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Session 4PD Adjusting for Risk Under Medicare

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Moderator: WILLIAM F. BLUHM
Panelists: PATRICK J. DUNKS
WILLIAM R. LANE
JILL ANN STOCKARD
Recorder: WILLIAM F. BLUHM

Summary: The Balanced Budget Act requires that the Medicare program adopt a risk adjustment mechanism for implementation in the year 2000. Panelists discuss the method chosen by the Health Care Financing Administration and the review of the method by the American Academy of Actuaries Task Force.

Mr. William F. Bluhm: You should be able to get a good grasp of this topic as it relates to the work that's been done by the AAA and the Health Care Financing Administration (HCFA). A year or so ago, Congress passed a law that required HCFA to adopt a risk adjustment mechanism for Medicare choice plans. In that law was a requirement that HCFA get an opinion of an actuary or a member of the Academy on the actuarial soundness of their plan. The HCFA came to the Academy and asked whether it could hire AAA to do it. The AAA explained that we don't do such things for the base purpose of earning money, but we could do it on a volunteer basis, which we did. There was a group of about 12 or 15 actuaries who got together and became the Academy's task force for this. I chaired that task force, and the other three speakers here today were all very prominent in that work.

We gave a report to HCFA that it included and attached to its report to Congress, which we will discuss shortly. The first speaker is Bill Lane, who will describe risk adjustment and talk at a high level about the HCFA risk adjustment mechanism. The second speaker is Jill Stockard. She is going to talk about our work group's analysis, the mechanics of what we're doing, and our conclusions regarding the issue of actuarial soundness. The third speaker is Pat Dunks, and he's going to talk about some of the outstanding issues and how this can be implemented in the real world.

Bill Lane is a principal at Heartland Actuarial Consulting and formerly chief group actuary at four different companies. Bill has been involved in risk adjustment for a long time, and has chaired the SOA's Task Force on Risk Adjustment since 1992. Jill is a senior consultant at PricewaterhouseCoopers, and has been there for seven years. She consults to employers, health plans, governments, and so forth. Pat is a principal at Milliman & Robertson and has been there for 13 years. He consults to HMOs, physician hospital organizations, providers, insurance companies, and Blues, with an emphasis in managed care, especially Medicare. With that, I'm going to turn it over to our first speaker, Bill Lane.

Mr. William R. Lane: It's possible to spend a whole day describing the HCFA reimbursement mechanism and not cover all of the details. Describing it in 20 minutes is a little bit of a challenge, but I'm the king of oversimplification, so I hope we can do that.

The current payment system for HMOs under Medicare is basically a fixed premium. It's based on age, gender, and location with some personal status indicators, but the health status of an individual has no bearing. Only the health status of perceived groups has any bearing. The perceived problem with this current reimbursement mechanism is that several studies have indicated to Congress or HCFA that the average health risk or status of people who have enrolled Medicare HMOs is, in fact, better than the average health status of people under Medicare in general. By paying an average payment to a Medicare HMO systemwide, the perception is that HCFA and the government are paying too much. The solution, as Bill described, came from Congress. Congress told HCFA to include risk adjustment within the payment mechanism. This was part of the Balanced Budget Act (BBA) of 1997 and, as part of that, it also wanted an outside actuarial body to analyze the actuarial soundness of their proposition. I do have several words of caution on this. This is oversimplifying a very technical subject. Seemingly minor differences, if you're not used to this kind of calculation or consideration, don't seem to be a big deal, but they can make very large differences in payments. You really have to dig into the details to know how it is going to impact a plan or area.

Real-world implementation issues are critical. Even if the theory behind the mechanism was perfect, the real world isn't perfect, and implementation creates issues in and of itself. The impact on an HMO plan in a given location can be very different. Some will gain revenue but most will lose revenue, and it is very different HMO by HMO. You have to look at the details of your own plan. A couple of good places to go for further information are the AAA's monograph of May 1993, which is available from the Academy, and the HCFA Web site (www.hcfa.gov).

What is risk adjustment? What's the whole point of it? Risk adjustment is combining a risk assessment mechanism with the payment mechanism to objectively determine the relative risk of individuals or groups using a classification system that assigns a single numerical value for different populations, and then making payments based upon that valuation. This is very simple in concept. For example, a particular population is 20% less healthy and a particular population is 20% more healthy; therefore, payments for them should be adjusted in that manner. Conceptually, it is very easy. The actual difficulty is making it work in the real world. One of the problems we have had all along is that a lot of people want to look at the classification of a risk assessment system and conclude that an individual is half as likely to have health claims. If that individual is in a car accident and his or her claims were expensive, they conclude that the risk adjustment system doesn't work. If you look at this at the individual level, you are going to have problems. It is like a mortality table; it measures relative risk, but is not really credible at the individual level. You have to be very careful, even though a lot of the ways of evaluating risk adjustment systems attempt to do that very thing, not to attempt to do it at the individual level.

Why risk adjust? Why do you want to do this in the first place? What is the point? There is one main desire that is driving the whole process. It started with the Clinton healthcare system, and has worked its way through several different areas. The same basic thoughts are always present. Thought number one is that managed care can indeed lower cost, but the fee-for-service indemnity system is very expensive and will continue to be more and more expensive. To contain costs, you have to have managed care. The second assumption is that people who are less healthy will seek to migrate to the least restrictive environment for their healthcare services. In other words, those people who feel they are the sickest will want the least restrictions on their access to health care. That presents problems because there is a strong perception that managed health care puts restrictions on your ability to access care. However, the government, employers, and others want people to be able to choose their own plan, and there is a strong desire for open enrollment for individuals to have that choice.

How do you balance the fact that people have this really strong tendency to do what is in their own best interest with the fact that their choice can make the system more expensive? The perceived solution is risk adjustment. Without some form of risk adjustment, those health plans that either intentionally or inadvertently get a healthier mix in their population are rewarded financially and vice versa. With risk adjustment, at least in theory, those plans that get a sicker population will get more reimbursement and those plans that get a healthier population will get a lower reimbursement. Technically speaking, you can do it systemwide, budget-neutral, and balance that out. If sicker people want to stay in the indemnity world, more

money flows to the indemnity world, and vice versa. The desirable goal is that if money follows chronic conditions and the payment system follows those patients who need it the most, then managed care plans will attempt to recruit such people. They will provide those services because they feel they can manage the cost once they have them. They just want the higher payment level because a cardiac patient is going to be more expensive.

Under the new system, there are two sets of payments that are very similar, but slightly different. One is for ongoing Medicare enrollees, and one is for new Medicare enrollees. The difference lies in the fact that if you have an ongoing Medicare enrollee, Medicare has a record of their health treatments from the year before. Medicare can look at the diagnostic markers of those people who are staying in Medicare and do risk adjustment on them, whereas a new Medicare enrollee doesn't have that history, so they can't risk-adjust them based upon any sort of clinical markers. Therefore, the payments are different in the first year for Medicare versus all other years. Basically, you have significant payments for age and gender just as you do today, with add-ons to those payments if the person is on Medicaid and has ever been disabled under Social Security definitions. Last, but not least, there are some significant additional add-ons if people have had a certain diagnosis that was captured during a hospitalization. It is keyed off of diagnosis, but it has to occur as the principal inpatient diagnosis for a hospital admission. For new Medicare enrollees, it is still age, gender, and Medicaid status, but they don't have the add-ons for those conditions. To balance the payments, the age/gender payments for a new enrollee are actually larger than the age/gender payments for an ongoing enrollee.

I want to give three examples to show you how this works. Let's take a male, age 67 in Medicaid, who has been disabled since 1959. This person has been hospitalized for a number of conditions such as peptic ulcer, rectal cancer, and anxiety disorders. All three of those conditions as a principal inpatient diagnosis would trigger an additional payment under the principal inpatient diagnostic cost group (PIP-DCG) program. The actual payment level would be the base amount of \$2,759 for a male 67 years of age in Medicare, an additional \$2,244 for being in Medicaid, an additional \$2,115 because he was originally disabled, and an additional payment for the anxiety disorders. Payments could be triggered for peptic ulcers or rectal cancer, but under the PIP-DCG system, payments are made for the most expensive condition and none other. If people have more than one condition that can trigger a payment, it is the largest of those payments and nothing else.

Let's take a similar person who was not in Medicaid, was not disabled, and wasn't hospitalized, but has congestive heart disease and Type 1 diabetes. This person is

on insulin and has congestive heart disease. Both are very significant conditions, but he was not hospitalized for them during the last year. The payment for that individual is \$2,759 because he is not on Medicaid and was never disabled. Because he wasn't hospitalized, there were no inpatient diagnoses and, therefore, no additional payments. You are looking at a difference between \$17,318 and \$2,759. What about that same kind of individual who stayed in the workforce through age 66 and this is the first year he is in Medicare? That individual is not in Medicaid and was not disabled. All he's getting is the demographic payment, but the demographic payment is \$3,162 as opposed to \$2,759.

The method that HCFA is using is based upon the PIP-DCG. Basically, the way this method worked was they took all International Classification of Diseases-9th Revision-Clinical Modification diagnoses, clumped them into clinically similar groups, and tried to separate them by perceived severity. They only used diagnoses that were the principal inpatient diagnoses from hospitalizations with a few exceptions. They took a look at the fee-for-service Medicare indemnity data and determined which diagnoses produced the most expensive people. They were looking at all costs during the year for all diagnoses. If an individual had both anxiety disorders and peptic ulcers, he or she would end up in both groups. The average cost for those two groups included all costs for that individual; they use the most expensive group. Once they have that most expensive group, the costs for those people are removed from the pool. This is done for the next most expensive group, and the next one after that until they come to the point where the people who are left have no predictive value in terms of looking at their diagnoses or not.

The process gives you groupings that are mainly by cost, so the most expensive groups are not just one clinical marker. There are several possible groups that happen to end up with relatively the same cost, so you see some rather strange mixtures through the groupings. A number of things were done when they set this system up that has caused some concern; for example, one-day stays in the hospital were ignored. If someone was in the hospital for one day and left, that data was not included and outpatient diagnoses were ignored for the most part. Some secondary inpatient diagnoses were used, and, in one case, chemotherapy was used, which is really a treatment. There was a little mixing and matching just because some real cost issues were involved. These PIP-DCG groups do not consider age and gender. A diagnosis is a diagnosis is a diagnosis. The key point to understanding this is, when they look at an individual who has a peptic ulcer, they are not looking at the cost for treating that peptic ulcer in the year the individual had the admission. When they look at the cost of someone who had a peptic ulcer in year one, they are actually projecting their costs in year two. This means a lot of expensive, acute conditions do not show up as expensive conditions because if the diagnosis

happens this year but the follow-up expenses are not that large, that person is not an expensive person in this mechanism.

This method tends to focus on the kinds of chronic conditions that indicate having it this year is very predictive of having more and more cost each year following conditions such as diabetes, congestive heart failure, and cancer. Any cost that they didn't allocate, essentially all of the acute conditions and a significant portion of some of the chronics, ended up reallocated in the age/gender factors. The most expensive PIP-DCG is No. 29. It is an extra payment of \$26,464 for the diagnosis of HIV/AIDS and lymphatic cancer/neoplasms, which does not have to be the principal inpatient diagnosis. The second most expensive, PIP-DCG 26, is metastatic cancer and brain or nervous system cancer. Just as a side note, they are not sequentially numbered. There is a PIP-DCG 29 and a PIP-DCG 26 but no PIP-DCG 27 or PIP-DCG 28. PIP-DCG 23 is liver/pancreas/esophagus cancer, end-stage liver disorder, or cardio/respiratory failure and shock. PIP-DCG 20 is diabetes with chronic complications, including renal failure and nephritis. On the low end of the scale, some of the least valuable add-ons are in PIP-DCG 7 for central nervous system infections and alcohol/drug dependence and in PIP-DCG 8 for peptic ulcer, angina pectoris, and asthma.

The PIP-DCG system as implemented is a prospective system, and I want to touch on that because it is a very important concept to understand. Concurrent systems of risk assessment and risk adjustment consider current-year costs in relationship to current-year diagnoses, so an acute condition is measured as something expensive because the cost happened in that year. Prospective systems consider next year's cost in relation to the current-year diagnoses, and they're very different because of that. Concurrent systems recognize accidents and acute episodes, as well as the chronic conditions. Prospective systems basically look at chronic conditions. There is obviously some additional cost in the following year of a major accident, but it's nothing compared with chronic conditions that persist and basically deteriorate the health status of an individual year by year.

The new PIP-DCG system is prospective. For most of the acute conditions, the cost remains within the demographic and status factors. It ignored a number of hospitalizations, so the cost for many of the less severe chronic conditions are still in the demographic and status factors, based on the fee-for-service system only. Even though these payments are for managed care systems, the costs are based on fee-for-service, which is important. Essentially the new system is not budget-neutral for HMOs or Medicare. If we were to use the fee-for-service system, apply the new system, and reallocate money for fee-for-service people, the system would be budget-neutral. It simply would take money from those who were less severe and give it to those who were more severe, with the total dollars being the same.

However, when you are developing the factors in the fee-for-service indemnity system and applying them to a totally different system, the managed care world, it is not budget-neutral. The average risk factor measured by this system for the HMO world is lower than the average risk factor within the fee-for-service system. That was an assumption that HCFA thought would be the answer before it even started this, and that was the reason for doing it. You might hear it's budget-neutral because it is designed to be budget-neutral. If you're looking at fee-for-service within fee-for-service, it is not budget-neutral from fee-for-service to HMOs as it's actually being implemented.

Regarding ratebook considerations, Medicare does not recalculate the cost every year on an exact basis by county as you might expect them to do. When they're trying to figure out what the payments ought to be, they don't go and look at the 1995 data, process it in 1996 and say this is going to be 1997. They have data that were collected in that manner years ago. Congress has set up rules as to how those numbers change. Technically, if the costs change, those numbers change. But Congress, in its infinite wisdom, established minimum payments and increases, and some other things such that ratebook values don't change quite that way. The average cost per county can only change by a certain amount under certain circumstances. However, those circumstances are wide enough and broad enough, and have limitations on how much the total dollars can go up, that it is those legislative, mandated change factors that force what the ratebooks are going to be. You have to understand that. Basically, the underlying costs are based on historical patterns that are several years old and changed by factors that are controlled by legislation, not by what's going on in reality.

When the new ratebook (there really isn't one) for this system goes into effect, it needs to be resculpted. In the past, if a given county had an average health status that was much higher or much lower than average, that was factored into the average county cost. With this new approach, that has to be taken out, and in order to do that, HCFA has come up with what's known as the rescaling factor. It is keeping the current ratebook and adjusting it by the legislative changes and a rescaling factor, which is an attempt to take out the average health status in that county. However, the average health status is based on current information, whereas the ratebook is based on historical information. There is a fair amount of potential mismatch if not actual mismatch there.

This new payment system is 10% new and 90% old. The first year of payment is in year 2000 using the old system for 90% of what they pay an HMO and only 10% under the new system. In 2001, it goes to a 70%/30% split, 45%/55% in 2002, and 20%/80% in 2003. By the year 2004, they expect to have a new system of risk adjustment in place so they can keep us on our toes, using all diagnoses as opposed

to just inpatient diagnoses. That has a lot of implications and issues in and of itself. There is a lot of data to collect, but it should, at least in theory, be far more accurate than the current one. And with that, I will turn it over to Jill.

Ms. Jill Ann Stockard: As Bill had stated before, HCFA approached the Academy and asked them to form a work group to look at the proposed methodology with respect to actuarial soundness. When our work group got together, we thought a lot about what actuarial soundness really means. There really is no definition of what actuarial soundness is, so before we got into our analysis, we thought it would make sense for us to lay a framework about what actuarial soundness is. We looked at some frameworks that the Academy had done in the past, which was the monograph that Bill had referred to earlier. The Academy had set some criteria and goals for risk adjustment—those goals and criteria being that payments to health plans should be accurate. First-year implementation and ongoing administration of the mechanism should have practical and reasonable administrative expenses to health plans, but payments to health plans should be timely and predictable so the system is resistant to gaming. We also looked into the individual components of the mechanism with respect to actuarial standards of practice and the general practice and principles of actuarial science.

That was with respect to the components of the mechanism. We also looked at the risk adjustment payment methodology from the big picture to see if it really met the goals of risk adjustment. The goals of risk adjustment were also based on some goals that the Academy had set forth in the past: they are that a risk adjustment system should reduce the effects of risk selection whether or not they are intentional. In other words, health plans should compete based on their ability to deliver care efficiently, not based on their ability to select better risk than the competing health plan down the street. The mechanism should compensate carriers fairly for the type of population that enrolls in their health plan. It should ensure consumer choice and protect the financial soundness of the system.

Our work group did have some limitations with our analysis. We did not collect, audit, or verify any of the data that HCFA used to develop the cost groups nor did we take a look at the managed care data used to generate the future payment. We also did not look at any of their calculations. In other words, we didn't take any of their formulas and apply them to the data to check for mechanical accuracy. We also did not have any type of marketplace or beneficiary studies to base an opinion on. With respect to individual components of the risk adjustment mechanism, only inpatient data is used, and HCFA has said that it intends to move to a more comprehensive methodology, but in the short term, it's based on inpatient diagnosis only. This has some pros and cons. The BBA set forth an aggressive implementation schedule, so it is the only data that's available, and the only data

that makes sense in the short term. It is easier to audit than outpatient and ambulatory data; however, it may penalize well-managed plans that have a tendency to deliver cost-effective, good care on an outpatient basis. They are not going to receive payment unless they change their practice patterns and bring those people from an outpatient setting into an inpatient setting. There was less predictive power with inpatient diagnosis versus a more comprehensive methodology, which also has some advantages because of the aggressive implementation schedule. There will be less variance in payments to health plans under this methodology.

Additional payment to health plans is only based on what is in the principal diagnosis code on the hospital information, so any ancillary information about a patient's condition is not taken into consideration for payment. There could be some situations where a secondary diagnosis is really the underlying condition that the risk adjustment methodology is trying to pay for. For example, let's say somebody has a chronic condition, but he or she ends up in the hospital for an acute condition. The health plan receives payment for that acute condition, but it's really not how the mechanism is supposed to work. There is also a chance of up-coding. For example, someone is brought into the hospital and there is a question about what should be principal and what should be secondary. Probably what will be coded as principal is what generates the most payment. The researchers that came up with the methodology put together a panel of clinicians who constructed a list of discretionary conditions—conditions that had vague coding or were for minor illnesses that might not have been appropriate to treat in an inpatient setting. These conditions were removed from the risk adjustment methodology. Anyone who has these conditions is only going to be paid on the basis of the age/sex factor, without a PIP-DCG for increased payment. The work group thought that this would remove incentives to hospitalize for minor illnesses. There could be changes in coding practices moving forward, and if the PIP-DCG mechanism is put in place longer than anticipated, it might want to redo some of the mechanics of establishing the cost groups because their weight has shifted.

Bill had talked a little bit about how the cost groups were put together and how diagnoses were lined up from the most expensive to the least expensive and then put into cost groups. The magical number for creating a cost group was 1,000 individuals with the same diagnosis. Being actuaries, we talked about whether or not 1,000 was the appropriate number and what would have happened if PIP-DCG had used a different number. If it had used a number greater than 1,000, the cost groups would certainly have had more credibility, but there would have been fewer resulting cost groups and a higher variance among the level of payments. Conversely, using fewer than 1,000, you'd have a smoother line across cost groups and more cost groups, but the data might not be as credible.

The exclusion of one-day hospitalizations is something we spent a lot of time talking about. Our work group met over a period of months, and at that time the PIP-DCG mechanism was a work-in-progress. When we first got together, the researchers were proposing that two-day stays be excluded, but the final mechanism is only going to exclude one-day hospitalizations. This will lower risk scores for plans to effectively manage their care. Those that can get patients into the hospital, treat them appropriately, and discharge them in a short amount of time will receive no extra payment besides the age/sex factor. It also reduces the predictability of the risk adjuster. I believe the research report that we were basing our analysis on stated that about 5% of those with otherwise qualifying diagnoses were being removed for additional payment. It does, however, reduce the gaming of the system. We stated in our report that we think that there are more disadvantages in excluding one-day hospitalizations than there are advantages.

Chemotherapy is a deviation from a principal inpatient diagnosis. Right now, with current HCFA coding rules, anyone who has cancer and is admitted to a hospital has chemotherapy—even though it is a procedure—as his or her principal inpatient diagnosis. To separate different types of cancers, because their associated costs are different, the mechanism is triggered based on the secondary diagnosis. Our work group believed that this was appropriate and will pay more appropriately for the cost of different types of cancer.

Bill mentioned that factors for newly enrolled Medicare members have their own special set of risk scores. This also was something that came up in our work. It wasn't originally proposed, so we didn't have any data to review how the factors were put together so that we could discuss their appropriateness. But we thought the absence of a review was probably not all that critical because there was really only a one-year time horizon. HCFA has stated its intention to move to a more comprehensive system down the road. We thought it was important to talk about some of the implications and dangers if they do not do that and stay with the PIP-DCG for a long time. The more efficient plans have a tendency to treat on an outpatient basis and may leave the market. Those plans, unless they change their practice patterns (which is not necessarily a good thing), will not be paid appropriately. The plans that attract people with multiple chronic conditions but have a great tertiary care center, or for whatever reason attract a sicker population, will only be paid for a beneficiary's single most expensive condition.

Our work group received some ancillary information indicating that there were some state healthcare reform programs that had used similar types of mechanisms, and they had some problems with the data. Theoretically, that may not happen with the Medicare program since there is a central payer and the data is readily available. With respect to resistance to gaming, hospital reimbursement from health

plans is not directly related to risk adjustment scores. That may change later, but health plans and insurers are currently removed from actual coding practices. There may be an incentive to hospitalize instead of treating on an outpatient basis in order to generate that increased payment.

With respect to satisfying the more macro goals of risk adjustment, does this methodology reduce the effects of risk selection? We thought it was certainly an improvement over the current system. Plans have absolutely no incentive to have anyone who is remotely unhealthy under health plans using the age/sex factors. There still was a potential for risk selection with this methodology to avoid beneficiaries who have chronic conditions but for one reason or another will not generate increased payments. They do not have a condition that has been a cost grouping, or they are not in the hospital long enough. Also, end-of-life hospitalizations will be avoided because of the prospective methodology. If you were admitted in the hospital last year but you are not in the health plan this year, there is no increased payment for you.

Does the PIP-DCG compensate health plans fairly for the risk that they assume? I've already talked about the exclusion of one-day hospitalizations. We have some concerns about that; however, we still think that this is an improvement over the current system. On an individual basis, the research shows that it accounts for about 6% of individuals' following year cost variability. On a group basis, there's a significant improvement over current age and gender payment. Does it maintain the consumer choice? We were not able to reach a conclusion on this. There are a couple different things that could happen with this risk adjustment methodology, and they're pretty much polar opposites. Plan choices could increase if health plans are being paid more appropriately for their more expensive lives. On the other hand, there was quite a bit of carrier withdrawal last year, prior to implementing risk adjustment. This could exacerbate that. Without having any type of marketplace testing, we were not able to conclude whether or not this goal will be met. Finally, does it protect the financial soundness of the system? Health plans really have two different types of expenses. They have administrative expenses and the expenses of delivering health care. Hopefully, the administrative expense is only a small portion, but health plans will probably see their administrative expenses rising because of the data collection requirement. There should be a better matching of Medicare revenue to healthcare expenses.

In summary, our work group thought that, from a conceptual, theoretical basis, the PIP-DCG risk adjustment mechanism was actuarially sound; however, we had some concerns about implementation, operation, and the impact that Pat is going to speak to you about.

Mr. Patrick J. Dunks: There are a few things that Jill touched on in our work group that we thought were still outstanding in our work. HCFA put a couple late modifications into the program. Jill mentioned we were chasing a moving target, and some of these things came just a few days before they wanted our report. They decided to include HIV within any inpatient diagnosis, which would trigger the HIV PIP category. We did not have a chance to properly review that in detail. Another issue was that, when they developed all their risk scores (keep in mind that this is a prospective method), they looked at diagnoses in one year and medical costs in the next year. If you had a given diagnosis in one year, they totaled the medical cost for the next year, which ended December 31 and started January 1. The method they will use now collects data from July 1998 through June 1999; then it will be used for payments throughout the year 2000. There is an extra six-month window there, but they didn't rescale any of their factors. We didn't have time to deal with that, but we didn't necessarily think it was totally unreasonable. That is one of those outstanding issues.

We also thought there was inadequate testing—in particular, the discretionary admits. When HCFA defines discretionary admits, that means those admits that do not impact cost in the next year. One example would be an appendectomy. An appendectomy does not necessarily imply that there is going to be higher costs in the following year. They categorized many admits as discretionary if there was a choice whether to admit or not. In general, the decision to admit was largely discretionary, so they had a group of academic clinicians make those decisions. One of the things we are concerned about is that academic clinicians, depending on their backgrounds, are not necessarily in tune with leading-edge managed care. Their list may have been different if the reviewers making the decisions were from a very efficient program.

We mentioned that we did not adequately test the impact on HMOs, beneficiaries, or providers. Many states have run a pilot for a year or done other things to reduce the initial impact in the market. We suggested testing the sensitivity of this coding method. For example, examine a predetermined number of inpatient charts, code them most aggressively within the legal bounds to get the best or highest PIP-DCG score, and then code them least aggressively and see the difference. This will show if coding practices have a lot of impact on this particular method, which would be one measure of how much it was subject to gaming.

Jill touched on the testing of the one-day length of stay. Our concern was that it was potentially biased toward inefficient plans. HCFA tested only two or three health plans. It took their data and scored them, excluding and including one-day lengths of stay, and for the couple of plans they looked at there was not a big difference. In my mind, that was not an adequate test because HCFA didn't

necessarily pick efficient managed care plans. There is a wide spectrum of how efficient plans are. I do not think it got to the core of the question, although it may not have understood that.

We had inadequate data to review the rescaling factors. As actuaries, there were some numbers that we wanted to replicate, and we had some concerns about taking averages. We couldn't look at newly eligible factor development, which came out the day of our report. They came up with a working aged adjustment of 21% of what the payment otherwise would have been, without backup for that number.

There are many miscellaneous incentives within this system, in particular, the two-day length of stay inpatient-only requirement to get credit. For instance, one procedure that can be done in a hospital is chemotherapy. Chemotherapy done in the hospital as an inpatient is not clinically as good as doing it on an outpatient basis. There are a lot of germs in the inpatient setting, and there are many good reasons to do it on an outpatient basis. It is actually better care to do it on an outpatient basis, yet there is a health policy that states if you can keep a member into the next year, you're better off putting him or her in the hospital for two days to deliver this care than you are otherwise. We think there is a problem there.

We strongly recommended in our report that HCFA should continue the analysis and testing of this method and adjust it appropriately. We don't know what its plans are. It said it will, and I guess the jury is out on that. We recommended the HCFA audit data quality, and I believe it has created some pilots to do that. I don't know if that was at our urging, or if it already had that in mind from an oversight point of view. Risk adjustment should include ambulatory data as soon as possible. We have some concerns about the long-term implications of an inpatient-only adjuster. The study showed that managed care was "selecting" the healthy enrollees. When they put in a risk adjuster, they also limited the general payment increases, which, over time, we could view as decreases, so they essentially double-whammied the system. We are concerned about bias in the inpatient-only system that may make it very hard for plans to compete.

For each Medicare-plus choice organization that submitted data, HCFA shared, for each of their contract numbers, the risk scores based on inpatient data from July 1997 through June 1998. HCFA gathered all the inpatient admissions in the country from the managed care plans and fee-for-service people. They looked at each plan's September membership and calculated a score based on all the admissions. This was possible because once it had all the HMO and all fee-for-service information, HCFA knew all the admissions for everybody in the country, and it produced those scores. Some plans did not receive scores because their data was not submitted in a timely fashion or it was inadequate. Almost all the risk

scores fell between 0–15% reductions. Most of them were between the 5–10% reduction on a full implementation basis. A few saw increases of 4–5%. I think the lowest, or the largest increase, was -16%. That was only one or two plans, and I have seen numbers worse than that working for my clients since then. I haven't been able to figure out if it is a data issue or it is real. It is alarming when you are talking about -20%, which is real money even at only 10% in 1 year. This year, the scores will be used for the Adjusted Community Rating (ACR) developments that are due in a couple of weeks and are a projection of revenue for the year 2000. They will not be used for actual payments. HCFA will recalculate the scores based on the inpatient data from July 1998 through June 1999, which must be submitted by September. It will then go through the same thing it did last year, and each member will have that score at the beginning of the year. At the beginning of the year 2000, each member will have a PIP-DCG score for the year, which will stay with him or her for the whole year, and that's how clients will get paid.

As I mentioned, some managed care organizations sent incomplete data in spite of public warnings that plans needed to get all their data in. If data is not submitted, the plan will receive lesser payments in the following year. HCFA does not care, but it is tough luck to the plan that doesn't comply with the data requirements. That message still holds. As I said, the year 2000 payments are based on this data period. The way the process works is that the organizations submit the information to the fiscal intermediaries to audit, and HCFA talks with the plans to fix problems so they can get entered into the system. There is a mechanism to add previously underreported admits at a later date and get a retro adjustment from HCFA.

There is a strong need to verify HCFA payments. Here's how you can. Carve your membership up into three buckets. If you are a Medicare plus-choice plan, you can look at the inpatient data for those members that you had during the data collection period. You have their inpatient data and their age/gender data, and you know if they were on Medicaid at that point in time. You might even know if they were ever disabled or not. You should know if they are working aged, that's an element of the current methodology, and you should know which county they live in. Essentially, outside of the disabled number, you can exactly reproduce the scores for each of your members using this methodology. You might want to take a sample to make sure your score from HCFA makes sense. If you are one of those very few plans that is at 1.04 that gets an increase, you might be happy and not look at it very much, but for most of you this is going to cost you money. If HCFA makes a mistake, it is not necessarily in your favor.

For new members, there are two categories: the Medicare age-ins and those who become newly eligible for Medicare. Inpatient data is not available, and Medicare does not have the fee-for-service data. If a new member enters your plan as a

commercial enrollee, only age/gender factors will be used. You may or may not know if they are on Medicaid or if they are a disabled working agent.

What can you do about all those things you don't know? As a group, look at your Medicare age-ins to determine the portion of Medicaid-eligible, and compare this in relation to the existing members. If it is vastly different, is there a reason? Is there some mechanism in the market that caused this to happen? Did I change my plan design to attract certain people? Can it be explained? If it does not seem reasonable, you could take a telephone survey of your individuals, and ask them if they were eligible. If you rely on HCFA's files to get this right and HCFA does not pick up the cases and your Medicaid eligibles are lower than you'd expect, that probably means in the PIP-DCG method that you're being underpaid. It is going to be up to you as a plan to check those things because nobody is looking out for you but yourself. The same checking is necessary with the disabled and the working aged. Although you are not really given an incentive to identify more working aged, there is an incentive to identify those who were once identified as working aged but have since stopped working and are no longer working aged. Of course, in terms of fraud you have to look for both.

The other new members, and these people are even more troublesome, are in fee-for-service or with a different plan. They are not age-ins so HCFA has their inpatient information, but you don't have it and HCFA will not share its inpatient information with you because that would be too much work for HCFA from an administrative perspective. You are limited in the kinds of things you can do to check on it. Only a small portion of these new members actually triggers a PIP-DCG category other than category four, which is the base age/gender category and the lowest. Look at the portion that triggers the score to see how it relates to your existing business. Does that smell right? If it doesn't, look back at your market. Was there an HMO in your market that just pulled out, giving you all those new enrollees? It could be that it didn't really care about their inpatient data in that area. If the managed care organization submitted junk, the Medicare-plus choice organization that picks up those members will be penalized. If you can figure that out, at least you can talk to HCFA. You must look at these things. Look at the average score for those people and see how it relates to your existing business. It will probably have to be adjusted for age/gender, which is available to you. You will have to do the same checks for Medicaid-disabled and working ageds that you did for a new member. Some of this may be part of your initial clinical assessment that many Medicare-plus choice plans are doing. When someone enrolls, he or she immediately undergoes a clinical assessment by a nurse. You might add a few questions to pick up this information so you can mechanize it and have something to check against HCFA's records.

In addition to this, you need to maintain your audit of the old payment methodology. Remember, it is still 90% old methodology and 10% new for 2000. However, even though it is just 10% new, get good at it while it's not horribly costly. Learn how to check it and try to work out the bugs because it is only two weeks from now that you are going to start collecting data as a Medicare-plus choice organization on which your 2001 payments are going to be based. We are starting to see real money when we talk about 30%. I urge you to verify what HCFA is doing on your membership side. I know some of you are saying more admits will mean more work. I looked at a plan just yesterday with a result of -20%, and I'm not sure if it's the data or something else. It's a small plan with 10,000–15,000 members. Even half of that impact, in the first year, is worth almost \$1 million to the plan even at 10%. One million dollars is a lot of money in terms of profit margins, so you really can't afford to look the other way.

How can you do this? There are postings on HCFA's Web site. We use it in our office, and it works pretty well. It has a few quirks, so you have to be careful. If your data goes in as garbage, the program is not smart enough to tell you, so you will have to do a lot of data checks before you enter your information. You will have to do all your data edits to make sure things are appropriate. You can also license the software from the firm that developed it for HCFA. It will support you, although there's a price tag associated with that, but it is not horribly expensive. It does a good job of supporting you or you can outsource this. You can hire somebody to do this for you, but you will still have to collect the data. You will need the inpatient data, the eligibility data, and disabled data or estimates. You might want to track these by provider and benefit plans moving forward so you can do analyses of the relative revenue under each benefit plan and/or for providers to see who is attracting the real sick people and who is not. This will be helpful to adjust your provider contracting or your marketing appropriately. You can make management adjustments as you go. It's better to track it now so you can cut things later. You will certainly want to track by county because one of the decisions you may be facing is which counties to cut, at some point in time, from your service area.

What do we think the market's going to do? I have heard complaints about this, and I don't think the complaints are necessarily directed at the method. I think complaints exist because there will be less money for Medicare-plus choice organizations. They may be structured as an attack on the method, but they are largely a reaction to the number.

What are plans doing? I think most of my plans are going to wait until this June 28, 1999. That will give us three days to finish their ACR before they finalize their decisions. They're talking about adding premiums and reductions in pharmacy

benefits. In many markets, there has been a push up, up, up on benefits. We are now entering an era when, with the risk adjuster and caps, the adjusting average per capita cost (AAPCC) increases are going to be capped at 2%, offset by the impact of the risk adjuster phasing in. We are looking at flat revenues for the next several years in those areas unless Medicare costs on the fee-for-service side take off, which is unlikely because there are laws limiting those increases. Plans have to live with flat revenue; however, the underlying costs are still increasing. The choices are tough. You can increase revenue by raising premiums or reducing benefits. We are also seeing service area exits. I don't think they are all related to the risk adjuster, although I think they are somehow intertwined. It is a very complex issue. What I have seen is that new entrants are more cautious. Potential clients used to come to me wanting to do Medicare and be up and running in eight months. They were not highly educated about the whole process, but they were sure they had to do it. They were sure it was a gravy train where they were going to make money. Now they want to look at it first. They have heard horror stories, and they want to see how it looks before they dive in.

From the Floor: I am somewhat confused about individual enrollees who are able to choose different plans in different months, and how the PIP-DCG payment is determined for the new carrier. The way you described it is a one-time payment. Is that prorated by the months that the enrollee is in the different plans?

Mr. Dunks: Let me see if I understand your question correctly first. You have enrollees who are in different plans in year one, and you're looking at how the payment is impacted in year two?

From the Floor: Right.

Mr. Dunks: Last year they were in a different plan either for the full year or for a partial year. This year, you have them. Medicare will hopefully have the actual data for all of the prior year, although it's not exactly the calendar year before it's shifted by six months. That's the data that they will base your payment on.

From the Floor: If the member is with me the first quarter and switches to a different carrier, how is that one-time payment prorated between my three months of enrollment if he or she switches to a different plan to get a new pharmacy benefit?

Ms. Stockard: Payment follows the beneficiary, so his or her payment is only calculated for one year. His or her payment doesn't change from year to year, but it follows the beneficiary around from plan to plan.

From the Floor: Will it be prorated monthly? The examples were annual calculations.

Ms. Stockard: Yes.

Mr. George Calat: If a carrier knows he or she is pulling out, it's a possibility he or she could purposefully not provide the data to HCFA with the intention of hurting their competitors. I guess that could be pretty extreme, but is there anything HCFA will be doing to protect against that?

Mr. Dunks: We have asked that question of HCFA, and they said that's a problem. I think that admission, if you can identify it, allows you to go to HCFA and negotiate. I wish we had a better answer.

Mr. Timothy M. Ross: I have a couple questions. The time period for the data is July 1 to June 30 ending 6 months before the year. The current AAPCC system assumes a 5% reduction from historical fee-for-service cost. Is that 5% reduction still built into the risk payments?

Mr. Dunks: The 5% reduction has actually grown, and the BBA is ratcheting that down towards 90% over the years. First it went to 94.2%, and then down 0.5% per year thereafter until 2002 or 2003. But it is going down, and that is the double whammy I talked about because, by ratcheting that down, it is limiting the overall increase in this market.

Mr. Ross: I think there are probably some fraud and abuse considerations here. HCFA and the attorney general certainly have been very aggressive in pursuing fraud and abuse in the Medicare-Medicaid arena, and the issue of up-coding will have an impact. I think one of the comments was that the patient is not affected, but there are some premium capitation arrangements. Certainly you have an environment where the hospital codes and the plan's requirement to be diligent in policing that affects both the hospital and the plan. A related issue is that this is still a number of years off, but when you move beyond inpatient-only, the data issues in running this kind of risk adjustment are going to be exaggerated and exacerbated because by including more, you're going to have a greater predictive affect. In other words, more will be risk-based, and you can have more problems with capturing noninpatient data, for example, capitated plans, staff plans, Kaiser plans, and so on.

Mr. Lane: I think you asked numerous questions or have numerous observations. Yes, the ambulatory data will be troublesome in terms of the reliability and the consistency of that data. While that has been submitted over time on HCFA forms,

it hasn't been used, so it hasn't been really tested. On the inpatient side, hospitals are using the same rules they always have used for diagnostic-related groups. That is one reason why it was more readily available. However, HCFA, by its own admission, wanted to get the ball rolling on this risk adjuster. It has asked the managed care industry for all the data for seven to eight years. It said, "It's time to move guys. If you don't like this inpatient-only, show us the data on the ambulatory side. That's what it told us in a nutshell.

Mr. Bluhm: I think it's probably safe to say that it went with the inpatient-only risk adjustment mechanism out of recognition for how bad that data was going to be when the time came.

Mr. Bryan J. Curley: I have a clarification question. You mentioned that HCFA is going to be using data with only a six-month lag for the risk adjusters. Does that mean that it will use the 1998–99 data for 2000?

Mr. Lane: Yes. There is not an exact match between how it actually intends to implement versus how the data was collected and evaluated for the factors. You are collecting data on a 12-month rolling period starting in July and ending in June, processing it in 6 months, and then applying it at that point in time. That is not how the factors were actually collected and developed, so there is a mismatch.

Mr. Curley: If the data that was collected from July 1997 to June 1998 was used only for the rescaling factors and the ACR, what was the purpose of that collection?

Mr. Dunks: It was for the dry run and the ACR. HCFA used several years of data for the rescaling factor, not just one year. It went back quite a few years.

Mr. Joseph N. Romano: I think implementation is going to be tremendously difficult. I am sure there are certain industry groups, the American Association of Health Plans (AAHP) for one, that are dealing with some of the practical implementation issues. What is the current Academy role in continuing the Academy's presence in dealing with either the industry groups or the focus on implementation?

Mr. Dunks: I can't speak about the most recent activities other than those I have been involved with. I know we have testified before both House and Senate committees about the work we have done, but as far as I know there is no additional effort being planned. I am not sure why we would want to necessarily do that.

Mr. Romano: From the Academy's point of view?

Mr. Dunks: From the Academy's point of view, yes.

Mr. Romano: With respect to the Medicare-current eligibles that are moving into a risk plan, HCFA obviously has the data to the degree that it has been utilizing services. You have indicated, and I'll address this one to Pat but other people can comment, that it is the health plan's obligation to encourage the submission of claims and to put the systems in place to get the submission of claims. However, with the Medicare program, there is a significant turnover and movement from the fee-for-service sector into the managed care sector. The managed care sector is then dependent on the information that the fee-for-service sector gives and the length of time it takes to submit the claims data or the information to HCFA. Outside of the normal penalties or issues that HCFA has for its hospitals and the fiscal intermediaries, what incentives or controls is HCFA going to use to ensure the completion of submitted information for the managed care companies?

Mr. Dunks: HCFA has stated that the submission of data for the managed care companies is a condition of their contract.

Mr. Romano: No, this is information given to the managed care companies.

Mr. Dunks: You are asking what they are going to do to be sure fee-for-service data comes through?

Mr. Romano: Absolutely.

Mr. Dunks: I think HCFA is assuming this will be done largely because people do not get paid in the fee-for-service world unless they do it.

Mr. Romano: Understood, but my memory is that the lag patterns for inpatient claims were significant—certainly greater than a month and a half or two months. Even if we have a longer term potential to true-up, we're talking about not getting that extra potential payment for 2000 until 2001 during the next cycle of collection.

Mr. Dunks: Actually, because the data will go by date incurred, if it takes a long time to submit, you might never see it. I think that is an opportunity to ask your people coming into the plan if they've had any admits, and you can hopefully check their PIP-DCG score. I don't think HCFA is planning anything.

From the Floor: I think somebody brought up that HCFA used 1,000 as a cutoff point for credibility under the PIP-DCG. Have you given any thought or do you have any idea of what a plan would use for credibility under the risk-adjusted methodology? I know you said a lot of your plans have these outrageous numbers,

and I have had plans with the same. They get these letters in the mail, and they think they are going to get killed, when in truth they only had a couple thousand member months during that period. What would you use as a cutoff?

Mr. Dunks: I am not sure I understand the question.

From the Floor: When an HMO receives the letter from HCFA with its score, specifically the letter that was sent out to all the plans a few months ago, the plan asks its actuary if the number is credible. Is the risk score credible based on the number of member months that the plan had? What do you think is a good cutoff for credibility purposes?

Mr. Dunks: I will give you a purely actuarial answer—it depends. The answer has to be in terms of confidence. Often people who aren't used to dealing in probabilities ask for concrete evaluations. What your answer really needs to be is more like "this represents a number that has an $x\%$ chance of being within $y\%$ of the right answer," and translate that for the management into something, although it doesn't really matter. That is what they're going to get paid on, and it is irrelevant how credible it is.

From the Floor: If you are projecting cost going forward, it is not necessarily what they're going to get paid.

Mr. Dunks: If you're using it for projecting cost, yes.

Ms. Stockard: Because you're asking about credibility from a pricing perspective if a plan gets a score of 0.9%, that wasn't based on pricing; it's in the mechanism. They ran their beneficiaries through a risk-adjuster formula, and that's the number that was spit out, regardless if you had 100,000 lives or 1 life.

Mr. John P. Burke: It is a good point if you are projected for community and are looking at a national average for managed care plans of a 7% reduction, phased in over time, and you get a risk score for your own health plan; that's a 20% reduction. What are you projecting for your community for the next year? You weigh the personal risk score, maybe 7% for community, and look at the rescaling factor. If you don't have 10,000 members, you have to give a fair amount of weight to what the community average is, even though your own risk score is a pretty good predictor if you keep all your members for the following year. The question still stands. I would use something like a weighting between how many members they have and 10,000 as a good representative of your county or community.

Mr. Dunks: I am a believer in simulations, and my reaction would be to build a simulation to see how reliable it is for that purpose.

Mr. Lane: It is a very similar calculation to what you already have today on the claims side. How credible were last year's claims compared to next year's claims? Now you have to consider credibility on both the claim side and the income side. How credible was last year's income based on the health score versus what you're going to get next year, as well as the claim risk? Your variance is obviously going to go up, and your credibility for the total match will go down.