PRESCRIPTION DRUG SPENDING
IS ALREADY ENOUGH
TO BUY ALL THE DRUGS ALL AMERICANS NEED

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American Public Health Association

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Disclaimer:  As always, we write and speak only for ourselves, not on behalf of Boston University or any of its components.

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I. INTRODUCTION

Good afternoon!

Our talk is divided into three main sections:

• listing of prescription drug problems in the United States
• description of their causes
• debunking of silly solutions and description of a new non-silly one

The main aim of our work on prescription drugs over the past seven years has been to shape a solution that works for each stakeholder—that advances the central long-term needs and interests of each party.

We highlight approaches that make needed medications available to all Americans without substantially increasing spending—and that liberate some $27 billion for research into new breakthrough medications.
II. PRESCRIPTION DRUG PROBLEMS

1. number lacking insurance—very close to 70 million people, or one American in four (EXHIBIT—RESIDENTS LACKING INSURANCE FOR PRESCRIPTION DRUGS, 2000)

2. greater U.S. income inequality reinforces the effects of lack of insurance coverage (EXHIBIT—INCOME INEQUALITY, OECD NATIONS)

3. high costs—roughly $140 billion in 2000

4. high prices—much higher than those in other industrial democracies (EXHIBIT—PRICES PAID TO DRUG MAKERS IN EIGHT NATIONS)

5. high spending per person—about $500 per person, highest in the world

6. rising costs—up 15-18 percent this year, and up even faster for some HMOs (20 percent or more) This means that drug spending is doubling every four or five years. (EXHIBIT—RETAIL PRESCRIPTION DRUG AND HEALTH SPENDING, U.S., PERCENT RISE FROM 1994)

7. relatively low drug use per person—our prices are higher than our spending per person, so use per person is probably lower

The core problem that summarizes and unites these seven is that medications are becoming increasingly unaffordable to Americans.

We could respond to these problems in three different ways:

- suffer and die
- pay more
- get all needed medications without paying more
III. CAUSES

To help guide selection among these choices, it is useful to consider the causes of the problems.

1. Lack of general and responsible commitment to affordable health care for all in the United States.

2. Fear that methods used by other nations can’t be responsibly employed in the United States.

We buy roughly one-third (or maybe one-quarter) of the world’s medications. (EXHIBIT—THE WORLD’S PHARMACEUTICAL MARKET, 1996)

- Therefore, we should be able to employ our purchasing power to get the lowest prices, not pay the highest. But with our market power comes greater responsibility. What Australia can do without damage to research or drug makers is not possible for the U.S.A. The greater U.S. responsibility has largely been forced on us by the actions of the drug makers and the actions of foreign nations in setting or negotiating lower prices.

- But drug makers first insisted our prices were not higher. They now often acknowledge that our prices are higher, but that this is necessary to finance research.

3. Wasteful spending patterns within the industry

- (EXHIBIT—HOW SIX DRUG MAKERS SPENT THEIR MONEY, 1999)
- (EXHIBIT—MAIN TASK OF DRUG COMPANY EMPLOYEES, JUNE 1998)
- (EXHIBIT—DRUG MAKERS’ DOMESTIC U.S. EMPLOYMENT)
4. Paralysis of public action to ensure affordable medications for all Americans while protecting pharmaceutical research and the drug makers themselves.

a. **Paralysis through money and influence.** Lobbying, campaign contributions, and public relations via advertising and front organizations.


But where is the risk that justifies such high rewards? If you earn the highest profits of any industry year after year, that is like going gambling with $1,000 each year and returning with $1,300 or $1,400.

Further, the profits on medications are much higher than the published numbers disclose. That is because the published data are firm-wide, and include non-prescription drug goods and services.

Merck is one example. Consider these data from Merck’s 1999 annual report,¹ reprinted in its 10-K statement.

Merck reports a consolidated 1999 income before taxes of $8,619.5 million on revenue of $32,714.0 million, for a before-tax return on revenue of 26.3 percent. This includes revenue and profit on Merck’s large Merck-Medco segment. But how much did Merck make on its prescription drug business alone?²

The answer is that Merck garnered a 37.4 percent before-tax return on revenue on its prescription drug business. A brief glance through Merck’s annual report
did not reveal this number, though it may be there, somewhere. The 37.4 percent return on revenue is more than two-fifths greater (42.2 percent greater) a return on revenue than the consolidated 26.3 percent of revenue that Merck reports. The calculations are shown in the exhibit that follows.

Exhibit
Merck Pharmaceutical Segment’s Revenues and Profits, CY 1997 – 1999
$ millions

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Segment revenue</td>
<td>$12,122.20</td>
<td>$12,839.90</td>
<td>$14,418.70</td>
</tr>
<tr>
<td>2. Segment profit</td>
<td>$7,396.20</td>
<td>$7,367.30</td>
<td>$8,495.40</td>
</tr>
<tr>
<td>3. Less all unallocated costs</td>
<td>$3,162.90</td>
<td>$2,370.20</td>
<td>$3,109.10</td>
</tr>
<tr>
<td>4. Segment profit after unallocated costs</td>
<td>$4,233.30</td>
<td>$4,997.10</td>
<td>$5,386.30</td>
</tr>
<tr>
<td>5. Segment profit as % of segment revenue</td>
<td><strong>34.9%</strong></td>
<td><strong>38.9%</strong></td>
<td><strong>37.4%</strong></td>
</tr>
</tbody>
</table>


Note: Unallocated costs are "indirect production costs, research and development expenses and general and administrative expenses, all predominantly related to the Merck pharmaceutical business, as well as the cost of financing these activities."

We calculated these unallocated costs by starting with before-tax profits reported for all segments (which do not reflect those costs not allocated to any segment) from p. 55 of the Financial Report, and subtracting before-tax profits reported on the consolidated income statement (which reflect all costs). See *Merck & Co., Inc. 1999 Financial Report*, pp. 42 and 55.
Further, there is no free market. Lacking a free market, we will continue to suffer growing pharmaceutical anarchy if government does not intervene. Worshipping a free market is idolatry. My bible warns against worshipping golden calves.

And worshipping a free market that is not there—that is not free—amounts to worshipping an invisible golden calf.

Evidence for the absence of a free market

- concentration of sales in few firms in most therapeutic classes

- In a free market, firms don’t talk about setting or administering prices—everyone is a price taker, not a price maker.

- growing concentration owing to industry mergers

- alleged suppression of generic manufacture through bribery

- suppression of generic competition through legislation extending patents, and through marketing of slightly reformulated medications to start patent clock all over again

c. Paralysis of public action to cut prices or profits—by claims that if this is done, “The lights go out in the labs, and there is no R&D,” according to Tracy Baroni, senior director of policy for the Pharmaceutical Research and Manufacturers of America (PhRMA), the drug industry’s lobbying arm.³

Research will cease. And then you will all die. We call this PhRMA’s fog of fear.
Here are some drug maker claims about research and some contrasting elements of reality.

Drug makers claim they set prices to cover costs. No. They are set to maximize profits, as stockholders demand.

Drug makers claim that research is financed by profits. No. Profit is what is left over after paying for manufacturing, marketing and administration, taxes—and research.

Drug makers claim that U.S. research spending is the highest and the most productive. This is doubtful. U.S. research is not very special, when compared to our health spending (CHART).

And much of the riskiest research is financed publicly through the NIH.

Much of what PhRMA labels research is really market research.

Worst, looking forward, the drug makers’ own policies are the real enemies of research.

- It is an angry future Congress that may act imprudently and in ways that really hurt research—and stonewalling is what will magnify the anger. The drug makers have no defensible fall-back position. That is imprudent.

- Short-term bottom line thinking not safe here, because prescription drugs are being increasingly politicized by 15-20 percent compounded spending increases—so drug makers need to help fashion durably affordable solution. Their failure to do so is imprudent.
• PhRMA’s preferred solution of private insurance is not feasible—even the insurance industry does not want to write drugs-only policies owing to very justifiable fear of adverse selection

• Any public payments for drugs for seniors will yield windfall profits for drug makers if they are not accompanied by serious price constraints. And the public will not long tolerate this.

• The drug makers’ dedication to breakthrough research is open to question. They are wasting some $27 billion annually on copy-cat research and on marketing and administration—dollars that could and should be devoted to breakthrough research.
IV. A PRESCRIPTION DRUG PEACE TREATY

A. Avoid Silly Solutions

Drug re-importation legislation—smokescreen, entirely unworkable and therefore ineffective.

Private management through PBMs—has done too little to attack the main source of high U.S. drug prices—the prices charged by manufacturers at the factory door.

Other efforts to contain spending by limiting use. Cutting use leads drug makers to raise price on their remaining volume. By contrast, cutting price leads drug makers to expand volume. Further, too little is known about which patients need which drugs, exposing many patients to the risk of denial of needed medications—especially when use is discouraged through higher out-of-pocket payments that penalize the poor.

B. Embrace serious solutions—selectively: cover people or win lower prices—or both

1. Spend more money

Subsidize drugs under Medicare (Gore)

Subsidize drugs through state charity programs, then through HMOs (Bush)

Both are very costly.
Both yield substantial windfall profits to drug makers, because drug makers’ revenue would rise far faster than their costs.

Gore approach makes payment a public responsibility, which will lead to price controls in a few years.

2. Cut prices alone

Maine bill for one state
Allen bill in Congress for one group, Medicare recipients
recent Vermont Medicaid waiver that allows many non-Medicaid patients to obtain drugs at the Medicaid price, about an 18 percent average price cut.

These can work well as strategies for one state, and even for one group of patients—such as those on Medicare, but price cuts are probably tougher to pull off nationally because they take so much revenue away from the drug makers.

3. Get all needed medications without spending more money.

Peace treaty proposal. This can be pursued by the federal government or by individual states. In light the high levels of prescription drug spending in many states—$8 billion in California, $7.5 billion in New York, and $6.4 billion in Florida, for example—more than many nations that enjoy much lower prices than we do—individual states or clusters of states have the buying power to win substantial price cuts.

1. cut prices to Federal Supply Schedule level → $35 billion initial reduction in drug makers’ revenue, a 42 percent overall average price cut, including the existing discounts and rebates of around 8 or 9 percent overall
but drug makers immediately recoup most of the lost revenue through higher private market volume

and they could be guaranteed replacement of the remainder of lost revenue through publicly subsidized purchase of medications for patients who can’t afford even the newly discounted prices

now, their revenue is fully replaced, but their profits are a bit lower because they have to manufacture more pills to fill all those extra prescriptions—so we will cover the higher cost of manufacturing, which we estimate at 5 cents on today’s retail dollar, or $1 billion to make $20 billion worth of medications

now, their revenues and profits are back where they were—and there are no financial impediments to maintaining research—but all Americans are now getting all prescriptions filled, at a tiny additional cost

finally, the drug makers need more than guaranteed profits—they need to be able to make money by doing what is good for us—by developing more breakthrough drugs. There are two main approaches. The total increase in dollars to finance research to develop new breakthrough drugs, from two basic reforms, would be $27.3 billion annually.

Today, drug makers waste too much of their finite research dollars developing copy-cat drugs. According to Goozner, DiMasi agrees that some 40 percent of industry-financed research aims to develop me-too drugs. That translates into $10.6 billion this year alone. Forty percent of $26.4 billion equals $10.6 billion in estimated expenditures to develop copy-cat drugs. It might be
asserted that copy-cat drugs can offer some clinical benefits to some patients. And it might be asserted that copy-cat drugs help promote price competition, and thereby work to lower prices. But it would be simpler and more direct to legislate lower prices and thereby save the $10.6 billion. In the absence of a free market, the multiplication of copycat drugs does not do enough to achieve genuine price competition. The drug makers need to be rewarded with substantial profits for breakthrough drugs, and not rewarded for developing copy-cat drugs.

- Today, the drug makers waste far too much money on marketing and administration, as shown earlier. Wouldn’t it be better if they devoted 10 percent of their revenue to marketing and administration, and 30 percent to research, instead of the other way around. Let’s shut down drug marketing, and instead disseminate all data about drug efficacy, safety, costs, and indications through the FDA. This will encourage the drug makers to focus their resources on breakthrough research.

- This change would liberate an additional $16.7 billion for new research to develop breakthrough prescription drugs. Here is how we estimated this figure. First, the top 12 drug makers alone garnered 167.4 billion in total revenue 1999. Second, assume that prescription drugs generated half of this, or $83.7 billion. Third, if the experience of the six drug makers cited above holds across the industry, then 11 percent (or $9.2 billion) of this $83.7 billion went to research and 31 percent (or $25.9 billion) went to marketing and administration. If we were to induce the drug makers to switch these two shares, $16.7 billion ($25.9 billion minus $9.2 billion) would be made available to finance breakthrough research by these twelve companies alone.

- The total increase in dollars to finance research to develop new breakthrough drugs, from two basic reforms, would be $27.3 billion annually.
**Exhibit**

*Residents Lacking Insurance for Prescription Drugs, 2000 (thousands)*

<table>
<thead>
<tr>
<th></th>
<th>Age 65+ lacking Rx coverage</th>
<th>Lack Any Health Insurance</th>
<th>Privately Insured/No Drug Coverage</th>
<th>TOTAL Lacking Drug Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td>12,226</td>
<td>44,850</td>
<td>11,990</td>
<td>69,066</td>
</tr>
<tr>
<td>% of U.S. total lacking drug insurance</td>
<td>17.7%</td>
<td>64.9%</td>
<td>17.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
INCOME INEQUALITY, OECD NATIONS WHOSE PER CAPITA GDP EXCEEDED $15,000, 1982 -1994

<table>
<thead>
<tr>
<th>Country</th>
<th>GINI Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>23.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>24.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>25.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>25.0</td>
</tr>
<tr>
<td>Norway</td>
<td>25.2</td>
</tr>
<tr>
<td>Finland</td>
<td>25.6</td>
</tr>
<tr>
<td>Germany</td>
<td>28.1</td>
</tr>
<tr>
<td>Italy</td>
<td>31.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>31.5</td>
</tr>
<tr>
<td>Canada</td>
<td>31.5</td>
</tr>
<tr>
<td>Spain</td>
<td>32.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>32.6</td>
</tr>
<tr>
<td>France</td>
<td>32.7</td>
</tr>
<tr>
<td>Australia</td>
<td>33.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>35.9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>36.1</td>
</tr>
<tr>
<td>United States</td>
<td>40.1</td>
</tr>
</tbody>
</table>

GINI COEFFICIENT (0 = COMPLETE EQUALITY; 100.0 = COMPLETE INEQUALITY)
### Exhibit

**Prices Paid to Drug Makers in Eight Nations:**

Percentage of U.S. Prices
(mean of 1997 and 1998 experience)

<table>
<thead>
<tr>
<th>Nation</th>
<th>Other nations’ prices as % of U.S. prices</th>
<th>U.S. prices % above other nation’s prices</th>
<th>Saving from U.S. prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>52.1%</td>
<td>92.0%</td>
<td>47.9%</td>
</tr>
<tr>
<td>France</td>
<td>57.4%</td>
<td>74.4%</td>
<td>42.6%</td>
</tr>
<tr>
<td>Canada</td>
<td>63.3%</td>
<td>58.1%</td>
<td>36.7%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>65.7%</td>
<td>52.3%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Sweden</td>
<td>67.9%</td>
<td>47.4%</td>
<td>32.1%</td>
</tr>
<tr>
<td>Germany</td>
<td>69.5%</td>
<td>43.9%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>76.5%</td>
<td>30.8%</td>
<td>23.5%</td>
</tr>
<tr>
<td>United States</td>
<td>100.0%</td>
<td>0.0%</td>
<td>8.7% *</td>
</tr>
</tbody>
</table>

* The 8.7 percent overall savings for U.S. residents from the reported average U.S. prices indicates the extent of secret discounts and rebates, not disclosed to the Canadian Board, that are granted by manufacturers to buyers in the United States, we calculate.6
RETAIL PRESCRIPTION DRUG AND HEALTH SPENDING, U.S., PERCENT RISE FROM 1994
THE WORLD'S PHARMACEUTICAL MARKET, 1996

- U.S.: 33.2%
- Europe: 29.4%
- Japan: 17.9%
- Southeast Asia + China: 6.5%
- Latin American: 7.0%
- Australasia: 1.2%
- Africa: 1.3%
- Middle East: 2.1%
- Canada: 1.5%
- Middle East: 2.1%
- Southeast Asia + China: 6.5%
HOW SIX DRUG MAKERS SPENT THEIR MONEY, 1999

- Production: 32%
- Marketing + administration: 31%
- R + D: 11%
- Other: 4%
- Taxes: 6%
- Profit: 16%
MAIN TASK OF DRUG COMPANY EMPLOYEES, JUNE 1998

- Production: 26%
- Medical R&D: 24%
- Marketing: 35%
- Administration: 13%
- Distribution, other: 2%
**Domestic U.S. Employment, Ethical Pharmaceuticals, Research-based Pharmaceutical Companies**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>59,541</td>
<td>54,429</td>
<td>56,481</td>
<td>26.4%</td>
<td>-3,060</td>
<td>-5.1%</td>
</tr>
<tr>
<td>Medical R&amp;D</td>
<td>49,409</td>
<td>51,002</td>
<td>52,600</td>
<td>24.6%</td>
<td>3,191</td>
<td>6.5%</td>
</tr>
<tr>
<td>Marketing</td>
<td>55,348</td>
<td>71,374</td>
<td>72,648</td>
<td>34.0%</td>
<td>17,300</td>
<td>31.3%</td>
</tr>
<tr>
<td>Administration</td>
<td>28,810</td>
<td>26,547</td>
<td>26,641</td>
<td>12.5%</td>
<td>-2,169</td>
<td>-7.5%</td>
</tr>
<tr>
<td>Distribution, other</td>
<td>5,611</td>
<td>4,934</td>
<td>5,097</td>
<td>2.4%</td>
<td>-514</td>
<td>-9.2%</td>
</tr>
<tr>
<td>Total</td>
<td>215,081</td>
<td>208,286</td>
<td>213,816</td>
<td>100.0%</td>
<td>-1,265</td>
<td>-0.6%</td>
</tr>
</tbody>
</table>

Source: PhRMA, Pharmaceutical Industry Profile 2000, Appendix: Detailed Results from the PhRMA Annual Survey, Table 20.
PHARMACEUTICAL AND ALL-INDUSTRY RETURNS ON EQUITY, 1970 - 1999

YEAR

MEDIAN RETURN ON EQUITY

0.0%
5.0%
10.0%
15.0%
20.0%
25.0%
30.0%
35.0%
40.0%
45.0%

DRUG INDUSTRY MEDIAN RETURN ON EQUITY AS PCT. OF ALL-INDUSTRY MEDIAN, 1970 - 1999
**Exhibit**

Prescription Drug Industry Returns on Equity and Revenue Compared with 41-Industry Median, 1999

<table>
<thead>
<tr>
<th></th>
<th>prescription drugs</th>
<th>41-industry median</th>
<th>Rx/41-industry ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>return on equity</td>
<td>35.6%</td>
<td>16.1 %</td>
<td>2.21</td>
</tr>
<tr>
<td>return on revenue</td>
<td>18.6%</td>
<td>5.2 %</td>
<td>3.58</td>
</tr>
</tbody>
</table>
**Exhibit**

**PAYMENTS TO PRESCRIPTION DRUG MANUFACTURERS, BEFORE AND AFTER EXISTING AND FSS DISCOUNTS AND REBATES, U.S.A., 2000**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payments to manufacturers before existing discounts + rebates</td>
<td>$105.5 BILLION</td>
</tr>
<tr>
<td>- savings from existing manufacturers’ discounts + rebates</td>
<td>- $8.9 BILLION</td>
</tr>
<tr>
<td>= Actual payments to manufacturers after existing discounts + rebates</td>
<td>= $96.5 BILLION</td>
</tr>
<tr>
<td>- extra savings from Federal Supply Schedule (FSS) prices</td>
<td>- $35.3 BILLION</td>
</tr>
<tr>
<td>= Payments to manufacturers after winning FSS prices</td>
<td>= $61.2 BILLION</td>
</tr>
</tbody>
</table>

Note: Some subtractions appear to be off by 0.1 billion; this apparent error is caused by rounding.
PRESCRIPTION DRUG PAYMENTS AND SAVINGS,
UNITED STATES, 2000
$ BILLIONS

<table>
<thead>
<tr>
<th></th>
<th>FULL PRICE</th>
<th>CURRENT</th>
<th>FEDERAL SUPPLY SCHEDULE (FSS)</th>
<th>POST-FSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAVE</td>
<td>$8.9</td>
<td></td>
<td>$35.3</td>
<td></td>
</tr>
<tr>
<td>PAY</td>
<td>$105.5</td>
<td>$96.5</td>
<td>$61.2</td>
<td>$61.2</td>
</tr>
</tbody>
</table>
NOTES

1 Merck & Co., Inc. 1999 Annual Report.


6 The 8.7 percent figure is our best current estimate of the size of public and undisclosed discounts and rebates in the U.S. as a whole. It was calculated using data for the United States as a whole (see previous endnote and appendix on methods). It is inserted as an estimate of the saving from undiscounted U.S. prices. This estimate reflects the share of brand name prescription drugs bought by uninsured individuals, private third parties, Medicaid programs, and institutional purchasers in the United States, as well as the rebates paid by drug makers to each state’s Medicaid program.