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# Pharmaceuticals

## A Medicare Drug Benefit: May not be so Bad

Reason for Report: Industry Update

# Industry

### Investment Highlights:

- Investors still have vivid memories of declining prices and sub market multiples for drug stocks during the period of time in which President Clinton attempted to reform the entire U.S. healthcare system in the early 1990's. Therefore, the recent groundswell of legislative proposals aimed at providing improved pricing or a prescription drug benefit for Medicare beneficiaries has been met with some level of concern. The purpose of this report is to explore the potential impact that possible Medicare reform proposals might have. Our primary conclusions are:
  - (1) We may not have resolution of this issue soon. President Clinton is set to unveil his proposal in the next few weeks. With elections coming up next year, Democrats may not want to resolve this issue before the onset of election campaigns. Therefore we may not see any laws passed until the elections are over.
  - (2) We are not talking about reforming the entire healthcare system, as was proposed in 1992. The proposed reforms (Clinton's and others) are aimed at a subset of the population, namely the 39 million Americans that are eligible for Medicare coverage. Roughly 2/3 of the 39 million already have drug coverage of some sort. Therefore, we expect any legislation passed to be less onerous to the drug industry than what was proposed in 1992.
  - (3) Volume increases could overwhelm negative pricing impact. It is important to remember that a reduction in prescription drug price both with or without associated prescription benefit coverage, is likely to be associated with price elasticity and increased utilization (especially for Medicare recipients that currently have no drug coverage).
  - (4) On a worst case basis we believe the top-line impact could be negative 6% if all Medicare recipients had access to drugs at a 40% discount to the manufacturer's price. On a best case scenario the sales impact could be slightly positive.
  - (5) Some companies are better positioned than others to weather this storm. In particular, Pharmacia & Upjohn (PNU;\$55 9/16;B-3-2-7) has a very low level of domestic business exposure (26%) when compared to other U.S. major capitalization pharmaceutical companies. LLY (LLY;\$67 1/16;A-2-2-7) has the highest domestic business exposure (60%).

## Medicare – The Facts

The Medicare eligible include the elderly (65 and over), the disabled, and those with end-stage renal disease and comprise roughly 39 million individuals in the U.S. Not surprisingly, because the Medicare population is generally older and sicker than the rest of the population, the drug utilization of this group is multiple higher than broader averages. According to the Health Care Financing Administration (HCFA), elderly persons represent 12.4% of the population but account for a third of drug expenditures. Also, given the political clout this group it is closely monitored by the politicians as well as the media.

While the Medicare program covers certain hospital and outpatient services, it does not include an outpatient drug benefit. With the technological revolution that is taking place in the development of safe and effective drug therapies, the absence of an outpatient prescription drug benefit is becoming a hindrance to providing comprehensive, effective treatment to certain components of this population.

According to the National Academy of Social Insurance, approximately two-thirds of the Medicare population have some form of prescription drug benefit. The remaining one-third or so have no outpatient drug coverage, presumably because they are unwilling or unable to purchase insurance or additional coverage. Bureau of the Census data indicate that in 1995, 10% of Medicare recipients were poor (annual income <\$7,309 for a single person or <\$9,212 for a couple) and 7% were near-poor (<\$9,316 and <\$14,618, respectively).

### Medicare Recipients' Drug Coverage

	% Of Beneficiaries with Supplemental Insurance	% of Supplementally insured patients receiving a drug benefit	% of all Medicare Beneficiaries receiving a drug benefit
Employer Sponsored	33%	86%	21
Medicaid	12	90	
Medicare Risk HMO	7	95	
Individually Purchased (Medigap)	29	29	
All Other	3	89	
Switched Coverage During the Year	8	80	
No Supplemental Insurance	8	0	
<b>Total</b>	<b>100</b>	<b>N/A</b>	<b>61</b>

Source: National Academy of Social Insurance, "A Medicare Prescription Drug Benefit," Michael E. Gluck.

## Price Impact

We have looked at a few different scenarios including what we believe to be a worst case impact on pricing for Medicare reforms. The three scenarios we outline are:

- **Price reductions for all Medicare beneficiaries to Federal Supply Schedule (FSS) levels (Scenario #1).** In this scenario we assume that Medicare recipients get a 40% discount from the manufacturers price (approximately the same price that the Veterans Association would pay). Therefore, Medicare beneficiaries without coverage would see a 40% reduction in price. The two-thirds that have coverage would see a 25% reduction, assuming that their coverage is providing them with a 15% discount currently. We would view this as the worst case scenario.
- **Price reductions for Medicare beneficiaries without coverage to FSS levels (Scenario #2).** In this scenario we assume that 40% price cuts would be provided for the 1/3 of the Medicare population that currently does not have coverage. We would assume that this would be according to some income or other criteria that would not result in switching for those patients that are currently receiving coverage.

- Price reductions for Medicare beneficiaries equivalent to that seen by large customers (Scenario #3). This scenario assumes that Medicare beneficiaries not currently receiving coverage would receive coverage from private providers and therefore see price reductions for the drugs they receive equivalent to what large pharmaceutical customers are seeing today. We estimate that large customer discounts run in the range of 15-20%.

**Potential Pharma Sales Impact of a Medicare Drug Benefit**

	Scenario #1	Scenario #2	Scenario #3
Company Pharmaceutical Sales	100%	100%	100%
U.S. Component of Total Sales	60%	60%	60%
% Exposed to Medicare	33%	33%	33%
Sales Reduction due to Price Reduction for 1/3 Not Receiving Prescription Drug Coverage	-2.64% (40% Reduction)	-2.64% (40% Reduction)	-0.99% (15% Reduction)
Sales Reduction due to Price Reduction for 2/3 with Prescription drug Coverage	-3.27% (25% reduction beyond assumed existing 15% discount)	0.00% (No benefit provided)	0.00% (No benefit provided)
<b>Estimated Effect on Total Sales</b>	<b>-5.90%</b>	<b>-2.64%</b>	<b>-0.99%</b>

Source: Merrill Lynch

As can be seen from the table above we estimate that the worst impact to an average company would be a negative 5.9% to the top-line. More reasonable scenarios cause a negative impact of 1-3%. It is important to note, however, that these only consider the negative impact of price and do not consider that volumes are more than likely to go up.

## Volumes Go Up with Benefits

It is our belief that when you either cut drug prices, provide a prescription benefit, or both, then volumes will go up with increased drug utilization. This could potentially make what is perceived to be a negative situation a positive or less negative one. In a paper entitled "Inadequate Prescription-Drug Coverage for Medicare Enrollees – a Call to Action" published March 4<sup>th</sup>, 1999 in the *New England Journal of Medicine* the authors (Stephen B. Soumerai and Dennis Ross-Degnan) sight some interesting figures with regard to annual drug expenditures per individual as a function of whether or not a Medicare beneficiary lacks or has supplemental health care insurance. The following table summarizes the figures annual prescription drug spend per enrollee presented in that work.

**Effect of Coverage Type on Drug Expenditures**

Medicare Beneficiary Health Status	Medicare Fee-for-service Coverage only	Medicare plus individually purchased plan	Medicare plus employer sponsored plan
Excellent	\$169	\$243	\$211
% Change		44%	75%
Fair	474	688	711
% Change		45%	64%
Poor Health	529	787	1011
% Change		49%	95%

 Source: "Inadequate Prescription-Drug Coverage for Medicare Enrollees – A Call to Action," *New England Journal of Medicine*, March 4, 1999 p722-727.

What is noticeable is that as the level of drug expenditures increases with increasing coverage. While the supplemental coverage may not in all instances provide for a prescription drug benefit, those that do are likely to be providing the drugs under that coverage at lower prices than that obtained by fee-for-service only beneficiaries who are paying list price. This would suggest that the underlying volume and utilization increases dramatically when coverage is

provided. Furthermore, the authors of the paper (cited above) point out that for low-income beneficiaries, annual drug expenditures increase as their coverage is supplemented.

Below is a table illustrating the components of U.S. pharmaceutical sales growth from 1987 through 1998. What is most interesting is the increasing volume component of sales growth during a period in which an increasing percentage of the population entered managed care. In that setting, drug prices are lower and the recipient is likely to have a benefit involving a small co-pay. In 1990, 26.1% of retail prescriptions were paid for by private managed care and 63.1% were paid for with cash, versus 64.9% and 24.7%, respectively in 1998.

**Components of U.S. Pharmaceutical Sales Growth**

Year	Price	Volume
1987	6.6%	8.9%
1988	8.5	3.0
1989	7.8	6.5
1990	8.4	6.1
1991	7.2	6.7
1992	5.9	3.0
1993	3.6	3.6
1994	1.8	4.8
1995	1.9	7.8
1996	1.6	10.1
1997	2.5	10.1
1998	3.2	12.7

Source: IMS

All of this points to the potential for volumes to increase if a prescription drug benefit is provided.

## Medicare Reform May Not Be a Negative

The following scenarios are similar to those in the previous section. The major difference is that we have introduced volume increases into the equation since increasing coverage and/or lower prices lead to an increase in pharmaceutical utilization.

- **Price reductions for all Medicare beneficiaries to FSS levels (Scenario #4).** In this scenario we assume that Medicare recipients get a 40% discount from the manufacturers price. Therefore Medicare beneficiaries without coverage would see a 40% reduction in price. The two-thirds that have coverage would see a 25% reduction, assuming that their coverage is providing them with a 15% discount currently. For the one-third without coverage, we have assumed a 45% increase in volume. We estimated that the two-thirds with coverage would see a 10% increase in volume as a result of the lower price.
- **Price reductions for Medicare beneficiaries without coverage to FSS levels (Scenario #5).** In this scenario we assume that 40% price cuts would be provided for the 1/3 of the Medicare population that currently does not have coverage. Again, we estimated a 45% volume increase for these beneficiaries. We would assume that this would be according to some income or other criteria that would not result in switching for those patients that are currently receiving coverage. We would expect no volume or price impact in the two-thirds with coverage.
- **Price reductions for Medicare beneficiaries equivalent to that seen by large customers (Scenario #6).** This scenario assumes that Medicare beneficiaries not currently receiving coverage would receive coverage from private providers and therefore see price reductions for the drugs they receive.

equivalent to what large pharmaceutical customers are seeing today. We estimate that large customer discounts run in the range of 15-20%. We assumed that volume would increase by 45% in the one-third of the population without coverage. We would expect no volume or price impact in the two-thirds with coverage.

#### Potential Pharma Sales Impact of a Medicare Drug Benefit

	Scenario #1	Scenario #5	Scenario #3
Company Pharmaceutical Sales	100%	100%	100%
U.S. Component of Total Sales	60%	60%	60%
% Exposed to Medicare	19.8%	19.8%	19.8%
Price and Volume Change for 1/3 Not Receiving Prescription Drug Coverage	5.68% (40% Price Discount+45% Volume Increase)	5.68% (40% Price Discount+45% Volume Increase)	8.05% (15% Price Discount+45% Volume Increase)
Price and Volume Change for 2/3 with Prescription drug Coverage	10.78% (25% discount beyond assumed existing 15% discount+10% volume increase)	13.07% (No discount or volume change)	13.07% (No discount or volume change)
<b>Estimated Effect on Total Sales</b>	<b>-3.33%</b>	<b>-1.05%</b>	<b>+1.32%</b>

Source: Merrill Lynch

Compared to the scenarios earlier in the report that did not consider the impact of volume changes, the above scenarios highlight the fact that increased utilization that should result from decreased prices can make the impact on sales less negative, or perhaps even positive.

### Different Degrees of Exposure

Because a drug benefit for the Medicare population involves only pharmaceutical sales in the U.S., we have provided the U.S. pharmaceutical sales for the companies in our universe in the table below. The higher the percentage of total company sales represented by U.S. pharmaceutical sales, the higher the exposure to a drug benefit for the Medicare population. We should point out that these percentages alone do not predict true exposure to Medicare reform. If a company has a high percentage of U.S. pharmaceutical sales but its main products are not heavily used by patients over 65 years of age, that company's actual exposure may be relatively low. The converse may also be true for some companies.

#### Company Exposure to a Medicare Drug Benefit

Company	1998 U.S. Pharma Sales as a % of Total Company Sales / % of Pharma Sales
American Home Products	37% / 61%
Bristol-Myers Squibb	38% / 62%
Eli Lilly	60% / 64%
Merck	31% / 56%
Pfizer	55% / 67%
Pharmacia & Upjohn	26% / 37%
Schering-Plough	52% / 63%
Warner-Lambert	37% / 67%

Source: Merrill Lynch

## Other Risks and Benefits

It must be realized that the analysis we have done is rather simplified, as we do not know the final form of Medicare reform that will be made into law. It is important to highlight other factors that may prove to be additional risks or benefits, including:

- **Potential phase-in of reforms.** Governmental programs are often phased in over time and are not implemented in one dramatic step. We could see a gradual increase in price discounts. Our scenarios have assumed a sudden one-time change in order to gauge the overall impact.
- **Prescription drug benefits may exceed budgets.** If the reforms include a prescription drug benefit and the financing for these benefits is not rock solid or well defined, there is a risk that a rise in drug utilization leads to drug coverage expenditures exceeding budgets. This could lead to further price reductions or additional regulation. This underscores the importance of the funding mechanisms for the various proposals being made.
- **Margin impact may be greater than top-line impact.** Given the high price paid by Medicare recipients that currently pay out of pocket, this segment may be very (if not the most) profitable segment. This may amplify negative price effects. Gross margins, however, for a given product may improve with increasing volumes.

## The Key Proposals

Some of the following proposals have been summarized from BNA's *Health Care Daily Report*.

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### Breaux/Thomas

The National Bipartisan Commission on the Future of Medicare, chaired by Sen. John Breaux (D-La.) and Rep. Bill Thomas (R-Calif.), failed in late March to achieve a supermajority of 11 votes needed to send reform recommendations to the president and Congress.

Under the premium support system proposed by the commission co-chairmen, Sen. John Breaux (D-La.) and Rep. Bill Thomas (R-Calif.), Medicare beneficiaries would select comprehensive health care coverage from either the government-run fee-for-service program or from a variety of private health plans, and would receive a federal contribution toward their premiums. The system seeks to blend government protections and market-based competition. The proposal would establish full coverage of outpatient prescription drugs to beneficiaries under 135 percent of the poverty level, which could total some 6 million recipients, according to Breaux. It would require that the government-run fee-for-service plan and all Medigap plans, which supplement Medicare, offer a "high option" plan that would provide prescription drug coverage.

The key points of disagreement of this plan seem to be where the poverty line should be drawn as well as how much, if any, of the program would be subsidized by the federal government. Apparently, time limitations prevented the committee from coming up with much detail for an actual drug benefit and how it might be funded.

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### Kennedy

The Access to Rx Medications in Medicare Act of 1999, proposed on April 20, 1999 by Sen. Edward M. Kennedy (D-Mass.) and others, proposes a program that would cover 80 percent of all costs for seniors with more than \$200 in annual spending on prescription drugs. Beneficiaries also would be subject to a 20 percent coinsurance payment under the bill. Funding could come from increasing the federal tobacco tax, using part of the projected federal budget surplus, or through

savings generated from less frequent hospitalizations that would occur if prescription drugs were more widely available.

Under the bill, Medicare would contract with companies offering prescription drugs through a competitive bidding process. The contracting entities could include pharmaceutical benefit management companies, health insurers, or networks of wholesale and retail pharmacies. The companies would be reimbursed on a regional or national basis and would be reimbursed based on the number of seniors enrolled. Current Medicare+Choice plans would continue providing drug coverage, and would have their Medicare payments adjusted to account for any additional costs associated with the bill. All 10 types of Medigap plans also would be required to provide drug coverage that exceeds that offered under the bill (currently, just three types of Medigap plans offer coverage).

Providers would be required to offer an adequate drug formulary and to provide such services as an appeals process, online drug utilization review, and 24-hour counseling for seniors. The bill also would attempt to increase the number of employers offering prescription drug coverage as part of their health care benefits package by providing a capitated payment geared to the number of retirees with drug coverage. The benefit would be offered under Part B of the Medicare program.

The key shortfall of the Kennedy proposal relates to how the program would be funded. In addition, the pharmaceutical industry would certainly point out that the bill relies on the federal government to control prices, access to care, scope of benefits, and quality of care.

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### Allen

Tom Allen (D-Maine) introduced Sept. 25, 1998 legislation called the Prescription Drug Fairness for Seniors Act of 1998 (H.R. 4627) that would allow senior citizens who are Medicare beneficiaries to purchase prescription drugs from participating pharmacies at substantially reduced prices. That would be achieved by allowing pharmacies that serve Medicare beneficiaries to purchase prescription drugs at the low prices available to federal agencies under the Federal Supply Schedule, which could reduce prices for seniors by 40 percent.

The limitations of this plan stem from the fact that while the Act would make medicines cheaper, it would not necessarily improve access to drugs for the uncovered Medicare population. Pharmacies would benefit from the system, but the pharmaceutical lobby would obviously object to the Act on the grounds that price controls would stymie innovation.

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### Clinton

President Clinton is expected to outline his proposal for a drug benefit shortly. Details of his plan have been sparse thus far, but some general comments have been made by his administration. A universal prescription drug benefit available under President Clinton's Medicare reform proposal would likely cost more than \$25 a month for beneficiaries but would be below current market prices of around \$90 a month for plans available on the market currently. The current Medicare premium is \$45.50 per month but does not include drug coverage. An administration official indicated on June 7<sup>th</sup> that the president's prescription drug proposal would keep drug prices under control by hiring companies to be pharmacy benefit managers to buy drugs at discount and by guarding against unwarranted consumption of prescription drugs. The administration will seek to argue that its prescription drug benefit will save Medicare money because increased accessibility of medications would have the effect of keeping patients out of doctors' offices and hospitals.

The plan is expected to require health maintenance organizations to bid against one another for the ability to sign up Medicare beneficiaries. Federal officials would be able to seek the best prices for goods and services from suppliers to the Medicare program. Companies whose retirees are eligible for drug benefits would be able to allow them to pay for drug benefits under Medicare.

Many questions remain about the details of the plan and how the benefit would be funded. Part of the funding would presumably be provided by the cost savings that drugs provide by lowering the need for expensive health care services. In our opinion, this concept would be a hard sell for President Clinton, as managed care companies are struggling to keep costs under control despite the benefits that prescription drugs might offer. In fact, these same organizations have in some part blamed the rapid growth of their drug bill for their financial woes. Regardless of what the feasibility and popularity of Clinton's plan will be, we believe that the Democratic party will elect to save Medicare reform as it applies to a drug benefit as a major platform for the next presidential election. Therefore, we would not expect Clinton's plan to become reality in the next year.

Opinion Key (a-b-c): Investment Risk Rating (1-4): A - Low, B - Average, C - Above Average, D - High. Appreciation Potential Rating (a-b-c): 1 - Buy, 2 - Accumulate, 3 - Neutral, 4 - Sell, 5 - No Rating. Income Rating (1-3): 1 - Same/Higher, 2 - Same/Lower, 3 - No Cash Dividend.

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