UNIVERSITY OF MIAMI SCHOOL of BUSINESS ADMINISTRATION



The Puerto Rico Chamber of Commerce, the University of Miami School of Business Administration and the Medicaid and Medicare Advantage Products Association present...

PUERTO RICO PUERTO RICO CONFERENCE 2014 Doing More with Less: The 2014 Economics of Productivity and Quality in Healthcare for Puerto Rico

The Cost of Chronic Disease

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The Data

♦ 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)

Percent of Change in Total Health Care Spending Associated with Obesity, Increased Treatment Intensity and Both Obesity and Treatment Intensity, 1987-2007





The Challenge

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





* Prevalence for all ages; incidence for 18-79 years; and obesity for ≥20 years

* Data modeled by joinpoint regression



Chronic Disease Drives U.S. Healthcare Costs



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



Chronic Disease

Both the medical and lost productivity costs employers and workers over \$1.3 Trillion per year

Within ten years, total costs associated with chronic disease will exceed \$4.2 Trillion



Key Drivers of Rising Health Care Costs

- 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 % of growth)
 - \diamond Arthritis (7 %)
 - ♦ Kidney disease (6%)
 - ♦ Hypertension (6%)
 - \diamond Mental disorders (5%)

Medicare Spending Dramatically Higher for People with

Nultiple Chronic Conditions Percentage of Medicare Spending on Patients with Chronic Conditions, by Number of Treated Chronic



Source: Health Affairs



Projected Lifetime Medicare Health Care Expenditures for a Cohort of Medicare Patients



\$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



The Challenge

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)



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



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

Tertiary Prevention

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

Health

Coaching



Following Treatment **Recommendations**



Transitional Care



Care Coordination **Models**

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



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

- ♦ Prevention and Public Health Trust Fund
- ♦ 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



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



Proposal

♦Fund the costs of scaling the program from the Prevention Fund starting in 2015

Provide full subsidy for eligible 60-64 year olds (\$320 to \$520 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 Diabetes¹
◇ Prevents 162 missed work days²
◇ Avoids the need for BP/Chol pills in 11 people³
◇ Avoids \$91,400 in healthcare costs⁴
◇ Adds the equivalent of 20 perfect years of health⁵

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 evidencebased 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 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

♦ 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

 \diamond 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





Gracias