Payment for care and cost of care

M6920
November 20, 2001

Paying for anything:
- pay for it myself
  - directly—cash purchases
  - indirectly—“free lunch”—airline miles
- someone else pays for it for me
  - explicitly on my behalf
  - for a category to which I belong
  - charity

The money comes 3 ways:
- employers
- governments
- individuals

All are ways of getting money from the resources of households
Historical snapshot

- primarily direct payment
  - in 1960, 49% was direct
  - by 1993, 17.8%
- as costs rose
  - cost shifting became common
  - prudent and aggressive purchasers limited these opportunities

Population and payments

Common types of health insurance plans

- Indemnity or Fee for service (FFS)
- Preferred provider organization (PPO)
- Point of service (POS)
- Health Maintenance Plan (HMO)
## Current experience

- **direct payment by uninsured**
  - insurance unavailable
  - insurance unwanted (voluntarily uninsured?)
  - insurance unaffordable

- **insured but category not covered**
  - pharmaceuticals
  - experimental treatments
  - alternate therapies

## Current experience, cont.

- **individual private insurance**
- **employment based insurance**
- **government financing**
  - Medicare
  - Medicaid
  - Military

## Current experience, cont.

- **direct support for public hospitals**
  - city/county government
  - state government (MH, TB)
  - federal government (Hanson's disease)

- **special populations**
  - military
  - veterans
  - prisoners
My decisions about paying

Will I purchase insurance?
- out of pocket as individual
- through an employer
  - may govern choice of employment
  - 53% of individuals have choice of plan
  - 64% of families have choice of plan
- through a government program
  - determining eligibility
  - determining personal "cost" in enrollment

Distribution of uninsured

<table>
<thead>
<tr>
<th>% of population</th>
<th>% uninsured</th>
<th>% of uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>Midwest</td>
<td>South</td>
</tr>
<tr>
<td>40.0%</td>
<td>35.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>35.0%</td>
<td>30.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>30.0%</td>
<td>25.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>25.0%</td>
<td>20.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>20.0%</td>
<td>15.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>15.0%</td>
<td>10.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

MEPS, 1999

Health status and coverage

<table>
<thead>
<tr>
<th>% of population</th>
<th>% uninsured</th>
<th>% insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Very good</td>
<td>Good</td>
</tr>
<tr>
<td>40.0%</td>
<td>35.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>35.0%</td>
<td>30.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>30.0%</td>
<td>25.0%</td>
<td>20.0%</td>
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<tr>
<td>25.0%</td>
<td>20.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>20.0%</td>
<td>15.0%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

MEPS, 1999
Average expense per person, 1996

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$11,492</td>
</tr>
<tr>
<td>Inpatient</td>
<td>$2,398</td>
</tr>
<tr>
<td>Ambulatory</td>
<td>$5,191</td>
</tr>
<tr>
<td>Prescriptions</td>
<td>$200</td>
</tr>
<tr>
<td>Dental</td>
<td>$286</td>
</tr>
<tr>
<td>Home Health</td>
<td>$0</td>
</tr>
<tr>
<td>Other</td>
<td>$384</td>
</tr>
</tbody>
</table>

% of population with expense for health care

<table>
<thead>
<tr>
<th>Type</th>
<th>% with expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any type</td>
<td>85.9</td>
</tr>
<tr>
<td>Inpatient</td>
<td>73.2</td>
</tr>
<tr>
<td>Ambulatory</td>
<td>65.2</td>
</tr>
<tr>
<td>Prescriptions</td>
<td>41.8</td>
</tr>
<tr>
<td>Dental</td>
<td>2.4</td>
</tr>
<tr>
<td>Home health</td>
<td>19.9</td>
</tr>
<tr>
<td>Other</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Federal poverty level for 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Lower 48</th>
<th>Alaska</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8,590</td>
<td>10,730</td>
<td>9,890</td>
</tr>
<tr>
<td>2</td>
<td>11,610</td>
<td>14,510</td>
<td>13,360</td>
</tr>
<tr>
<td>3</td>
<td>14,630</td>
<td>18,290</td>
<td>16,830</td>
</tr>
<tr>
<td>4</td>
<td>17,650</td>
<td>22,070</td>
<td>20,300</td>
</tr>
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</table>
### Sliding Fees for Primary Care

<table>
<thead>
<tr>
<th></th>
<th>100% FPL</th>
<th>150% FPL</th>
<th>200% FPL</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHC</td>
<td>$19</td>
<td>$48</td>
<td>$98</td>
<td>28</td>
</tr>
<tr>
<td>Voluntary</td>
<td>$41</td>
<td>$62</td>
<td>$84</td>
<td>81</td>
</tr>
<tr>
<td>FQHC</td>
<td>$29</td>
<td>$54</td>
<td>$83</td>
<td>30</td>
</tr>
<tr>
<td>Other</td>
<td>$20</td>
<td>$36</td>
<td>$56</td>
<td>16</td>
</tr>
</tbody>
</table>

United Hospital Fund/NYU Survey, 1999

### Payment for Uninsured

- Payment before visit: 38%
- Financial counselling: 7%
- Bill for service: 38%
- Services without regard to pay: 9%
- Other: 8%

United Hospital Fund/NYU Survey, 1999

### Medical cost and bankruptcy

- Medical reason/substantial medical debt: 50%
- Substantial medical debt: 30%
- Medical reason: 10%
- No medical insurance: 5%

Consumer Bankruptcy Project, 2000
Recent analysis of availability

- amount of coverage in a community related to the labor market
- this confounds the overall, long term finding that smaller firms are less likely to offer

Practical implication

- if companies can hire from a pool that does not expect coverage, they won't offer
- communities with large Hispanic immigrant labor pools tend not to offer coverage

My decisions, cont.

If uninsured
- is this problem worth dipping into my pocket?
- how much care will I buy for any one episode?

If insured
- where can I go/how much can I get
- will I supplement
People do have choice of insurance coverage*

*HSC Community Tracking Study
Household Survey, 1998-1999

But availability varies*

*HSC Community Tracking Study
Household Survey, 1998-1999

and costs are going up

Health Affairs 17: (99-110)
Reasons for changing health plans

- Employer changed offerings: 36%
- Job change: 32%
- Less expensive plan: 16%
- Better services: 8%
- Other: 8%

Community Tracking Study Household Survey, 1996-7

HMO status makes a difference:

- Provider not covered: 0%
- Changed plan: 5%
- Other Insurance Reason: 10%
- Personal Preference: 15%
- Provider no longer available: 20%
- Moved: 25%
- Other: 30%

But we’re the good guys!
Coalition for Affordable Quality Healthcare

- 24 largest plans
-Assert that they:
  - Work with CDC on antibiotic resistance
  - Simplify paperwork for credentialing
  - Improve access and service
    - Direct access to OB/GYN and pediatrics
    - Assured ER coverage
    - External review of claims
Regressive vs. progressive payments

- If cost is a flat fee, it will disproportionately hit the poor
  - This is acceptable for consumer goods with no public benefit—if people really want it, they'll find the $$ or earn more
  - It ignores the "public good" aspect of health

Income transfer

- If cost is sliding fee of some kind, income transfer is involved
- If the ratio remains the same across income levels, it is proportional
- If the ratio of fee to income increases at higher level, it is progressive

Controlling Costs:

- Reducing overall investment or limiting % of GDP
- Limiting growth
- Limiting expenditures in some one sector
All cost control hurts someone...

- Limiting employer costs → increase co-payments
- Limiting hospitalization → layoff nurses & other employees
- Limiting profits → reduced growth in retirement funds

Why we are concerned

Another perspective
And yet another.

Expenditures per Hospital Day, 1996

And what we get.

\% 65+
- Infant mortality per 1,000
- Life expectancy, female
- Life expectancy, male

Health Spending, Access & Outcomes
Health Affairs 18:3, 178-92

US Expenditures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Expenditure</td>
<td>247.3</td>
<td>699.4</td>
<td>1,088.2</td>
<td>1,403.6</td>
</tr>
<tr>
<td>Private $$</td>
<td>142.5</td>
<td>416.2</td>
<td>586.0</td>
<td>774.9</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>69.8</td>
<td>239.8</td>
<td>346.7</td>
<td>474.2</td>
</tr>
<tr>
<td>Out of pocket</td>
<td>60.3</td>
<td>145.0</td>
<td>189.1</td>
<td>236.5</td>
</tr>
<tr>
<td>Public funds</td>
<td>104.8</td>
<td>283.2</td>
<td>502.2</td>
<td>628.7</td>
</tr>
<tr>
<td>Medicare</td>
<td>37.5</td>
<td>111.5</td>
<td>211.3</td>
<td>257.4</td>
</tr>
<tr>
<td>Medicaid</td>
<td>14.5</td>
<td>42.7</td>
<td>95.0</td>
<td>122.7</td>
</tr>
<tr>
<td>Other Fed'l</td>
<td>19.9</td>
<td>41.0</td>
<td>56.8</td>
<td>87.6</td>
</tr>
<tr>
<td>State and local</td>
<td>32.8</td>
<td>88.0</td>
<td>139.2</td>
<td>181.0</td>
</tr>
</tbody>
</table>
**Health Expenditure as % of GDP**

![Graph showing health expenditure as % of GDP from 1960 to 2008.](image)

**US trends**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Total (Billions)</td>
<td>26.9</td>
<td>73.2</td>
<td>247.3</td>
<td>699.4</td>
<td>1,149.1</td>
</tr>
<tr>
<td>Services and Supplies</td>
<td>25.2</td>
<td>87.8</td>
<td>229.6</td>
<td>674.8</td>
<td>1,113.7</td>
</tr>
<tr>
<td>Hospital care</td>
<td>9.3</td>
<td>28.0</td>
<td>102.7</td>
<td>256.4</td>
<td>382.8</td>
</tr>
<tr>
<td>Home Health Care (free-standing)</td>
<td>0.1</td>
<td>0.2</td>
<td>2.4</td>
<td>13.1</td>
<td>29.3</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>0.7</td>
<td>2.7</td>
<td>12.0</td>
<td>37.7</td>
<td>90.6</td>
</tr>
<tr>
<td>Nursing home care (free-standing)</td>
<td>0.8</td>
<td>4.2</td>
<td>17.6</td>
<td>90.9</td>
<td>87.8</td>
</tr>
<tr>
<td>Administration</td>
<td>1.2</td>
<td>2.7</td>
<td>11.9</td>
<td>40.5</td>
<td>57.7</td>
</tr>
<tr>
<td>Gov't PH Activities</td>
<td>0.4</td>
<td>1.3</td>
<td>6.7</td>
<td>19.6</td>
<td>36.6</td>
</tr>
</tbody>
</table>

**Cost of insurance management**

- Employer group plans: 10-15%
- Individual private plans: 30-50%
- Medicare: <2%
Payments by Medicare Beneficiaries

Out-of-pocket spending by elderly

Prescription drugs

- The industry expects 15% revenue growth 2000-2005
- Growth due to
  - More prescriptions
  - Mix of prescriptions
  - Price
- HMO prescriptions/member/year
  - Non-Medicare: 5.8/Medicare: 17.4
National spending for prescription drugs

<table>
<thead>
<tr>
<th>Year</th>
<th>Spending (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>$0</td>
</tr>
<tr>
<td>1970</td>
<td>$50</td>
</tr>
<tr>
<td>1980</td>
<td>$100</td>
</tr>
<tr>
<td>1990</td>
<td>$150</td>
</tr>
<tr>
<td>2000*</td>
<td>$200</td>
</tr>
<tr>
<td>2008*</td>
<td>$250</td>
</tr>
</tbody>
</table>

* projected

Blues cost increases

<table>
<thead>
<tr>
<th>Year</th>
<th>Medical Costs (in billions)</th>
<th>Drug Costs (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1999(est)</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Drug spending growth

<table>
<thead>
<tr>
<th>Top 10 Drugs/Growth</th>
<th>Growth (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prilosec</td>
<td>34</td>
</tr>
<tr>
<td>Prozac</td>
<td>20</td>
</tr>
<tr>
<td>Zocor</td>
<td>55</td>
</tr>
<tr>
<td>Claritin</td>
<td>40</td>
</tr>
<tr>
<td>Pavachol</td>
<td>15</td>
</tr>
<tr>
<td>Zyrtec</td>
<td>68</td>
</tr>
<tr>
<td>Allegra</td>
<td>18</td>
</tr>
<tr>
<td>Zyban</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>Evista</td>
<td>&gt;1000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top 10 Launches</th>
<th>Launches (in millions/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viagra</td>
<td>57.8*</td>
</tr>
<tr>
<td>Arthrotec</td>
<td>15</td>
</tr>
<tr>
<td>Singular</td>
<td>11.5</td>
</tr>
<tr>
<td>Plavix</td>
<td>9.8</td>
</tr>
<tr>
<td>Meridia</td>
<td>9.0</td>
</tr>
<tr>
<td>Evista</td>
<td>8.3</td>
</tr>
<tr>
<td>Allegra-D</td>
<td>7.5</td>
</tr>
<tr>
<td>Zyrovan</td>
<td>7.5</td>
</tr>
<tr>
<td>Zomig</td>
<td>6.2</td>
</tr>
<tr>
<td>Propecia</td>
<td>6.1</td>
</tr>
<tr>
<td>Propecia</td>
<td>6.1</td>
</tr>
</tbody>
</table>
Direct to Consumer ads

- Antihistamines (22%/$287M)
- Cholesterol Reducers (9%/$113M)
- Hair loss (7%/$92M)
- Inhaled steroids (6%/$84M)
- Smoking Cessation (6%/$81M)
- All Others (50%/$644M)

And more subtle ads:
NY Times, April 18, 2000

- “An Open Letter to Healthcare Providers Nationwide” from 33 MDs, 2 nurses and 1 pharmacist
- Must not be content with elevated systolic or diastolic blood pressure
- No mention of diet or exercise
- This message supported by Bristol-Meyers-Squibb Co. as part of its commitment to extending and enhancing the lives of patients

Drug price increases

<table>
<thead>
<tr>
<th>Decrease</th>
<th>Increase</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 100 Drugs</td>
<td>Recently Marketed Drugs</td>
<td></td>
</tr>
</tbody>
</table>
Source of increase in drug costs

- Type of drug
- Number of prescriptions
- Price increases

Number of Rx/year, Medicare, 1996

- With drug coverage
- Without drug coverage

Consumer Expenditures
Focus on Unit Cost

- Cost to producer
  - materials \times labor \times profit
- Control the cost per unit
  - make it more cheaply
  - reduce margin

- Cost to purchaser
  - price \times volume
- Control your costs
  - buy less or another product

The Roemer dilemma

- ‘A built bed is a filled bed’

- Lower occupancy does not automatically save money

Why costs are high: 1996 hospital employees

- Employees per 100,000 residents
- Specialists per 100,000 residents

- Atlanta
- Chicago
- Miami
- Minneapolis
- San Francisco
- New York City
- United States
Why costs are high: Medicare patients, 1995-6

![Bar chart showing % visiting 10+ MDs last 6 mos. vs. Hospitalization for ambulatory care per 1,000 enrollees for different cities: Atlanta, Chicago, Miami, Minneapolis, San Francisco, New York City, United States.]

How we have dealt with cost in health

- Shift from community rating to experience rating
- Controlling the number of units
  - competition or planning
- Changing to different units
  - many raise rather than lower costs

Controlling the price per unit

- competition
  - drugs/the role of patents
  - consumer role different than in TV market
- certificate of need
- wage or price controls & fee regulation
Change in payments

- Prospective payment shifts perspective as components go from being...
- revenue generating to...
- cost generating

A coming change in coverage...

- From defined benefits to defined contributions

Impact of change to premium support approach

M.Moon, Growth in Medicare Spending, Commonwealth Fund, May, 1999
So how are we doing in the U.S.?

- Cost?
  - % of GDP, per capita spending
- Access?
  - % insured vs. uninsured
  - Availability of primary care services
- Quality?
  - Satisfaction with care?
  - Infant mortality?
  - Life span?