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## Session 24IF Prescription Drug Issues in Today's Marketplace

Track: Health Key words: Marketing

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Summary: Advancements in drug therapy and the introduction of new drugs continue to help improve health care treatments, but often at a high dollar cost to an insurance plan. This session looks at various issues related to prescription drugs that actuaries need to address such as pricing and designing health benefit plans, drug formularies, and managed care approaches

**Ms. Margaret Wood Wear:** We're going to talk about prescription drug issues. I'm from Pharmaceutical Card System (PCS), and I'm going to start off with some issues that are general to the marketplace and the actual pharmaceutical issues that are driving drug cost increases. Bill Pollack from Milliman & Robertson is then going to talk about how employers are addressing these issues within the marketplace. After that, John Fritz from Ernst & Young is going to discuss some of his experience in how companies handle prescription drug issues in mergers and acquisitions (M&As) and other kinds of more general open topics.

I'm going to talk about four things basically in regard to drug trends.

- (1) How drug spend is rising.
- (2) What are the key factors in driving the increases in drug spend?
- (3) Drug industry watch which is going to be about some specific things that are happening from a product development standpoint in the pharmaceutical area.
- (4) What you can expect in the future.

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There's actually been a 70% increase in the marketplace in retail drug spend from 1992 to 1997. The retail drug spend in 1992 was almost \$50 billion, and it's over \$80 billion in 1997. This excludes mail-order drugs which, as you know, have increased significantly in the last few years. Most importantly, the rate of increase is also increasing. There was a 5–6% rate of increase from 1992 to 1995, and most recently the increase has been 12–13%. Now, this is not just a fluctuation of time and populations and that kind of thing. I have some information here on some specific therapeutic classes that shows that the drug spend has increased significantly.

Drug spending is not being driven just by one or two classes. The aggregate drug spend in the therapeutic classes from first quarter 1996 to first quarter 1998 indicate that diabetes has increased during that time about 62%. Central nervous system, which includes pain and depression drugs as well, increased about 49%. Cardiovascular, which includes heart disease kinds of drugs, high cholesterol—those types of things—has increased 21%. Respiratory, including asthma, allergies, and other kinds of things like Claritin and Seldane, has increased 34%.

Third-party coverage of prescription drugs has increased significantly. One of the things that we feel is a problem is that people begin to lose sight of how much drugs really cost when they don't have to pay for them. In the first quarter of 1995 the third-party share was 47%, and now it's gone up to 62%.

When we look at some key national statistics we see that total prescription sales grew 12.6% to \$81.2 billion in 1997, and during that same timeframe inflation was about 2 1/2%, so that's a real growth of about 10%. The average cost per script increased also about 10%, from \$30 to about \$33, and the average number of scripts filled per person increased from 8 to 8.3. This is the average number of prescriptions per person per year across the total book of business in the country. The source for this is Information Services America. The cost of branded drugs has increased 3–4% for most quarters, which is the underlying cost inflation just of drugs that are already in the marketplace. The cost of generics has declined.

**Ms. Wear:** PCS's experience is lower than the average, and there are two reasons for that. One is that we have some accounts in which we handle only the retail and not the mail order because our mail order facility is relatively new. The other reason is that we handle basically only insured populations, and the average age of our population would be lower than that in the general public.

I'm going to talk a little bit now about the key drug spend drivers: environmental factors, pharmaceutical marketing practices, and new product development.

Some of the main environmental factors that we see affecting drug spending are aging population. Clearly we all know about this with the baby boomers coming through and people living longer. That's just going to drive people to use more drugs. The older people get, the more drugs they're going to use. Changing treatment standards: There are a lot more preventive, more aggressive diagnosis standards. Two examples of this are there was a recent change in the diabetes diagnosis standard, and that actually increased the number of individuals who are now classified as having diabetes by around two million. So that's a whole new population coming in now that's going to be using diabetic drugs—generally the oral kind of agents and not necessarily the insulin—who weren't using drugs before. Another one is cholesterol-lowering drugs. The parameters around which they decided people needed to be on those drugs was lowered, so now there are significantly more people using cholesterol-lowering drugs. And, again, members are demanding more services just across the board, flexibility in their benefit options, disease management, nurse triage, alternative medicine, and wellness services, and it's just sort of an overall mind-set that people can kind of get what they want.

To drive that even further, pharmaceutical companies now have direct-to-consumer advertising. There were some changes in regulations in 1997 that allowed pharmaceutical companies to do a lot more direct-to-consumer advertising. In 1997 pharmaceutical companies spent around \$1billion on direct-to-consumer advertising, and it's projected in 1998 that this figure will be almost double. At the same time the environmental factors are decreasing the demand for drugs, marketing issues are forcing payers to expand services to members. To top that off, pharmaceutical companies have sales forces that visit physicians to entice them to prescribe their own products, and the sales force has increased about 40% over the last three years.

When we're talking about generics, often we think that when a drug goes off patent, that's going to be a driver to lower drug spend. The fact that some blockbuster drugs that are coming off patent in the next few years creates hope that drug trends might stabilize or even decline. But what about new product introductions? When we look at what's anticipated to come into the market, and we know what some of those things have done, there are typically three types of new products: first, what they call me-too drugs, which is just a different version of an existing drug. Second, a slight improvement over an existing drug, such as Avapro. And third, breakthrough novel therapies; Viagra would be something like that. All three of these result in significant market expansion and sales growth. The next likely innovative blockbuster product could be anything, but it could be in the Alzheimer's category or products in the pain and migraine class, where a lot of new things are happening.

Along with the strength of all these new products coming out, the approval process has been enhanced. Advances in the pharmaceutical industry have resulted in quicker and stronger new product development, and with recent enhancements in the Food and Drug Administration (FDA) approval process, new product approvals have doubled. In 1980–84 there were 21 average new products in the market per year, and in 1995–1997 there were 53. What is more enlightening, too, is that these drugs are a result of 1970s technology, and we expect more dramatic and faster breakthroughs now going forward into the future. With gene therapy, etc., we expect a lot more new drugs to come out. In 1997, 43% of the prescription sales were of drugs that were introduced after 1990.

The result of all these factors is market creation. The positive impact of new product introductions is stronger than the negative impact of generics. The price of an off-patent branded—once the patent is released, because the cost of the drug that's the branded product is going to drop significantly. What's happened with generics is there are so many people who come into a certain category and make a whole lot of them, the price gets driven further down. Many of the pharmaceutical companies making that particular generic decide it's not cost effective anymore, and they drop out of the market. So there are actually some generics on the market that have only one manufacturer making them. Then they can increase the cost of the generic, and there are two or three on the market now—it's kind of a really strange phenomenon where they've actually increased the cost of the generic, somewhere between 10% and 20%, I believe.

To summarize the environmental factors: We talked about demographics and changing treatments, the impact of pharmaceutical marketing, direct-to-consumer advertising, and larger sales forces, and then on top of all of that with the product development, things coming out much quicker and outpacing generic drug impacts.

I'll talk a little bit about the top new products in 1997 and what we see coming out in 1998. These are the top prescription drugs by sales in the general marketplace. Prilosec is no. 1, and Prozac is no. 2. Then if you look top product launches in 1997, no. 1 is Lipitor and no. 2 is Rezulin. These are some significant drugs; some of them are already moving into the top 10. The average sales are by month mainly because they weren't all in the marketplace for a full year, so we wanted to show what a strong impact some of the new drugs coming into the market can have.

Three significant new products have already been launched in 1998. Viagra came out in April; Evista, which is a drug for women's health came out in January; and Avapro, launched right at the end of last year, which is a new class of drugs to treat antihypertension. Global sales for Viagra are expected to be \$1.2 billion by the end

of 1999, Evista sales are expected to be \$500 million per year by the end of 2000, and Avapro is expected to be a \$1 billion product by the year 2000. Viagra has received significant attention in the marketplace, and this sort of explains what was going on. If you look at these other new drugs in the marketplace, Lipitor was by far the most successful new drug launched, and in the first month Viagra just wiped that out. Of course, it's a very expensive drug. This is not normal.

When we look at what this generally means in the marketplace, and we're looking at drug trends, old norms are basically gone. Historically drug spend has been a small piece of the health care dollar, but it's increasing much more rapidly than the rest of the health care business. We expect double-digit pharmacy budget increases at least for the next three years, with unit cost inflation to be 2–3%, increases in utilization of 3–6%, and increases in intensity—meaning new drugs coming into the market, different therapy mixes, and that kind of thing—to be about 4–7%. That totals out 9–16%, and actually some of the things that we've been seeing continue to happen. These were calculated near the end of 1997 as to what we thought, and we're beginning to think that these might even be on the low side.

There are lots of things that can be done to impact the trend. Actually, I think Bill's going to talk quite a bit more about that, so I'll just leave that for him.

Mr. William M. Pollock: This is designed to be an interactive session, so I encourage you to ask questions as we go along. In my prepared remarks I'll be presenting some prescription drug utilization statistics from a survey that Milliman & Robertson conducts with Health Maintenance Organizations (HMOs) from around the country. Then I'm going to discuss some ideas and why utilization trends seem to be on the uptick, and I'll discuss some managed care strategies to deal with these higher utilization rates.

The survey I alluded to earlier is called the Milliman & Robertson HMO Intercompany Rate Survey, and we've been doing this for about five years. I guess the most recent survey was completed in the fall of 1997. Basically what we were trying to do when we started this whole survey process is get a sense of how HMO premium rates vary in different geographical regions of the country. What we've asked survey participants to do is basically rate up a particular group-rating scenario, where we give them the demographics of the group, we give them a specific benefit plan, and we ask, "What would you charge for this particular scenario?"

In 1997 the benefit plan that we picked had a \$10 physician office visit co-pay and a \$5 prescription drug co-pay. That \$5 drug co-pay is starting to look a little dated to me. I would guess we might bump it up or change it to a tiered co-pay in our 1998 survey. We started out really trying to gather premium information, but lately,

as participation has increased, we've tried to gather more and more detail in the survey process and not just look at premium rates but at some of the underlying detail that was used to build up to that premium rate. We'll ask them to break their per-member revenue target into some categories like how much of that is for hospital services, how much for physician services, how much for administration, etc. We've also started to ask for utilization statistics: You've told us you expect \$40 per member per month for this particular group to be used for hospital care, so how many days per thousand might you expect for this group? Lately we've asked them to provide information on prescription utilization. Now, this isn't an experience-study-type survey per se. It's really almost a prospective expected utilization rate, but we're assuming it's based in part on the plan's actual historical utilization and cost experience. Anyway, in this most recent year we received 247 responses, where people provided us with their expected drug utilization rate.

Table 1 summarizes the overall results for those 247 responses. This is strictly commercial group. We also surveyed Medicare plan information for those plans that are in the Medicare risk market, and also Medicaid, but my remarks are going to deal strictly with commercial group. In 1997 the average utilization rate among those responses was 6,801 scripts per thousand members per year, or, stated more simply, on average they assumed the member would have almost seven prescriptions in a year's time. Keep in mind that the survey deals with expectations. It's not necessarily an experience study in which we ask, What was your utilization in 1994, 1995, 1996? I've added what our overall results were from our 1996 survey and compared the two, and when we compare those two statistics we're showing a 9% increase in the expected rate of utilization for a particular group. That's pretty dramatic. For those of you who work in managed care, I think in the last few years our trend expectations have been very low and especially so on the utilization side. In some categories in medical care we're expecting no increase, if not decreases; certainly hospital inpatient utilization would be an example of that. Well, here's a category where things are going up, not just going up a little bit, they're going up a lot. Now, that first column of statistics represents all plans who responded. We didn't have the same plans providing this information in both years. So maybe a little fairer comparison would be to line up only those plans that responded to this question in both 1996 and 1997, and while the percentage change—when we compare things that way—isn't as dramatic, it's interesting that the rates themselves are a little bit higher. And in the far right-hand column this will give you a sense as to how big these plans were that participated in these surveys. In 1997, if we add up the average membership of all 247 participants, they had over 23 million members in total. So certainly not the entire HMO industry is represented in this survey, but a significant enough piece, I think, to draw some conclusions.

TABLE 1
OVERALL RESULTS: COMMERCIAL GROUP

	Average Scripts per 1,000 per Year		
	All Plans Reporting	Only Plans Reporting Both Years	Membership base (000) (All Plans)
1997	6,801	7,155	23,293
1996	6,233	6,737	19,119
Percent Change	+9.1%	+6.2%	+21.8%

From the Floor: How many plans reported both years?

**Mr. Pollock:** Good question. I think it was between 200 and 240. I don't have the number.

From the Floor: It was significant.

Mr. Pollock: Yes, it was significant. Now, in Table 2 we take a look at the 1997 responses, all 247, grouped by region. Each region here represents four to seven, I think, different states, depending on the region, and we can see that the results do vary quite a bit by region, with a fairly wide range of results. The highest region was the east south central region which, I believe includes states like Florida, Georgia, Alabama, Mississippi, Louisiana, and I think, the two Carolinas. They had the highest utilization expectation: over eight scripts per member per year. On the other end of the spectrum we had the Mountain Region, not California, which included states like Colorado, Montana, Utah, Idaho. They had the lowest expected utilization rate: a little less than six scripts per member per year.

Now, in Table 3 I've taken the scripts utilization statistics and lined them up with days per thousand and office visits per thousand. I guess until I saw these data my expectation would have been as you get into a region with a lower days-per-thousand rate, one might expect that the scripts rate might be a little higher: the thinking there is that as people get out of the hospital quicker, they're taking drug therapy on an outpatient basis as a substitute for the drug therapy they would have received on an inpatient basis. Likewise, I guess as a pricing actuary putting on my pricing hat, I would have expected that as office visit utilization increases, drug utilization would increase because a lot of times a physician will not prescribe a drug for a patient until he or she has seen that patient. Well, this table doesn't seem to support either of those two theories because we have regions like the Mountain Region that has the lowest script utilization but certainly not the lowest—or certainly not the highest inpatient utilization—and, flipping that around, the South Central Region has eight scripts per member but certainly not the lowest inpatient

utilization. The same is true on the office visit side. So that was a little bit surprising to me. I guess the other thing that was, to me, somewhat interesting about these data is that at the regional level, if we identify the 25th percentile region and the 75th percentile region and use that as a proxy for variance or variation, that on days-per-thousand we have a pretty narrow band between the 25th and 75th percentiles, 245 days versus 255: very, very narrow. On the office visit side, the same sort of phenomenon: 2.8 office visits per member versus 3.0. But on the drug side we have a much greater variation, especially on a percentage basis: 6.4 scripts at the 25th percentile versus 7.3 scripts at the 75th. Some people would say that the extent to which we have lots of variation is an indication that there's not much management going on in drugs relative to these other two categories. Personally, I think that's a reasonable observation.

TABLE 2
RESULTS BY REGION: COMMERCIAL GROUP

Region	Average Scripts per 1,000 per Year
East North Central	7,300
East South Central	8,016
Mid-Atlantic	6,448
Mountain	5,727
New England	7,272
Pacific	6,202
South Atlantic	6,822
West North Central	6,378
East North Central	7,141
Total	6,801

TABLE 3
RESULTS BY REGION: COMMERCIAL GROUP
Scripts, Inpatient Days, Office Visits

	Scripts per 1,000	Inpatient Days per 1,000	Office Visits per 1,000
East North Central	7,300	245	2,923
East South Central	8,016	253	2,603
Mid-Atlantic	6,448	295	3,258
Mountain	5,727	234	2,890
New England	7,272	263	3,199
Pacific	6,202	199	3,033
South Atlantic	6,822	248	3,000
West North Central	6,378	255	2,726
East North Central	7,141	253	2,849
Average	6,801	247	2,960
25th Percentile	6,378	245	2,849
75th Percentile	7,272	255	3,033

The bottom line is that drugs are chewing up a greater percentage of our overall medical budget. Table 4 shows in each of the last four surveys we've done, the participants' expected drug costs as a percentage of all medical costs. It's not quite apples to apples because we've changed the benefit plan in 1996 and upped the physician co-pay, and, as a result, you would expect the drug percentage to go up a little bit. All else equal, we're still seeing, I think, an indication that drugs are more out of control than the rest of medical care. I think Margaret's remarks support that as well.

TABLE 4
PRESCRIPTION COSTS AS A PERCENTAGE OF TOTAL

	Copays		Rx Costs as a
	Physician	Rx	Percentage of Total Medical Costs
1997	\$10	\$5	12.7%
1996	10	5	12.1
1995	5	5	11.9
1994	5	5	11.5

**From the Floor:** You said that the variation in drug utilization by region indicated that there was essentially not much management.

Mr. Pollock: Yes.

**From the Floor:** Or would you say that certain regions see more management and utilization in drugs?

**Mr. Pollock:** My statement was that the extent of variation in drug utilization is an indication that there's less management going on there. Now, that's certainly not the only interpretation you could make, but my opinion was that variation is an indication of lack of management.

**From the Floor:** Do you have any kinds of hypotheses about why you have these regional differences?

Mr. Pollock: I think it's partly a reflection of the fact that physician practice patterns vary by region. The extent of variation we see on the drug side—if we were to go back five years, maybe even less than five years, on the inpatient side we would have seen something similar in the area of variation. If you look at overall health care statistics versus HMO statistics, you still see a wide variation of inpatient utilization as well as office visit and drug utilization. Again, my personal take on it is that, as an industry, HMOs have sort of figured out how to manage inpatient care. That's sort of their area of first success. Now they're starting to tackle some of the other areas, and because they're just starting to tackle drugs, we see a much greater amount of variation.

**From the Floor:** Are HMOs using some type of incentive to encourage physicians to control utilization?

**Mr. Pollock:** I'm going to defer that for a second.

Again, just to summarize here—drugs seem to be eating up a greater portion of the overall medical cost budget, and that in many people's eyes is a concern. In the drug companies' eyes they might say this is good. Drugs are good, and drugs are effective therapies I think most actuaries would say, "Well, maybe there's some truth to that, but until you show me some proof I'm going to assume that this might be a problem that I need to confront."

So, getting off the survey, what are some possible reasons why drug trends seem to be on the upswing—why utilization trends in particular seem to be on the upswing? Margaret covered some of these in much better detail than I will, so I might cruise through these. But I still think, despite that table that shows inpatient days, office visits, and scripts, there is something to the fact that as people are getting discharged out of the hospital quicker—or instead of being admitted to the hospital at all—HMOs and their physicians are trying to figure out alternate, less costly ways of treating their conditions. I think that is part of the reason why we're seeing higher drug trends.

**From the Floor:** Isn't direct consumer advertising a major factor in drug trend?

**Mr. Pollock:** You're totally right. Drug companies can now advertise directly to consumers new drug therapies, new and improved ways to treat all their ailments and make them feel better. That is a major reason for increased utilization.

From the Floor: Has benefit design impacted utilization trends?

**Mr. Pollock:** Yes. A lot of HMOs and insurers have been a little lax in updating their drug co-pay or drug cost-sharing levels, and suddenly they find themselves in a market offering a relatively attractive benefit or a benefit that might attract adverse selection because they're slow in transferring some of the financial responsibility over to the member.

**From the Floor:** I'm not sure we should take all the responsibility for that. Large group buyers may not want that put on the backs of their employees, and so it's not totally under the insurer's or the HMO's control.

Mr. Pollock: Correct. Yes, I would agree that sometimes the buyers are going to dictate what the benefit plan is. Sometimes part of that is we want such-and-such a co-pay. I still have HMO clients who have major groups. Often they're negotiated, unionized groups who want a \$1 drug co-pay. Why do you have this? Well, we have to offer it because that's what has been negotiated with that union.

From the Floor: What about "lifestyle drugs?"

Mr. Pollock: Drug companies have become very successful in their direct advertising to consumers. Not only do they have products that can cure your life-threatening illnesses, or potentially life-threatening illnesses, but they have products that can just make you feel better and take away all your worries and ills. So, yes, you have new products coming on the market, and consumers are saying, I've heard about that, I want one of those, or I heard about that because I have a friend who's on that drug, and I want some of that. Margaret mentioned the big uptick in FDA approvals. We have new drugs coming on the market that aren't really replacing an existing drug or a new and improved version of an existing drug. These are drugs that are, for the first time, able to treat a particular condition or provide a particular therapy. So we have biomedical advances.

For whatever reason, HMOs have been a little bit slow in applying some of their financial incentive ideas that they've used successfully to help control inpatient utilization and hospital cost over to the drug area. Up until the last few years, except in isolated markets, I think the vast majority of HMOs took the entire

financial risk for drugs, and what sense does that make? I mean, if you apply the idea of financial incentives to other parts of medical care, why wouldn't you do it in the prescription drug area? So HMOs are just starting to realize we've got to help focus the attention of our providers by putting them at some financial risk for drugs. There's been a lot of mergers and acquisitions in the industry, both drug manufacturer mergers and acquisitions, but also drug manufacturers acquiring prescription benefit management (PBM) companies, and that poses some interesting dilemmas in terms of what the role of the PBM really is.

Finally, a reason for high drug trends is that they're tough to manage, and what I meant by that is drugs is a relatively difficult to manage because they're so much a discretionary-type medical service. People can come in and see their doctor and say I want one of these. There was a physician consultant at Milliman & Robertson who said there was a big uproar in, I think, the Dallas market because an HMO member went to the press and said, "I went to my doctor, and I wanted Claritin for my condition." That particular HMO said, "No, we don't prescribe or cover Claritin as part of our plan." I guess it wasn't on their formulary. This situation went to the press, and, of course, it turned into a public relations disaster. Prescription drugs are a medical service that patients actually ask for as opposed to most things that they don't like to deal with or don't like to get. They don't like waiting in doctors' offices, if they can get a prescription over the phone, thank you very much, they're on their way. So, it's a tough thing to manage because you have the drug companies pumping ideas into the members. Members come to the physician with expectations, and sometimes those expectations are tough to deal with.

Let's talk a little bit about how you attack these drug cost trends. What would be your basic goals in managing drug costs? This is pretty simple. First of all, you want to pay the lowest unit cost you can for a particular drug. If you're going to cover a particular drug, you want to get the best deal you can. Then you want to encourage the use of less expensive drugs. You want to use generic drugs when they're as effective as a brand name drug. You also want to use one of the lower-cost generic drugs within a particular therapeutic class because there's a huge price variation in generic drugs even within a particular therapeutic class. You could choose from generic drugs A through Z, and a few of those drugs may cost as much as three or four times the lowest-cost drugs within that therapeutic class. So you want to use the cheapest drug as long as you're not compromising effectiveness or quality. You want to make members pay a greater share.

Drug are very expensive. Certain drugs—Viagra is a great example—what? \$10 per pill? And here we are with benefit plans in which we're saying, If you put down a \$5 bill, I'll give you a \$100 or \$200 worth of medicine. For a benefit that again has

a high discretionary element to it, I don't think that makes a lot of sense. People really don't have an economic disincentive to go in and get a prescription filled. So you want to make members pay as great a share as the market will bear in the absence of your ability to do the fourth thing, which is reduce unnecessary utilization, and of the four things I've mentioned here, that seems to be the toughest, the most elusive in terms of actual success stories.

We have the four goals—lower unit cost, less expensive drugs, make members pay more, and reduce unnecessary utilization. I have some strategies going down the left-hand side and which of those four goals they're intended to address (Table 5). One is a restricted network—again, these are HMO strategies. Usually I can squeeze a lower reimbursement rate out of a pharmacy if I can promise them greater volume by constructing a more restricted or more exclusive network. That's one way to lower unit cost. MAC programs: MAC stands for maximum allowable cost. These programs are intended to address the phenomenon I mentioned earlier in that within a particular therapeutic class you can have a number of companies offering a generic drug, and the price range within that generic class can be fairly significant. What most HMOs have done is said, Fine, yes, we do want those generic drugs used, but we're only going to reimburse up to maybe the 25th percentile of that range of cost, and if you, Mr. or Ms. Pharmacist, want to dispense a different drug, you can go ahead, but we're only going to give you like the 25th percentile price. So, again, that's a lower unit cost type of strategy.

TABLE 5
STRATEGIES IN MANAGING DRUG COSTS

	Lowest Unit	Less Expensive	Make Members	Reduce Unnecessary
Strategies	Costs	Drugs	Pay More	Scripts
Restricted network	х			
MAC programs	х			
Formularies	х	Х		
Plan design		Х	X	
Risk sharing		Х		X
Educate/		Х		X
Monitor/ feedback				
Prescribing protocols		X	-	X

Formularies can go toward lowering unit costs and encouraging generic drugs. Formularies are basically a list of preferred drugs that an HMO will come up with, and they can be preferred from both a quality standpoint as well as a cost standpoint. By encouraging the use of formulary drugs the idea is that they will be able, again, to encourage less expensive drugs and lower unit costs by getting rebating from the manufacturers, either directly or through a PBM.

Plan design is a way to encourage less expensive drugs and make members pay more. The way to encourage less expensive drugs is to have a differential co-pay. I guess the most popular form these days is either a two-tiered co-pay where you pay one lower co-pay for a generic drug and a higher co-pay for a branded drug, or that branded drug could be separated into formulary and nonformulary branded drugs, and you'd pay a even higher co-pay for a nonformulary branded drug. Probably the best way to really get at the ideal plan design from an actuarial standpoint, if it could be sold, would be just a percentage co-pay or a coinsurance-type plan design. That would be the most effective way to get members to realize how expensive some of these drugs are. When they're shelling out \$10 for a \$150 drug, there's not much disincentive there.

I mentioned risk-sharing earlier and the fact that HMOs have been kind of wimpy in terms of getting their physicians to take risk for drugs. Risk-sharing in and of itself isn't going to help them figure out how to lower cost. It'll help them get their attention. It'll help focus their attention on how much money is being spent on drugs and hopefully also help reduce unnecessary scripts.

Educate, monitor, and feedback: I guess these last two are where I really think the next wave of success is going to incur in managed pharmacy. By educate, monitor, feedback, what I mean is have the HMO sit down with pharmacists and physicians and identify within a particular therapeutic class which drug among all these different drugs that are available, is the best drug to start with and under what conditions, or under what circumstances we want to make an exception. There's so much choice out there. There are so many products are being offered in certain therapeutic classes that part of the reason we're seeing this wide variation in utilization rates is there's just too much choice. There's not someone sitting down and saying, here's the drug or drugs of choice. HMO that make the effort to sit down and develop guidelines or take someone else's guidelines and modify them for their own use and educate their physicians—I think that's where some potential true savings could occur, not only in encouraging the less expensive, equally effective drugs but also in reducing unnecessary scripts, and the same is true with prescribing protocols. I guess that's sort of what I described, the prescribing protocol.

So, in summary, drug trends are likely to remain high. Some of the drivers, like direct advertising to consumers, are still going to be there, and, as Margaret said, drug companies are putting more and more money into getting their story out, hiring more drug reps, and that's likely going to continue to fuel utilization. You want to make sure your pharmacy contracts are in line, not paying more than your competitor down the street, encouraging less expensive drugs, sharing risk with providers to focus attention, but bottom line is the next wave: this utilization

management or utilization maximization, is going to be a tough deal, and I think it's going to be a few years before we have lots of success out there in the industry. So, with that, I'm going to turn it over to John.

Mr. John Fritz: I'm going to talk about issues of pharmacy costs and so on, pharmacy synergies in mergers. Here I'm not talking about mergers of drug companies but mergers of health plans, obviously. We've seen a lot of mergers of late and a little bit slowing down lately with some of the problems happening in the health plans. One of the major reasons for these mergers is to grow in size: both in maybe expanding into new markets or expanding into markets that they're in, just becoming larger in those markets. One of the major strategic reasons for wanting to be larger is to be able to negotiate and have leverage in your negotiations with providers. And the pharmacy area is really no different from that. The bigger you are and the more members you can deliver to the retail outlets, the manufacturers, and so on, the more leverage you have in terms of your negotiations. You've obviously read about the prices being paid for acquiring health plans, and while that's come down a little bit, I guess, of late because of the problems, there are still huge prices. If you did an actuarial valuation, an economic valuation, of some of these purchase prices, it doesn't pencil out, and so it's very, very important to look for the synergies that might be present. What kinds of economies of scale are there? Clearly we just heard that drug costs are just out of sight, and they're going to keep escalating, and so the area of looking at pharmacy synergies for an acquisition becomes more and more important as drug costs escalate.

So let's look at it a little bit in terms of what kind of things we look at. First, health plans use all kinds of different strategies with regard to their pharmacy. In the area of PBMs they may be using an internal PBM. They may be working with an outsourced or an external PBM. Let's say two merged entities or two merger partners are working with the same PBM. There may be a lot of differences in terms of their dealings with that PBM, in terms of maybe some of the services are contracted out to the PBM and, some are done internally. The financial arrangements with the PBM might be quite different from one company to the other. So lots of things need to be looked at in terms of what's best practices of the two entities, and whether we can maximize the cost savings potential for that.

Bill talked a little bit about formularies and plan design, and obviously that enters into the equation of what could be possible synergy savings. One formulary may be better than the other one. In fact, they may be just totally different formularies. Even when two plans may be using a closed formulary, there may not be that much similarity between one closed formulary to the other, and different drugs are treated differently. Then there's the area of rebates. As Bill mentioned, rebates come from manufacturers. If you're dealing with an external PBM, that external PBM gets the

rebate and then passes some of that along to the health plan. Then it's a matter of how much negotiating power you have in terms of negotiating with that PBM, and what portion of that rebate you get as a health plan. If you have your own internal PBM, you have a little bit more control in terms of actually dealing directly with the manufacturers. So if you have a formulary that you're really proud of and that really is doing well, maybe you can negotiate with the manufacturers themselves in terms of the level of rebates that you would be able to get through that internal PBM.

Then there's the issue of physician risk-sharing. We can't forget that because what we do in the physician risk-sharing area may affect how we measure the potential synergies. If we do something really well on a health plan side, and we have physician risk-sharing, it's possible that some of the benefit of that synergy might disappear, because you're sharing the risk with the physicians—lower pharmacy costs or whatever—and it accrues to the physicians instead of to the health plan.

**From the Floor:** What's the difference between an open and closed formulary?

Mr. Fritz: An open formulary is one in which you have a list of drugs that you want the members to be using. The physicians are probably aware of it. You make it known to the physicians, but there's no enforcement behind it. So, you have formulary, but there's no penalty. You maybe have no benefit design differential; you just have a formulary out there. The incentive-based formulary would be sort of an open formulary, but you have a financial incentive or disincentive to use off-formulary drugs, for example, a or difference between generic and brand name. A closed formulary would be one in which unless there's a really strong reason medically from the physician to use a drug that's not on the formulary, there'll be no reimbursement at all.

One of the things that we need to set up for a merger and in terms of trying to measure the synergies, is a sort of benchmark for what we expect the cost savings to be, and then, as we move down the road, figure out if we are maximizing our benefits and measure it against those benchmarks that we set up in the first place. I'm going to spend most of my time in three areas: ingredient cost, dispensing fees, and rebates. I'll mention a little bit about two others, but I will be spending most of my time on those three.

When you're dealing with the cost of drugs, the first very visible cost obviously is what is being charged by a retail entity for the ingredient portion of the drug cost, and then tacked onto that is a dispensing fee, and those are two items of negotiation. And you may have different arrangements with different retail outlets. Similarly, in terms of the types of costs, Bill mentioned the MAC price, the maximum allowable cost for generic drugs. On the brand-name side, it's average

wholesale price less some discount as far as the ingredient costs, and then the tackon is usually a per-script type of tack-on of \$1, \$1.50, \$2, whatever, per script.

In terms of the ingredient cost and dispensing fee portion, first it's important to be able to evaluate everything by retail chain. I guess if your two health plans that are merging are both dealing with external PBMs where you have no control over what that PBM is going to do with each individual retail outlet, it's not important to look at results by retail chain, but if at least one of the merger partners has their own internal PBM, then I think it does become important to start looking at things by retail chain and actually do an analysis of the ingredient cost versus dispensing fees by chain. In order to keep the work more manageable, I think one of the things you have to do is limit it down to a significant enough share of the total volume of drugs, and so maybe pick the top 25 brand names, or 50 or so, and the same thing on the generic side, and do your study on that basis. And here I'm staying away for the time being from the impact on this analysis of co-pay variations and other benefit design situations. We're just looking at the actual cost of the drugs before we apply any of those other cost reductions to that.

Once we have separated the cost by retail chain, then we would want to focus on the cost for one retail chain, call it Chain A. If we have actual cost for HMO ABC and emerged into another HMO XYZ, let's substitute the contract that XYZ would have with Chain A as a basis of the cost and compare what is the total cost overall. Say we have a situation in which Chain A has total volume with HMO ABC of three million scripts. The total cost is \$165 million. If we then use XYZ's contracts, figure out what the total cost there is. Based on those contracts, those three million scripts would have cost, say, \$160 million. So there's a \$5 million savings. Then looking at the generic side we have, let's say, 1.5 million total scripts with Chain A, getting for HMO ABC, with their contract with that chain, we get \$18 million of cost; and substituting XYZ's contract a higher cost. So in this particular example ABC's contract with Chain A is better on the generic side but worse on the brand name side. So there's at least the synergy here of a \$5 million saving if we can now negotiate a deal with Chain A to utilize XYZ's contract for the brand name drugs. You would do the same thing now for XYZ's experience: ABC's contracts to Chain A, and hopefully you'll confirm that the same relationship exists, and in most cases it will. Then you can tell if we can use XYZ's contracts with ABC's volume, we would have saved \$5 million on brand names. Now, on the XYZ side we may save \$1 or \$2 million on generic drugs if they could have had ABC's contracts for generic drugs. So, summing all that up for all of the chains, you come up with a bottom line of potential synergy savings, say, on an annual basis or whatever the time period is that you're looking at that you can use as a benchmark to test yourself over time as you're implementing these various changes in your contracts with the

retail chains. The same kind of thing would be done for mail order organizations on either side.

In the area of rebates we would take a look at the list of rebatable drugs for each HMO or for each PBM, and those may not necessarily be the same. The list may be different from one HMO to the other, or one PBM to the other. But by putting them side-by-side, possibly organizing them by manufacturer, you can figure out which is the better deal, again, doing the same kind of a thing, going through the calculation and coming out with which side would provide the most savings in terms of synergies moving forward.

None of these things, though, can be done in a vacuum. For example, on the rebate side, if you find out that ABC has much higher rebates, say, measured as per member per month or per script—whatever the measurement basis is—that may be an indication that ABC just uses a lot more or a much higher proportion of brand name drugs because rebates tend to come from the manufacturers generally for brand-name drugs. And very often the cost benefit might be better to encourage more generic utilization as opposed to increasing the rebates. So those kinds of things have to be examined.

Some of the other considerations include the administrative charges. That may be in the actual contracts. Many times that's fairly easy to do just looking at the contracts between one PBM and the other and taking a look at the claim costs or the administrative charges being levied by the entity doing the pharmacy benefit management. And the drug utilization review capabilities, one entity being better than the other, may come out in terms of the quantifiable things that you've done in the other calculations. In terms of the overall cost to the health plan, though, the cost savings to the health plan—again, you can't do this in a vacuum because a lot of these savings measured, say, per member per month or per script, will vary dramatically by line of business. For example, with senior business for a risk contract, the rebates would be probably three, four, maybe five times higher than they would be for commercial just because of the mix of drugs and the higher brand-name utilization and the higher drug utilization of the older population. For Medicaid population generic utilization of those drugs tends to be high—also younger ages—and so those rebates tend to be even lower than the commercial side in the Medicaid side. Then even within commercial there are variations of the ultimate cost to the health plan on the drug side. The individual line tends to have much higher co-pays. Therefore, that eliminates many drugs out of the total that may be reimbursed or at least partially reimbursed in the large group market in which the co-pay may be guite a bit lower. So there's a dramatic difference in terms of per month per member costs depending on benefit design.

Bill mentioned that there hasn't been a lot of physician risk-sharing. There's been more of the physician risk-sharing probably in California than in some of the other parts of the country. I've seen some physician risk-sharing arrangements that include pharmacy, where the risk-sharing level is at such a low level that it virtually guarantees that the physicians will end up paying something for costs on the pharmacy side that are greater than the attachment point. In fact, I've seen some fairly naive discussions in which physicians feel that this may be a good area to make extra money in terms of taking on more risk because they will be able to manage the risk of that pharmacy better when they have the incentive. And, like I said, those are pretty naive discussions, especially given what's going on in the marketplace today.

A whole lot of variation exists in these risk-sharing arrangements. They may be actually separate pharmacy risk pools. They may be combined with a hospital risk pool. They could be using a separate capitation for pharmacy, or it could be part of a total global cap so that the physicians are just taking the entire risk. So there's a lot of that, and it has some impact. As I said earlier, when you make this calculation of synergy for the merger, you have to take into account how the physician contracts are going to impact that calculation, because ultimately what you're trying to get—the information you're trying to calculate for, the merged health plan—is what the cost savings are that will come back to the health plan that they can either use in terms of lower premiums or additional profits.

**Mr. Fritz:** I have seen some situations where the health plan is trying to get a specific deal in which actually the total cost, not just utilization but unit cost, actually capitates with a maximum increase per year as part of the negotiation. At least the ones I have seen or those negotiations I've had any involvement with have not materialized. The PBMs have backed off from it. I don't know. Margaret, maybe your experience at PCS is different.

**Ms. Wear:** Well, we occasionally entertain the idea, but we try to stay away from it, mainly because we have less control of the PBM over the utilization impact even of the health plan.

**Mr. Pollock:** I have PBM clients who are still in that business of taking the total cost risk. They've gotten a lot smarter, and they've written their risk-sharing agreements in such a way that they give them much more protection, but they are taking a utilization risk.

From the Floor: How can the insurer control utilization?

**Mr. Fritz:** The real control is at the physician level in terms of their prescribing pattern. If you can get them into the loop of sharing risk, I think you have a much, much better chance of controlling that runaway inflation.

From the Floor: Can a PBM legally take on risk?

Ms. Wear: We're like a sub-risk taker. We take risk directly with an insurance company or an HMO. We're not the first-line risk taker. And in most states we're okay. There are a couple of states in which we can't take risk, and I know that some of my competitors actually do. I don't know whether they own them or they're affiliated, but through some type of an insurer or HMO license that they have in certain states they actually can take risk through that, but PCS does not have an HMO license, and in some states we are not allowed to take risk.

**From the Floor:** How large is the impact of mental health drugs on overall drug utilization and trend?

**Ms. Wear:** I know that in certain populations we've seen mental health drugs already as high as 50% of the total drug spend. It can be really incredible in like a Medicaid type of a population. So it's going to have a really strong impact. Those types of drugs are very expensive. Oftentimes they're reasonable long-term types of therapies, and they're not the kind of therapies that, when we talk about lowest unit cost and those kind of things, people change. Once they're on a particular therapy they tend to stay on it.

**From the Floor:** Do some of your clients try to limit mental health benefits through a free-standing drug card program?

**Ms. Wear:** If it's not covered on the medical side, it usually does not come through the card. It's usually just an excluded area. If the client is set up with us to specifically exclude that drug, then it wouldn't even be processed.

**From the Floor:** That's an interesting point, and it's probably more obvious in a situation where you're talking about a drug exclusively used for mental health, like Prozac. You get the same kind of issue arising under cloudier circumstances when you talk about arrangements to include or exclude oral contraceptives. You have certain contraceptive drugs that are used for other applications like treating acne or osteoporosis.

**Ms. Wear:** Right. There are medical exception procedures. But when you're basically not covering that, I'm not sure how you then can then go back and include it if you don't have a diagnosis.

**From the Floor:** Other than through an appeal process.

Ms. Wear: There are different types of things that we can bring to plans to help them, for instance, on Viagra, where plans are trying to make a decision right now whether they cover it or don't cover it. Again, if they do cover it, is it just a wide-open coverage? We offer them a drug limit so—and it's tested in the system—they can only fill a prescription for up to a certain number of pills every month. So you can't go beyond that. There are other standard types of things within a computer system that can work, and it's less of a problem than say a medical exception type of process.

**From the Floor:** Has anyone looked at the impact of drug utilization on the overall experience of the health plan?

Ms. Wear: We have a department at PCS that does some outcomes research, but that's kind of a step that we're aiming toward that we haven't really gotten into. It's a difficult one to measure. We believe that there is an appropriate level of utilization for drugs, and it doesn't mean that it's higher or lower on any particular drug than what a plan is using now. It could be higher in some cases and lower in others, but is there a corresponding offset then on the medical side that makes it more cost efficient to use the drugs at a higher level? And those are kinds of things that, long term you're probably going to be seeing a lot more information about, but I haven't seen a lot of that to date.

From the Floor: Are you seeing any general trends in rebate levels?

**Ms. Wear:** Well, I'm not as familiar with the contracts that we have as some other people would be, but it has seemed to me in the information that I've seen that the trend is different with every manufacturer. Some of them are being more stringent around the requirements of what you need to do to get to a certain level of rebates, but PCS has a lot of clout with the manufacturers just because of all the claims that we process. So we usually can deal with it.