MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

Ronald Reagan Building
International Trade Center
Horizon Ballroom
1300 13th Street, N.W.
Washington, D.C.

Thursday, September 11, 2003
10:20 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair
ROBERT D. REISCHAUER, Ph.D., Vice Chair
SHEILA P. BURKE
AUTRY O.V. "PETE" DeBUSK
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ALLEN FEEZOR
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ALAN R. NELSON, M.D.
JOSEPH P. NEWHOUSE, Ph.D.
CAROL RAPHAEL
ALICE ROSENBLATT
JOHN W. ROWE, M.D.
DAVID A. SMITH
RAY A. STOWERS, D.O.
MARY K. WAKEFIELD, Ph.D.
NICHOLAS J. WOLTER, M.D.

AGENDA ITEM:

Risk adjustment issues in Medicare managed care
-- Dan Zabinski

MR. HACKBARTH: Last for today is risk adjustment in managed care. And we are pretty close to back on schedule now.

DR. ZABINSKI: It looks like we're back on schedule again. Should I cut back any?

MR. HACKBARTH: That's not an excuse to be long-winded.

DR. ZABINSKI: You know I'm never long-winded. This with take like 12 minutes, is that okay?

To finish today's session I'm going to discuss risk adjustment issues in Medicare. Our motivation for presenting this material is that MedPAC and ProPAC and PPRC, as well, have all made recommendations on risk adjustment. And we're at a point where CMS will soon begin using a new risk adjustment system that could substantially affect payments to Medicare+Choice plans. The Commission, thus, has an opportunity to evaluate the new system and make comments and recommendations.

My discussion today will actually cover two topics. One is the new risk adjustment system that CMS will begin using next year. And the other topic is the possibility of using prescription drug data to risk adjustment payments for comprehensive benefits provided by capitated plans in the Medicare program.

Before discussing either topic, though, I'd just like to quickly review what risk adjustment is intended to do. The purpose of risk adjustment is to adjustment the payments to plans for the expected relative costliness of their enrollees.

You cam see how this works in Medicare+Choice by examining the methods for calculating payments which is just the product of a county-based payment rate and an enrollee level risk score.

While risk score indicates an enrollee's expected costliness relative to the national average, so it's job is essentially to adjust the base rate in each county up or down according to how much the enrollee is expected to cost.

The idea is that the risk score and the payment increase with an enrollees expected costliness. For example, risk scores below 1.0 indicate an enrollee is less costly than average, so payments for those enrollees are below the county base rate.

Conversely, risk scores above 1.0 indicate an enrollee is more costly than average, so payments for that enrollee are above the county base rate.

Now let's discuss the system that CMS will use to determine risk stores beginning January 1st, 2004. This system is a version of what's called the Hierarchical Condition Category or HCC model, and CMS has named their version the CMS-HCC.

This model uses enrollee's demographics and diagnoses from inpatient, outpatient, and physician encounters in a base year to determine an enrollee's expected costliness in the following year.

This is a more comprehensive model than the current risk

adjuster which uses only demographics and principal diagnoses from hospital inpatient stays.

While developing the CMS-HCC, CMS found that the costs of specific groups of beneficiaries differ so much that it was beneficial to develop different versions of the CMS-HCC for different populations. Therefore, there are four versions of the model, one each for the standard community dwelling population, one for the long-term institutionalized, one for ESRD beneficiaries, and one for frail beneficiaries participating in special programs such as PACE and Social HMO. In the next few slides we'll discuss these specific versions of the model.

First, the standard CMS-HCC. It is a slightly simplified version of the full HCC in the sense that the CMS-HCC collects beneficiaries' diagnoses into what they call 64 disease groups, whereas the full HCC has about 86 disease groups. Despite being a simpler model, the CMS-HCC does explain nearly as much variation in costliness as the full HCC, 10.8 percent versus 11.1 percent.

In general, for each disease group an enrollee falls into, CMS will make higher payments under the CMS-HCC.

In addition, CMS found that if a beneficiary has more than one condition, in some cases some combinations of diseases cost more to treat together than to treat them individually. Therefore, the CMS-HCC also includes additional payments for the attractions of some conditions.

Ultimately, CMS will use the CMS-HCC to calculate an enrollee's expected costliness by summing their costs associated with the enrollee's demographics. There are disease groups that they fall into and the disease interactions that apply.

The CMS also developed a version of this model for the long-term institutionalized who are beneficiaries who have lived in institutions for at least 90 days. The long-term institutional version is not much different from the standard version as it includes the same 64 disease groups, the key difference between the models being that the costs associated with demographics and disease groups in the long-term institutional version were estimated with data from the long-term institutional beneficiaries.

A third version of the CMS-HCC was developed specifically for beneficiaries with ESRD. This version actually has three parts, one each for three ESRD subpopulations. Those who are on dialysis, those who have had a recent kidney transplant, defined as a transplant within the last three months, and finally, those who have had a successful transplant, meaning a transplant that took place more than three months ago and the beneficiary has yet to return back to dialysis.

First of all, the part of the model for the dialysis patients includes the same 64 disease groups as the standard CMS-HCC, except that it doesn't exclude kidney diseases. The costs associated with disease groups in this model were estimated with data on dialysis patients.

Second, the part of the model for recent transplant patients is quite basic. It simply consists of making three equal monthly lump sum payments, one in each of the three-months following a

transplant. These payments are simply adjustments upward in the dialysis-based payment rate for the higher costs to the transplant patients.

And finally, the part of the model for successful transplant patients uses the standard model, that is the standard CMS-HCC, with additional payments for the cost of immunosuppressive drugs and intensity of care.

The final version of a CMS-HCC is for frail community-dwelling beneficiaries enrolled in PACE and demonstrations including social HMO, the Minnesota Senior Health Option, the Minnesota Disability Health Option and the Wisconsin Partnership Program. For institutionalized beneficiaries participating in these programs, CMS will actually use the long-term institutional version of the model I discussed two slides ago.

The idea of the frailty version of the CMS-HCC is to first determine an early risk score using the standard CMS-HCC model. Then an organization level frailty score will be added to the CMS-HCC score to produce a total risk score for each community-dwelling enrollee of these programs.

In this slide, I discuss the method for calculating the organizational level for frailty scores. First, CMS has decided to measure an enrollee's frailty with the number of difficulties and ADLs that the enrollee reports. Then CMS has used MCBS data in regression analysis to determine the relationship between the number of ADLs that a beneficiary has and the difference between their actual cost and their expected cost from the CMS-HCC. The idea of doing this is to measure how far off the CMS-HCC is in predicting costs for beneficiaries with different numbers of ADLs.

Using these results from the MCBS analysis, CMS has determined a frailty factor associated with number of ADLs where the frailty factor is an indicator of the average percentage difference between the actual cost and the cost predicted by the CMS-HCC for each number of ADLs.

Ultimately CMS will survey community-dwelling enrollees of these programs to find out their number of ADLs. The agency will use these survey results to calculate a weighted average frailty score for each organization and this weighted average frailty factor is the organization's frailty score that is ultimately used to determine a beneficiary's total risk score.

In addition to developing several versions of the CMS-HCC, CMS also addressed a couple of issues related to risk adjustment. These include, first of all, that the CMS-HCC model will be phased in. In 2004, that means 30 percent of M+C payments will be based on the CMS-HCC but that percentage will increase annually until it reaches 100 percent in 2007.

Second, CMS will like two proportional adjustments to all payments to M+C plans in 2004. One adjustment is a dollar adjustment in payments for changes in providers coding of conditions over time. This change will decrease aggregate payments under the CMS-HCC in 2004 by about 1.5 percent.

The second adjustment is an increase to all payments that were adjusted by the CMS-HCC, so that total payments in Medicare+Choice are constant in 2003 and 2004. With this budget

neutrality adjustment, total payments in 2004 under the CMS-HCC will be 16 percent higher than they would be without the budget neutrality adjustment. But because only 30 percent of the payments will be adjusted by the CMS-HCC in 2004, the net effect is an increase in payments of about 5 percent.

Now I'd like to turn our attention to a different topic, that being the possibility of using prescription drug data to risk adjust payments to capitated plans and Medicare. This is not an entirely new idea. Some plans had approached CMS with the idea of being able to use drug data under the CMS-HCC.

Our motivation for discussing this topic was spurred by the reform bills that recently passed in the House and Senate. If the Congress ultimately passes reform that provides drug coverage in Medicare, interest in using drug data to risk adjust payments for comprehensive benefits may increase.

Now I'm not aware of any study that actually analyzes use of drug data to risk adjust payments in Medicare, but drug data and risk adjustment for non-Medicare populations has been excessively analyzed. This research suggests that prescription drug data do perform fairly well. But because their results are not based on Medicare populations, I do emphasize that these results may or may not be indicative of how well they would perform in the Medicare program.

In any event, for the populations analyzed, these studies indicate that the drug data explain about as much variation in costs as what are called the ACG and ADG models, which are two widely used diagnosis-based models developed by researchers at Johns Hopkins.

However, two one models that use diagnosis data, one being the HCC model that we've already discussed and the second being the CDPS developed by Rick Kronick at UC-San Diego, explain more variation in costs than do drug-based models.

Now an important result from this research is that they found that the models that combine drug data and diagnosis data perform better than models that use either type of data alone. But I do caution that no study has analyzed the effect of adding prescription data to the CMS-HCC, so it is not clear how much adding prescription drug data to the CMS-HCC would improve that particular model.

As analysts and policymakers consider whether whether drug data are viable risk-adjusters, they should consider not only the variation in costs explained, but other advantages and disadvantages of drug data relative to diagnosis data.

In the literature, the advantages of drug data cited include first that drug data often are more complete and higher quality. This is especially true for plans without encounter data such as those that pay providers subcapitated rates or on a salary basis.

Second, nearly all prescription drugs show up in pharmacy data, so using prescription data would not disadvantage plans that do not have encounter data.

And third, prescription drugs tend to be more timely. For example, it takes CMS about six months to collect enough diagnosis data to effectively determine risk scores but prescription data are often available soon after prescriptions

are filled.

Disadvantages of drug data cited in the literature include that new drugs frequently are introduced and also use of drugs can change quickly. So models that use prescription data may have to be updated more frequently to account for these frequent changes than do diagnosis models.

And second, the use of prescription data may reward increased prescribing patterns which may not be a desirable effect.

In closing, I would just like to say that we are seeking the Commission's comments and their views on risk-adjustment issues that they would like to pursue and perhaps make recommendations on.

DR. ROWE: I don't really see a value for us to go into deep considerations with respect to the pluses and the minuses and the potential theoretical values or disadvantages of adding the drug data. I think you should just get some drug data and add it to the Hierarchical CMS and see if it improves the proportion of the variance that's described. If it does, it's worth adding. And if it doesn't, it's not. Isn't that possible, rather than sort of a priori making some sort of hypothetical decision?

DR. REISCHAUER: Where are you going to get the drug data?

DR. ROWE: Are there not drug data available from plans in Medicare+Choice and that you can go and get the data? Don't all the Medicare+Choice plans have the drug data?

DR. REISCHAUER: They offer a million different coverage situations. Even if the Medicare prescription drug bill were to pass, I would have great reluctance about doing this simply because the benefit that everybody has will not be the same. Some people will have a more generous benefit than others.

Unless you can make sure that that is not biasing the --

DR. ROWE: Do you think they're really that different?

DR. REISCHAUER: Across Medicare+Choice plans they're hugely different. Some don't provide any. Some provide only generics. Some have limitations of $500 a year.

DR. ROWE: I would recommend that you not do the pilot study on the ones that that don't provide any.

In other words, you could just go and pick a kind of middle of the road or fairly generous drug benefit and do the analysis. And if that doesn't improve the proportion of the variance that you can attribute, then it's not worrying about.

DR. REISCHAUER: But you're then than explaining the utilization of other services for people who have good drug benefits. And then you want to apply that to everybody else who might have deeply overpaid or over adjusted than everybody else.

DR. ROWE: No, it's okay the way it is.

I'm simply saying, and I think you're on the same -- but otherwise, you can go around the mulberry bush here forever, as to the pros and cons. It's a very pragmatic question.

DR. NEWHOUSE: There's also the issue of how do we get access to these data?

DR. ROWE: Alice will give you access to them.

[Laughter.]

DR. ROWE: CMS could pay a health to do the analysis on this

data.

MS. DePARLE: Some of them wanted to.

DR. ROWE: Exactly. Maybe a health plan could just do the analysis and say this is what we found. I don't know, it seems to me easier than the hypothetical pros and cons.

DR. REISCHAUER: I think it probably doesn't improve at all. But I'm asking, so you find that out, it's an interesting article in a journal. But really, can you apply it given the structure of the program right now?

DR. ROWE: What you're saying is you wouldn't go there anyway, even if it improves?

DR. REISCHAUER: You couldn't go there is what I'm saying.

DR. NEWHOUSE: You couldn't go there without a drug benefit, is what you're saying?

MR. FEEZOR: Bob, you're saying because the drug benefits aren't equal, you couldn't apply whatever you learned from it then?

DR. REISCHAUER: We'd probably be better off applying it even with unequal, but it wouldn't be quite kosher, because some people have employer-sponsored coverage, some will have plan A, some will have plan B, some will on Medicaid.

DR. ROWE: See if this is logical. Since, as you say there are abrogados number of different benefits for health plan pharmacy benefits, then we wait until Congress decides what their benefit is going to be. And since there are so many obviously different variants out there, we pick the one in an M+C program which is just like the one that Congress picked. And we go and do the analysis on the data retrospectively to see whether it improves the variance. And then you know.

DR. REISCHAUER: What I was saying is under the current laws, Congress is not going to pick an benefit. The benefits could be quite different that are available to people.

DR. ROWE: We don't know what the law is going to be.

DR. REISCHAUER: No.

MS. ROSENBLATT: I was going to raise the data issue, too. I guess I'm less interested in the risk adjustment using prescription drug data. If does improve it, at least on the commercial population. I don't know what it does on the Medicare population. I think the health plans that are interested in using prescription drug data are those that either have capitated provider arrangements and don't get good underlying data and are looking at prescription drug data as being better than trying to get the underlying physician data. I think that's the whole issue there.

And a plan like Kaiser, I think, has been a big proponent of using prescription drug data, but I don't want to speak for Kaiser.

But the question I have, since I don't know all the bills that we were talking about at lunch very well, is there anyway to start collecting prescription drug data in this interim period, when the discount cards are being used or anything? So that at least there's data collection of some sort? No?

MS. DePARLE: Why not?

DR. REISCHAUER: No.

MS. DePARLE: Why not?

DR. REISCHAUER: You have prescription card A, and it covers certain medications. It doesn't cover others. You will buy some outside the card, some inside the card maybe. I mean, I don't know.

MS. DePARLE: That's a question about the quality of the data? Alice's question is can you collect it?

MS. ROSENBLATT: I mean, one of the things I see is let's suppose that a drug benefit does pass. And I think one of the concerns that everybody has is nobody knows what that is truly going to cost because we do not have data. So wouldn't it be nice to start collecting data now before something like that went in? Something is better than nothing.

MS. DePARLE: We have MCBS data.

DR. MILLER: The way a lot of this works, at least for estimation purposes, is you run it off of MCBS where you do have a more complete set of experience for the beneficiary. Of course, it's a small sample and there are issues there.

There was certainly contemplated in some conversations a while back that if you got the drug card off of the ground, it would give you some framework to begin to start doing this with the quality and incompleteness being the caveat to it.

When you say can't we just collect it right now, in Medicare, since there's no benefit, there's absolutely no vehicle. You would have to create the vehicle to do that.

MS. ROSENBLATT: I'm not saying now. I'm saying if the discount card does in, is there any provision there? I guess where I'm going is rather than us ending up with any sort of recommendation on risk adjustment connected with pharmacy, is it better for us to make a recommendation on data collection?

MR. FEEZOR: If I can just follow Alice, that's what I was trying to get at this morning, Mark, could we put something in our publications that talk about what a valuable resource this could be and to begin to at least contemplate that. Bob is right, it's going to be a very disparate number of benefits. But still, it is such -- based on our work at CalPERS, it's such an extraordinarily good modifier and purifier of the data.

And Dan, if you haven't seen it, actually Kronick did a lot of our work. But we did about a three-year study in terms of the availability of information and the best methodology for risk adjustment. We absolutely said we wanted to use our pharmaceutical data as a modifier. That's about a three-year-old study.

DR. NEWHOUSE: I want to cross the chasm in the table and agree with both Jack and Bob. I agree with Jack that rather than debating whether the under-65 generalized to the over-65, we better get some data on some sample from the over-65, whether it's from the health plans or not, and find out what the increment in R-squared is in that.

But in the larger picture, I think I want to more agree with Bob because, my guess and I'd bet some money on it, from the under-65 data is that it's going to be a modest improvement.

Now what I'm worried about, let's suppose it is a modest improvement -- or even if it's more than a modest improvement --

rather one would want to use this as a risk adjuster, there will undoubtedly be drugs that kick a person into a disease category which is a very expensive disease category. And prescribing a relatively cheap drug will lead to a large increase in the reimbursement.

All of the studies that I'm aware of have to be in the context of not actually paying on the drug or not increasing the entities' revenue if you prescribe the drug. Within Kaiser that would certainly be the case.

We already are worried about overmedication among a subset of the elderly, at least. And maybe there would be a demo or something, but we ought to have some knowledge of behavioral effects in addition to the just percentage of variance, in the absence of behavioral effects, that would go on here.

MR. HACKBARTH: Other comments? Okay.