Health Care Spending in the United States

What? Who Cares? Why? What Do We Do About It?

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Introduction

• Purpose of talk
  – Introduce you to basic facts about US health care spending, put it in context, understand issues, drivers, consider policy approaches

• Organization of Talk: “W W W W”
  – What?
  – Who Cares?
  – Why?
  – What Can We Do About It?
What?

What’s Happening with Health Care Spending? Who Pays? Who’s Covered?
US Health Care Spending is High

• Total health care spending in 2013: $2.9 trillion; 17.4% of GDP
  – About 1 out of every 6 dollars in the US is spent on health care
  – $9,255 per person (not household); GDP per person $53,160
  – “5th largest economy in the world”: US $15 tril, China $7.3, Japan $5.9, Germany $3.6, France $2.8, Brazil $2.5, UK $2.4, Italy $2.4, Russia $1.9

• US health care sector larger than the economy of France.

• Hospital care 5.6% of GDP; physician services 3.5%; insurance 1%

Spending Growing, but Slower Recently

• Total health care spending growth in 2013: 3.6%
  – Slower than in 2012 (4.1%)
  – GDP growth in 2013: 3.7%
  – Health care share of GDP has been constant since 2009

• Predicted to rise to almost $5.2 trillion by 2023
  – More than 150% of current levels
  – 19.3% of GDP in 2023; $15,000 per person
  – US govt. share: 26% 2013; 31% 2023
  – $826 billion increase

US Health Spending as Percent of GDP

*Source: National Health Expenditure Accounts
Not a New Problem

by Andy Warhol (CMU ‘49)
~ 1985-86
(Was) Available via Christie’s
$15-20,000
Part of US Economy

• Largest single industry in the U.S. economy.
  – Agriculture, forestry, fishing, and hunting (1.0%); Mining (including oil and gas extraction) (0.91%); Construction (3.9%); All manufacturing (13.8%); Computer and electronic products (2.8%); Motor vehicles (1.1%); Furniture (0.3%); Food and beverage and tobacco products (1.4%); Apparel and leather (0.16%); Broadcasting and telecommunications (3.2%); Legal services (1.3%); Performing arts, spectator sports, etc. (0.4%); Brewing (0.15%).

• Largest single share of federal government expenditures (2013).
  – Health: $856.1 billion (24.8% of federal spending)
  – Social Security: $813.6 billion (23.5%); Defense: $633.4 billion (18.3%); Education: $72.8 billion (2.1%).

International Health Spending as % of GDP

Health expenditure as a share of GDP, 2011 (or nearest year)

*Source: OECD Health Data*
International Growth in Health Spending, 2000-2011

Health expenditure as a share of GDP, 2000-11

Where Does the Money Come From?

*Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group*
Average Annual Growth in Spending per Enrollee, 2009-2013

*Sources: Health Care Cost Institute; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group*
Privately Insured (ESI)

ESI Per Capita Health Spending and Spending Growth: 2008-2013

Note: All data weighted to reflect national, younger than 65 ESI population.
Source: Health Care Cost Institute, www.healthcostinstitute.org
Publicly Insured (Medicare)

Medicare Per Enrollee Spending and Spending Growth: 2008-2013

*Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group
Publicly Insured (Medicaid)

Medicaid Per Capita Spending and Spending Growth: 2008-2011

Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.
Health Insurance Coverage

- **Employer-Sponsored Insurance, 49%**
- **Medicaid/ Other Public, 18%**
- **Medicare, 13%**
- **Uninsured, 16%**
- **Private Non-Group, 5%**

Total = 307.9 million

*Source: Kaiser Family Foundation, KCMU/Urban Institute analysis of the 2012 ASEC supplement to the CPS.*
Who Cares?

Private Spending, Public Spending, Who Really Pays?
Who Cares?

• So what if we spend almost $3 trillion on health care?
  – We’re a rich country – we have to spend the money on something
    • How many refrigerators or cars can we have anyway?
  – Health care has been getting better, more valuable
  – Spending on computers and telecom (voice, internet, TV) has been rising rapidly
    • No speeches by politicians about controlling the growth in spending on computers, no Hill briefings on reining in runaway computer expenditures, no comparisons to Japan, Britain, France...

• Health care is valuable, but...
This Is a Big Problem for the US

• Health care spending crowding out spending (or investment) on more valuable goods and services

• Increased health spending entirely ate up increases in income for a family of 4 over the past decade.
  – Income would have increased by $355/month if health spending grew at inflation.

• Government spending on health has grown more than twice as fast as national income.
  – Spending growing faster than our ability to pay for it.
  – Publicly financed spending generating an increasing burden: higher taxes or reduced spending on education, housing, infrastructure, etc.
  – This spending will eventually crowd out growth in the overall economy.

  – “Social security is Grenada; Medicare is Vietnam.” Douglas Holtz-Eakin, former Director, CBO.
Private Health Spending

• Increased health spending completely wiped out increases in income for average family of 4, 1999-2009.
  – Income would have increased by $545/month if health spending grew at inflation.
    • $335/month if health spending grew at GDP growth rate + 1%.
  – Income actually grew by $95/month net of increased health spending.

Premiums Rising Faster Than Inflation and Wages

Cumulative changes in insurance premiums and workers’ earnings, 1999–2012

Projected average family premium as a percentage of median family income, 2013–2021

*Source: Kaiser Family Foundation, Commonwealth Fund
Health Spending and the Federal Budget

• Gov’t health spending per capita grew 2.29 times as fast as GDP per capita 1970-2002.
  – Health spending is growing faster than our ability to pay for it.
  – The US is becoming “a health insurance company with an army.”

“Think of the United States government as a gigantic insurance company with a sideline business in national defense... This particular insurance company has made promises to its policy holders that have a current value of $20 trillion...in excess of the revenues that it expects to receive..... It is an accident waiting to happen.”

Peter Fisher, Undersecretary of the Treasury, November 2002
In 20 years, Medicare and Medicaid will take over the majority of the US government budget (excluding debt service).
Projected Health Spending by Payer 2013–2023

NHE in $ billions
Fed govt $ ↑ > 2X in 10 years

$0.81 trillion
$2.9 trillion
$4.0 trillion
$1.76 trillion
$1.24 trillion
$5.5 trillion

2013
2018
2023

28% 18% 28%
18% 26% 26%
26% 25% 26%
31% 18% 18%

Federal government
State and local government
Private employers (including "other private revenue")
Households

% GDP: 17.9% 18.7% 20.5%

*Source: Commonwealth Fund.
Who Pays for Increased Health Spending?

• All of us
  – Employer sponsored health insurance costs come out of workers’ pockets $ for $
    • Reduced total compensation: pay, share of premiums, cost-sharing, benefits, loss of health insurance entirely,…
  – Government health care programs paid for by taxpayers
    • Current and future generations
    • Reduces education funding,…
  – “Tax expenditures”
    • Tax revenues foregone by exclusion of ESI from taxation.
    • $238 billion in 2013, 1.5% of GDP (CBO).
Now for Some Good News!
Health Care Cost “Slowth”

• The rate of growth of health care costs has slowed substantially over the past few years
  – Hovering around 4% past few years; very close to rate of growth of GDP

• Will this continue, or will cost growth speed up again?
  – We don’t know;
  – BUT
    • I’ll take it
    • We should NOT take our foot off the gas
Health Care Cost Growth 2007-2013

National Health Expenditures Annual Growth Rate

- 2007: 6.00%
- 2008: 5.00%
- 2009: 4.00%
- 2010: 4.00%
- 2011: 4.00%
- 2012: 4.00%
- 2013: 3.00%
 Longer Term

• More good news
  – Growth rate has been slowing continuously since 2002
    • 9.68% in 2002
    • Slowing, but not steadily, since 1981; 16.01%

• But,...
  – Growth rate has cycled for a long time
  – Periods of slow growth followed by resumption of faster growth
    – 1973, 11%; 1976, 15%
    – 1978 12%; 1981, 16%
    – 1986, 7%; 1988, 12%
    – 1998, 6%; 2002, 10%
Health Care Cost Growth 1961-2013

National Health Expenditures Annual Growth Rate

Year

Percentage Change

National Health Expenditures Annual Growth Rate
Cost Growth Cycles

• Reasons for cycles not entirely clear
  – Business cycle
  – Attempts to control costs followed by attempts to undo them
    • Political economy
    • Private efforts: “gaming” the system
      – Patients, hospitals, doctors,…
    • 1970s: wage & price controls (Nixon); “voluntary effort” (Carter)
    • 1980s: prospective payment system (Reagan)
    • 1990s: managed care
    • Parallel phenomena in other countries
Is This Slowdown for Real?

• We can’t really tell
  – Not enough information
• Reading the tea leaves
  – Things that might be suggestive
    • The economy - recession
    • Other countries - experiencing same thing
    • Medical technology – big advances
    • Population health
    • Increased consumer cost sharing
    • The ACA/supply side reforms
    • Health care employment
    • Health care capital projects
Impacts on Economy

• Council of Economic Advisers: 1% decline in annual rate of growth of health spending →
  – GDP 4% higher by 2030 (that’s a lot of $$$)
  – Median family income $6,800 higher by 2030
  – Budget deficit lowered by up to 2% by 2030
  – 0.16 percentage point lower unemployment rate by 2030; 320,000 additional jobs

Why?

PxQ, “Whodunnit?”
What’s Driving Health Spending?
Decomposition

• Spending = Price × Quantity
  – Increases in spending have to be due to P ↑ or Q ↑
    • (or patient mix, or intensity of care)
• Is health care spending increasing mainly due to increasing prices or increasing quantities?
  – Overall
  – Private
  – Public – quantities, not prices (short-medium term)
• Why do we care?
  – Who benefits from increased spending?
    • Prices go up – sellers benefit
    • Quantities go up – consumers may benefit (or maybe not)
    • Another possibility – quality goes up, but supply limited, so prices go up, quantity does not, but (some) consumers benefit, as do sellers
  – Where to look – what’s behind increased spending
Overall Components of Health Spending Growth

Hartman M et al. Health Aff 2015;34:150-160
Private Spending? It’s The Prices (mostly)

Components of Health Spending Growth, Private Employer Sponsored Insurance, 2012-2013

<table>
<thead>
<tr>
<th>Component</th>
<th>% Change</th>
<th>Utilization</th>
<th>Unit Price</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Inpatient</td>
<td>-2.3</td>
<td>-0.8</td>
<td>4.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td>0.8</td>
<td>0.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Outpatient - Visits</td>
<td>-0.8</td>
<td>-0.5</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>Outpatient - Other</td>
<td>-0.5</td>
<td>-0.5</td>
<td>3.4</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Whodunnit?

• So what’s driving health spending?
  – Suspects
    • Aging population
    • Increased income
    • End of life care
    • Malpractice
    • Market power
    • Incentives
      – Patients
        » Cost sharing
      – Providers
        » Provider payment
  • Uncertainty about what works
  • Technology
Innocent

• **Aging**
  – Nope. Aging population did lead to increased spending, but doesn’t account for much of total.

• **Income**
  – Nope. Income has increased, but same story as aging.

• **End of life care**
  – Nope. Medicare deaths (6% per year)→27-30% of Medicare $. But, # hasn’t changed in decades. Total US deaths per year (< 1% of the population)→ 10-12% of $.

• **Malpractice**
  – Nope. At most ~2% of spending. A problem for physicians, but not a driver of health spending.
Under Suspicion

• Market power
  – Suspicious – could be.
    • We know that price increases are a major driver of private spending increases.
    • We know there’s been a tremendous amount of provider consolidation.
      – Most hospital markets in the US dominated by 1-3 systems
      – Doctor-hospital consolidation growing
      – Branding and market power – “must-haves”
    • We know that there are substantial barriers to new entry into markets.
      – Medical school, immigration, non-MD providers
      – Hospital costs of entry, regulations
    • We know that consolidation → higher prices (across markets).
    • Don’t know if consolidation → increased spending.

M. Gaynor, "Health Care Industry Consolidation“, Statement before the Committee on Ways and Means Health Subcommittee, September 9, 2011.
Market Power

- There is a lot of variation in prices.
  - Northern Virginia: Prices vary by up to a factor of 1.4 across hospitals.
  - Massachusetts
    - Hospitals: payments vary by up to a factor of 4 across hospitals.
    - Physicians: payments vary by up to a factor of 3 across practices.
  - San Francisco prices 43% higher than in Miami.
  - Not explained by patient severity, Medicare, Medicaid or indigent patient share, academic or teaching facility, or costs.
  - Explained by provider size, “must-have” status, i.e., bargaining leverage.

- Hospital mergers can lead to price increases of up to 53 percent.
- Quality of care lower where hospitals face less competition.
Guilty As Charged

• Incentives – Yep.
  – Consumers – Yep.
    • Tax exclusion of ESI → too generous insurance, higher spending, higher premiums. No major change in decades, but...
    • Low cost sharing → incentive to choose higher tech (more $) care.
  – Providers – Yep.
    • Fee-for-service payment provides incentives to do more?
      – Nope. Depends on levels of fees relative to costs (profitability) – think Medicaid.
    • But, high fees and fee growth can → incentive to do more.
      – Esp. associated with higher tech services/procedures.

• Uncertainty about what works – Yep.
  – Patients and providers uncertain about effectiveness of alternative treatments.

• Technology – the smoking gun – Yep, Yep, and Yep.
  – Technology has been advancing very rapidly in medicine.
    • Very few technological advances in medicine are cost-saving. They mostly are cost-increasing.
    • Advances improve medicine & make it more valuable. Hence, consumption increases, as we would expect if a good becomes more valuable.
    • Payment incentives for patients and providers.
    • The “technological imperative” for both doctors and patients.
      – If it’s new, fancy, high-tech and expensive, it must be good.
“The Technological Imperative”
Example – Proton Beam Therapy

• Treatment for prostate cancer. $120 million to build. No idea if this works. Medicare pays $1,400 per treatment; typical man gets 20 treatments = $28,000. This is very expensive, we lead in its adoption, and it has unproven benefits.

• In general, ½ of medical treatments are of “unproven effectiveness” (i.e., we don’t know if it works!), http://clinicalevidence.bmj.com/x/set/static/cms/efficacy-categorisations.html
Low Tech/"No Tech" Examples

• Antibiotics for viruses
• Annual physicals
• PSA tests
Combination of Factors

• Consumer Incentives
• Provider Incentives
• Technological Advances
What Do We Do About It?
What Can We Do About Health Spending?

• The rate of growth of health spending is unsustainable without causing serious harm
  – “Slowth” is helping a lot, but don’t assume it will last, and don’t let up on the pressure.
  – But, remember, it’s not all bad
    • Health care generates a lot of value

• There’s no “silver bullet”
  – No single policy to address the problem
  – Goal isn’t necessarily to reduce health spending, but to slow the rate of growth
  – Some different issues in private and public
    • Private – high prices, price growth
    • Public (Medicare) – quantity, shift to expensive treatments
    • Overall – technology, expensive treatments