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## PUERTO RICO CONFERENCE 2012 Economic Transformation in Health

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## The Cost of Chronic Disease

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## The Data

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- Healthcare Spending growth in spending can be decomposed into:
  - Change in treated prevalence
  - Change in spending per treated case
  - Interactions
- About 2/3 growth linked to treated prevalence increases between 1987 and 2008. Includes both rising clinical incidence (diabetes) and increased treatment intensity (lipids, anti-hypertensives)



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

### **The Opportunities:**

Medicare will spend \$250 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 Disease Have Also Driven Up Indirect Costs (i.e., Absenteeism and Presenteeism

Projected costs associated with seven of the most common chronic diseases\*





#### **Chronic Disease Drives U.S.** Healthcare Costs



Mental Illness<sup>1</sup> \$317 billion

Arthritis & Other Rheumatic<sup>3</sup> \$128 billion

Heart Disease & Stroke<sup>5</sup> \$444 billion

> Diabetes<sup>7</sup> \$174 billion

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Alzheimer's<sup>2</sup> \$183 billion

> Chronic Lung Diseases<sup>4</sup> \$173 billion

> > HIV/AIDS<sup>6</sup> \$22 billion

Cancer<sup>8</sup> \$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 Health Care Costs

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- Doubling of obesity since 1987 accounts for 8 to 20% of the rise in health care spending (varies by time period)
- Five chronic conditions are key drivers of rising health care spending in Medicare (account for a third of the growth) :
  - Diabetes (8 percent of growth)
  - Arthritis (7 percent)
  - Kidney disease (6%)
  - Hypertension (6%)
  - Mental disorders (5%)

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



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Projected <u>Lifetime Medicare Health Care Expenditures</u> for a Cohort of Medicare Patients



"Lifetime costs refer to costs incurred

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## The Challenge

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### 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 III 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



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

**Truth :** Many Americans are not receiving the preventive care they need, resulting in preventable cases that can lead to costly complications



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#### **Example: Diabetes Prevention in United States**



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**

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#### **Primary Prevention**

Goal: **Reduce or Eliminate Risk Factors and Avert** Disease



Eating healthy



Getting exercise







Vaccines

#### **Secondary Prevention**

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



**Risk-based** screenings



**Blood tests** and other monitoring



**Taking steps** to reduce risks

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

Goal: Manage Disease to Avoid **Complications and Disease** Progression

**Tertiary Prevention** 



**Following treatment** recommendations



Health coaching

**Transitional** 

care





Care coordination 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

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- Prevention and Public Health Trust Fund (\$15 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



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YMCA's Diabetes Prevention Program ©2010 YMCA of the USA





- 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

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

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

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





- Adding Medicare to the eligibility --aged 60 to 69
- Medicare Savings
  - -Ten year savings \$6.6 Billion
  - -Lifetime savings \$26.5 Billion

## Implications

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- 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 III 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 evidencedbased 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



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 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

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- 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

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