Estimating the Budgetary Implications of Prevention Policies

Presentation at a Congressional Lunch Briefing
Organized by Representative Michael Burgess

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Assessing the Cost Impact of Health Interventions: Key Concepts

- Costs of health care
  - Annual health care spending per capita
  - Lifetime health care spending per capita

- Cost effectiveness
  - Return on investment

- Budgetary impact
  - Federal government’s spending and revenues

CBO’s Focus
Considerations in Estimating the Budgetary Impact of a Proposed Health Policy

- Baselines for health care spending, health risks, and health outcomes

- Behavioral responses
  - By individuals, employers, state and local governments, health care providers and insurers, and others

- Effects of behavioral changes on people’s health

- Effects of health changes on federal spending
  - Medicare, Medicaid, Social Security (OASI and DI), Supplemental Security Income, exchanges subsidies, other federal programs

- Other effects on federal spending

- Direct and indirect (health-related) revenue effects
Health Promotion and Disease Prevention Interventions

- Clinical preventive services
- Community-based health promotion
- Laws and regulations to limit risky behavior
- Personal financial incentives to modify risky behavior
- Excise taxes on products with health risks
Establishing the Baseline (Part 1)

- What risk factor (or condition) does the policy target?

- How prevalent is the risk factor?
  - Variation among population subgroups

- What are the effects of the risk factor on health and mortality?
  - Associations with other risk factors

- What are the prevalence projections for 10 (25, 50) years for the risk factor and its health consequences?
  - State and local government policies
  - Employers’ behavior
  - Health care system developments
  - Socioeconomic factors
  - Community norms
Baseline Projection: Prevalence of Smoking Through 2035
(Based on National Health Interview Survey, multiple years)

Percentage of U.S. Adults


Actual
Projected

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Establishing the Baseline (Part 2)

- How do health outcomes associated with the risk factor (condition) affect:
  - Annual and lifetime per capita health care spending?
    - Overall and among population subgroups?
  - Health insurance premiums?
    - Taxed and untaxed shares of compensation?
  - Participation and spending in government health, disability, and retirement programs?

- And for estimates incorporating changes in GDP....
  - Labor force participation?
  - Productivity in the workplace?

- What are the projections of those metrics for 10 (20, 50) years?
Smoking and Per Capita Health Care Spending
(Based on Medical Expenditure Panel Survey, 2000 to 2008, and National Health Interview Survey 1998 to 2007)

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Behavioral Responses and Health Outcomes

- What responses would the policy induce from
  - Individuals?
    - Variation among population subgroups
  - State and local governments?
  - Employers?
  - Health care providers and insurers?

- How would those behavioral responses affect health and longevity
  - Initially and over time?
  - Taking behavioral substitutions into account?

- How sustainable would the responses and effects be?
Rate of Improvement in Health for Smokers Who Quit
(Based on IARC’s tobacco control report, Surgeon General’s reports)

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Economic Outcomes

How would the health and longevity outcomes affect:

- Annual and lifetime per capita health care spending?
  - Variation among population subgroups
- Health insurance premiums?
- Labor force participation and productivity (for estimates incorporating changes in GDP)
Fiscal Outcomes

- How would health, longevity, and associated economic outcomes affect:
  - Federal outlays?
    - Medicare
    - Medicaid and exchange subsidies
    - Social Security (OASI and DI)
    - Other federal health and retirement programs
  - Federal revenues?
    - Changes in the mix of compensation
    - Changes in earnings (for estimates incorporating changes in GDP)

- How would other responses affect federal spending?
  - Shifts of existing spending by other stakeholders to the federal government
Illustrative Findings

From the CBO Study

*Raising the Excise Tax on Cigarettes*
Effects on Federal Outlays of Increased Longevity and Lower per Capita Health Care Spending

Effects of Greater Longevity

Effects of Lower per Capita Health Care Spending

Total Effects on Outlays

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Effects on Federal Outlays, by Program

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Health-Related Effects on Federal Revenues

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Health-Related Effects on Revenues, Outlays, and the Deficit

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Challenges in Weighing the Strength of the Evidence

- Sparse or conflicting evidence
- Lack of risk factor information in some household surveys
- Weak research designs
  - Cross-sectional studies, selection bias issues
- Publication bias
- Extrapolations from one subpopulation to another
- Extrapolations from clinical to community settings