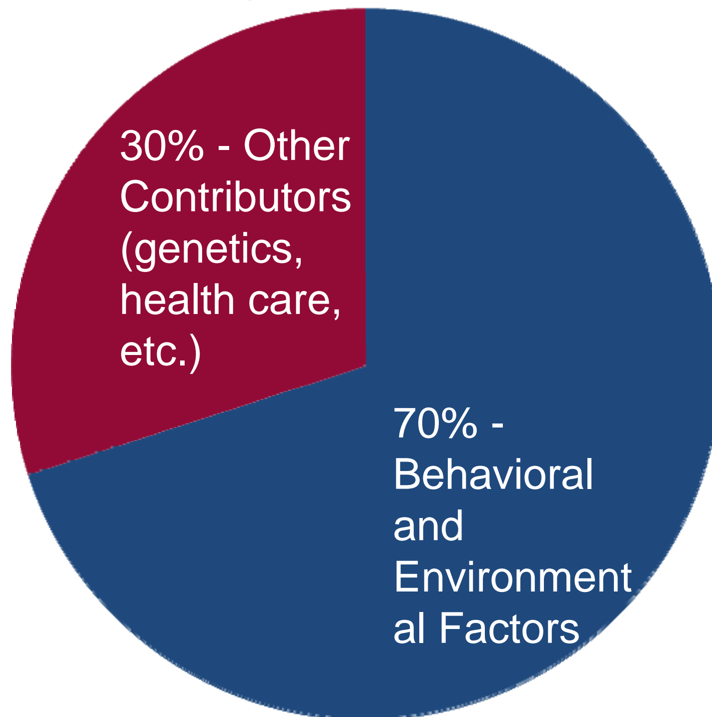
The Challenge:

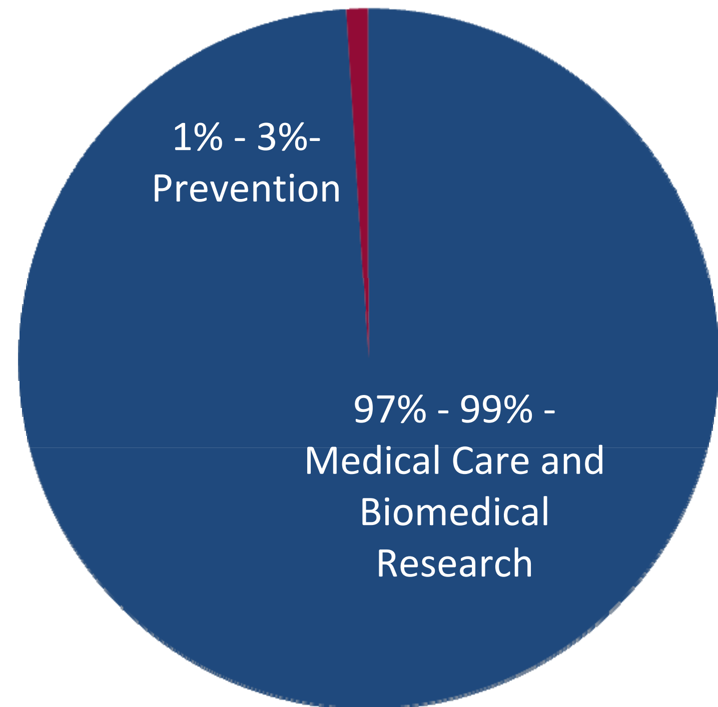
Obese workers spend nearly 40% more on health care than normal weight adults

For each additional dollar spent to treat health care costs associated with chronic disease, there is an additional $4 lost in productivity

Need a better system to avert disease, change behavior and keep chronically Ill patients healthier before entering Medicare and while they are enrolled in the program.

The U.S. spends very little on prevention, despite behavioral and environmental factors accounting for 70 percent of U.S. deaths





Source: Institute of Medicine, Health Affairs, Journal of American Medical Association (JAMA)

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Prevention is often defined inaccurately and incompletely, focusing on a specific category rather than the comprehensive definition

Prevention Encompasses Three Major Areas with Specific Goals

Primary Prevention

Goal:
Reduce or Eliminate Risk Factors and Avert Disease

Eating healthy

Getting exercise

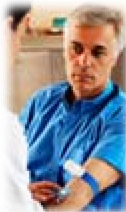
Avoiding unhealthy behaviors

Vaccines

Secondary Prevention

Goal:
Find and Treat Disease in Its Earliest Stages to Stop Its Progression

Risk-based screening s



Blood tests and other monitorin g

Taking steps to reduce

Most people define prevention as this category only, even though it encompasses all three

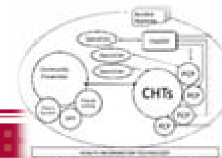
Tertiary Prevention

Goal:
Manage Disease to Avoid Complications and Disease Progression

Following treatment recommendation s

Health coaching

Transition al care



Care coordinatio n models

Weight Loss Can Save Healthcare Dollars

- RCTs have shown lifestyle modification programs can reduce weight by about 7%
- Some investigational drugs (not FDA approved) can reduce weight among those with BMI>=27 of about 10 to 15%
- These larger reductions in weight could reduce Medicare spending by $35 to $60 billion over the lifetime of a patient and $8 to $13 billion over ten years starting at age 65

Building a National Prevention Strategy through the Affordable Care Act (ACA)

- Prevention and Public Health Fund ($10.9 Billion total over ten years)
- National Diabetes Prevention Program
- No copays for certain clinical preventive services
- Medical homes and community health teams (Medicaid incentives to adopt with 90% match)
- Exchanges—defining care coordination and prevention as an essential benefit

Proposal

- Improve the incoming health profile of Medicare beneficiaries
- Use evidence-based program like the DPP and make available to overweight adults with CV risk factor at age 60 (or earlier)
- Scale the program nationally using YMCAs and other non-profit organizations for $80 million/year
- Fund from Prevention Fund--$1 Billion in funding next year

The Y's Reach and Scale – We can make Diabetes prevention available to most American communities

57% of U.S. households are located within 3 miles of a YMCA

Proposal

- Fund the costs of scaling the program from the Prevention Fund starting in 2012
- Provide full subsidy for eligible 60-64 year olds ($220 to $320 per year)
- Include the benefit in Medicare program
- Include the availability of the DPP as a prevention “expectation” in the health insurance exchanges

DPP Lifestyle Program Summary

Treating 100 high risk adults (age 50) for 3 years…

- Prevents 15 new cases of Type 2 Diabetes[1]
- Prevents 162 missed work days[2]
- Avoids the need for BP/Chol pills in 11 people[3]
- Avoids $91,400 in healthcare costs[4]
- Adds the equivalent of 20 perfect years of health[5]

1 DPP Research Group. N Engl J Med. 2002 Feb 7;346(6):393-403
2 DPP Research Group. Diabetes Care. 2003 Sep;26(9):2693-4
3 Ratner, et al. 2005 Diabetes Care 28 (4), pp. 888-894
4 Ackermann, et al. 2008 Am J Prev Med 35 (4), pp. 357-363; estimates scaled to 2008 $US
5 Herman, et al. 2005 Ann Intern Med 142 (5), pp. 323-32

Results

- Community based DPP generates a net weight loss of 4.2% relative to placebo
- Using participation rates in the community-based trial yields (net of enrollment costs) Medicare savings just for the cohort of those 60-64 of:
  - $7 Billion over the next ten years
  - $27 Billion in lifetime Medicare savings

Results

- Adding Medicare to the eligibility --aged 60 to 69

- Medicare Savings
  - Ten year savings - $6.6 Billion
  - Lifetime savings - $26.5 Billion

Implications

- Federal government should partner with private sector to improve health profile of incoming Medicare beneficiaries as well as their own insureds
- The YMCA-DPP should be scaled nationally starting next year (cost $80 million or so out of the *$1 Billion* authorized next year)
- Would transform primary prevention system using evidence-based lifestyle modification program

Preventing Chronically Ill patients from getting sicker: Community Health Teams

- No care coordination (other than for homebound patients) in traditional Medicare program
- Key policy challenge: scale and replicate evidenced-based care coordination nationally for Medicare and other patients
- Potential vehicles –section 3502 care teams and section 2703 Medicaid medical homes using care teams

Populations to Target for Care Coordination

- Dual eligibles ($3.7 Trillion in federal spending over next decade). Could potentially save $125 Billion

- Traditional FFS Medicare ($6.1 Trillion in spending over next decade). Could potentially save NET about $100 Billion

- New Medicaid populations in the exchanges

Conclusions

- The ACA provides the possibility to transform our primary, second and tertiary prevention systems—just need comprehensive plan and leadership
- By
  - Taking the DPP national over the next 18 months
  - Building community health teams that link primary prevention and care coordination
  - Improving our ability to detect disease