MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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COMMISSIONERS PRESENT:

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MARY K. WAKEFIELD, Ph.D.
NICHOLAS J. WOLTER, M.D.

*** March 21, 2003 proceedings begin on page 240.**

AGENDA ITEM **PAGE**

Variation in per capita Medicare expenditures 3
-- David Glass

Health insurance markets for Medicare beneficiaries: work plan and preliminary analysis 47
-- Scott Harrison, Jill Bernstein

Sources of variation in hospital financial performance under prospective payment 78
-- Kathleen Dalton
Cecil G. Sheps Center for Health Services, UNC
-- Julian Pettengill

Growth in the use of physician services 133
-- Kevin Hayes, Joan Sokolovsky, Chantal Worzala

Post-acute care services
-- Introduction 165
-- Sally Kaplan
-- Comparison of freestanding and hospital-based skilled nursing facilities by patient characteristics, use, and costs 166
-- Suzanne Seagrave
-- Patterns of post-acute care use pre- and post-PPS 183
-- Chris Hogan, Direct Research, LLC
-- Nancy Ray

Impact of providers' costs on the quality of dialysis care 206
-- Chris Hogan, Direct Research, LLC
-- Nancy Ray

Note: March 21st proceedings begin on page 240

P R O C E E D I N G S

MR. HACKBARTH: Good morning. First on our agenda today is a discussion of variation in per capita Medicare expenditures.

David, would you lead the way for us please?

MR. GLASS: Thank you. Our theme today or at least this morning is variation. We're going to return to the question of geographic variation and Medicare expenditures. These are some preliminary results and we're hoping to put together a June chapter on the subject. This is kind of Variation 101. We're going to start from the beginning. A lot of people, Wennberg and Associates up at Dartmouth they're looking at more subtle things. They're looking at variation in service use by smaller areas. But we're starting right at the beginning because these are the kind of questions we've had to answer. We'll get to the other eventually we hope.

So the question we've had to answer is concern over variation in Medicare expenditures, particularly per capita Medicare expenditures among states. So we're at the state level. There is large variation and it raises concerns. People are worried that it means that the program

is inequitable.

A lot of the problem though has to do with the use of incorrect measures of per capita expenditures. We've gone over this in the past and it's in your handout. Basically, the problem is they were using -- what's often used is a number that's essentially the provider payments in a state divided by the number of beneficiaries who live in the state. That gets you into trouble in states where you have either large in-migration or out-migration for services. Like Washington, D.C., for example, has a lot of providers and hospitals and gets a lot of beneficiaries coming in from Maryland and Virginia. So when you divide all the services provided in D.C. by the number of D.C. beneficiaries you get a high number, which is also an incorrect number.

So we've started what we think is a better measure and it starts with the amounts that CMS calculates is fee-for-service expenditures by county. We focus of the fee-for-service expenditures rather than fee-for-service plus, for instance, M+C expenditures. That's because we're trying to understand what's really going on in these geographic areas, and the M+C payments, as you know, have a lot of

policy in them as well so are somewhat arbitrary. So we've look at fee-for-service expenditures by county to start with and then rolled it up to the state level. This is consistent with the Commission's position on what M+C payments should be, for example. That they should be the same as the fee-for-service in that area, risk adjusted, of course.

Now conceptually there's two sources of variation. There's the cost and the quantity of services. Principally in the cost we're going to look at input prices, the cost of doing business in an area. We feel that should be adjusted out, if you will, because that's a major source of variation. Then another one is the mix of providers. By this we mean that different areas, different states have different mixes of, for example, hospitals. Some have lots of teaching hospitals, some have very few. Because payments are made differently to some of these places you need to think about that. Also, someplaces have a different mix of other kinds of providers like long-term care hospitals as opposed to SNFs, and you also would like to think about how you might be able to adjust for that to get an equal -- an understanding of what's being provided.

Now quantity, one of the principal things that determines how much health care someone seeks out and receives is there health status. If you're really sick and you have to go to the hospital, obviously you're going to require a lot more health service than someone who is well. So we want to be able to take that into account. Also there are some other beneficiary characteristics which people have said affect service use, such as how much supplemental insurance you have, for instance, income, other characteristics. Then there's, of course, practice pattern variation which is what a lot of people have looked at in some depth and we're just going to get to that here in this presentation. But that's another possible source of differences in the quantity of health care provided in area.

The question here, of course, is should the differences be of concern or are they simply reflecting differences in the cost of doing business, beneficiary characteristics, and physician behavior? The differences in expenditures I'm talking about. So is that a concern or is that just the way things are?

So the way we started this is to sort the states by their per capita fee-for-service expenditures. So we

figure out what range each state falls in here and then, in this case we're weight it by the beneficiaries who live in the state. The reason is that we're looking at beneficiary per capita expenditures so we need to weight the state population in here so we're treating all beneficiaries equally. If you didn't do this you'd end up with beneficiaries in states with small populations counting for more than a beneficiary in a state with a large population. So we have beneficiary weighted this so the height of these bars is the percent of beneficiary-weighted states in each of those dollar categories of per capita fee-for-service expenditures.

The thing to note about this is it's kind of bell-shaped and it's pretty spread out. If you want measure things you could say that the three central bars have about 60 percent of the distribution in them. In Table 1 in the handouts we also have things like standard deviation and that kind of measure in there. $740 is the standard deviation in this, and the average is about $5,400.

MR. HACKBARTH: David, could I just make sure I understand the beneficiary weighting? So this graph says that 60 percent of beneficiaries live in states with per

capita expenditures between $4,500 and $6,000?

MR. GLASS: That's exactly right.

DR. REISCHAUER: Can we use the term per beneficiary rather than per capita? Capita is really the number of people living in a state, right?

MR. GLASS: Okay.

DR. REISCHAUER: You use both terms here and it strikes me as an unnecessary confusion.

MR. GLASS: We don't want that.

DR. NEWHOUSE: When I look at the bars it looks like it's more than 60.

MR. GLASS: There's two above 20 and one at 20. Yes, it's around 60, 63 or something like that.

So we look at this and then we start to adjust for known factors so we can get down to, is there really much variation underlying this or is it just cost and health status and other things that we know about.

MS. ROSENBLATT: Can I just ask another clarifying question, talking about numerator and denominator? If the beneficiary lives in a state, that beneficiary is in the denominator.

MR. GLASS: Right.

MS. ROSENBLATT: But if the beneficiary who lives in Maryland gets service in D.C., what's happening to the numerator?

MR. GLASS: These are all the expenditures on behalf of the beneficiary. So in that case it would go back to Maryland because that's where the beneficiary lives. That's why we wanted to use this measure.

MS. ROSENBLATT: I thought I read that but what you said before didn't sound like that. So it's all mapped back to the beneficiary.

MR. GLASS: Back to where the beneficiary lives, right. To the state of residence of the beneficiary. That's why we in fact wanted to use this one.

So the first thing we adjust for is input prices. Essentially you can do this by making them all equal to one. When you do it you end up with 75 percent of the distribution now showing up in those three central bars. You can see that the whole distribution is pulling in and getting taller. So a lot of the variation that people are worried about to being with is simply that we pay different amounts in different areas because input prices are different, which seems reasonable.

MS. BURKE: Can I just, following up on Alice's point. One of the things that confused me about this, not the definition of how the numbers work, but the fundamental question. If you are tracking the patient back to their state, so essentially you're accounting in the state for the expenditure, the practice pattern is not that state's practice pattern. It's a pattern that exists in the state in which they were services.

MR. GLASS: Right, or the area --

MS. BURKE: So that you're distribution in fact isn't a reflection of what's occurring in those states. It's occurring only to the extent that someone lives there but they are going -- it happens only in those cases where people really travel across boundaries.

MR. GLASS: Yes. But that's not uncommon thought. So when we get down to talking about practice pattern you'll note that we start saying, you probably don't want to look at the state level any more.

MS. BURKE: Right, you want to look at a county.

MR. GLASS: Right, or a market.

MS. BURKE: But the bigger point is you're bringing people back to where they live rather than where

they're served.

MR. GLASS: Right.

MS. BURKE: Which may be a fundamental problem.

MR. GLASS: No, I don't think it's a fundamental problem, because I think that's what you want to do.

MS. BURKE: Sure, it is.

MR. GLASS: If the question you're trying to answer is, are beneficiaries in my state getting the short end of the stick here, I think is what you want to talk about.

MS. BURKE: Except that your beneficiary in your state may be serviced at the Mayo Clinic.

MR. GLASS: That's fine. That's why we're tracing it back to the state where the beneficiary lives.

MS. BURKE: So it's not a question of the practice there. It's a question of the practice where they're serviced.

MR. GLASS: If the question you're answering is, are the beneficiaries in my state getting shortchanged, you want to know how much is spent on them, regardless of where they get it.

MS. BURKE: But when you begin to try and

understand why the practice patterns are different, that's not a function of where they live. It's a function of where they're cared for.

MR. GLASS: That's right.

MR. HACKBARTH: And that point the state really doesn't become an appropriate unit of analysis.

MS. BURKE: Right, or even the county.

MR. HACKBARTH: Or even the county, right.

MS. BURKE: It's not about where they live.

DR. REISCHAUER: Not to interrupt the smooth flow of your presentation further, but the price adjustment is the one for the place the service is delivered? So I live in western Maryland but come into the District of Columbia for half of my stuff and half of my stuff I get in western Maryland. Do you weight the individual elements or deflate the individual elements --

MR. GLASS: I'll get back to you on that.

DR. REISCHAUER: I think it's impossible to do is what I'm thinking.

MR. GLASS: I'll ask. I don't remember which one we did.

DR. ROWE: David, does this include GME?

MR. GLASS: GME is in those bars as they're sitting there now. We later take it out.

DR. ROWE: But this includes it still.

MR. GLASS: Yes, it's still there.

DR. ROWE: Because that's one of the major sources of variation, or a source of variation, right?

MR. GLASS: Yes. We'll get to that in a minute.

MR. HACKBARTH: In that spirit that we'll get to that, why don't we go ahead and let David present. I know that I was one who started this. I acknowledge and accept full responsibility.

MR. GLASS: So if you take out input prices, clearly you change the shape of this and in the way that one would expect.

We then adjusted for health status. We did that by looking at the HCC, hierarchical condition category risk adjustment scores and we adjusted by that. We're trying to get to the quantity of care beneficiaries use eventually. We've also adjusted in here for Part A and B participation rates, which is a very small effect but just different states have different mixes of people who are Part A only and Part B only.

So after those adjustments you can see how the three central bars represent about 90 percent of the distribution as opposed to about only 60 percent when we started, and the standard deviation has dropped to 480 from 740. So you can see that just adjusting for these things that seem very reasonable to adjust for gets rid of a lot of the variation and presumably a lot of the concern that people have that their beneficiaries in their state are getting incredibly shortchanged. There are still some outliers in this distribution but most of it has moved towards a central tendency.

You can see the effect. The black bars are where we started, the gold bars are where we ended up. Any payment system that didn't account for input prices you'd kind of wonder about that. And if expenditures didn't vary by health status you'd find that pretty unusual too. So this is not an unexpected result, but we're trying to show that it's important to look at these things and adjust for them before you start arguing about, our your beneficiaries getting shortchanged or not.

So the question is, is the remaining variation a source of concern? Are areas with more use getting higher

quality and those with less use being punished? We want to try to look at the question at some level at least. So when we do that we also now adjust for GME, DSH, and IME, which doesn't make the bars look all that different. It moves states up and down. It changes the state's position around but leaves the distribution unchanged. That's a subtlety about what order you do things in to say, how big is the contribution of this or that. We'll get into that in the paper when we write it, but from here on out we've also adjusted for IME, GME, and DSH.

Now this doesn't show up on the overhead too well but I hope you can see it on yours. What this is is a picture where we've gone to an ordinal measure. We ranked the states on the bottom in ascending of adjusted service use per beneficiary. We're calling it adjusted service use because essentially we've taken the payment side of it out. So the states that are at one is the lowest use, and state out at 51, at that end, is the highest use. What we've plotted it against is a measure of high and low quality, also ordinal, that was used in a JAMA article fairly recently. It's based on how frequently Medicare patients receive 24 preventive measures or treatment methods that

have strong indications of improving outcomes. So it's a measure of quality that others have use.

What jumps out at you is that many of the states with low adjusted service use, over near the origin there, have relatively high quality, and many of the states with high adjusted service use have relatively low quality. We put a trend line in there to help visualize that. So if the concern was that low-use states have low-quality care, they're not getting their fair share, the beneficiary is being shortchanged and not getting high-quality care, that concern isn't supported by the data, as we see it.

DR. ROWE: There's not a typology here. The quality measure does not have imbedded in it some measure of utilization or volume.

MR. GLASS: No, it's just a percent of patients getting aspirin within 24 hours after an MI, that sort of thing. It's that percent of people getting beta-blockers or a percent getting certain vaccinations and that sort of thing.

DR. REISCHAUER: But some of it is mammography or screening and things that in fact back Medicare pays for. You just listed a series of which Medicare doesn't pay for

but some of them Medicare pays as well. So it is in utilization.

DR. ROWE: But it would work in the opposite direction.

DR. REISCHAUER: That's what I'm saying.

DR. ROWE: Because the more flu shots and mammograms you do, the higher volume it would be, and that would make this relationship even steeper.

DR. REISCHAUER: Stronger. It's a stronger story.

DR. ROWE: I'm not trying to see whether it would be stronger or weaker, I just want to understand if there is a volume piece in here. We may want to correct for that at some point if it's important.

MR. GLASS: We're not trying to quantify things too much here. That's why we're doing things ordinally. Anyway, we found this an interesting fighting.

We'd also point out that if one tried to equalize payments to states by, for example, just simply upping the use in lower-user areas by overpaying or something like that you'd run into, in addition to all the other problems with that you'd run into the problem of the beneficiary liability would go up. Again here we've plotted the relationship

between state's service use on the bottom and beneficiary liability of the left, on the Y axis. Again, pretty clearly, if you do a lot of use your beneficiary liability tends to go up.

So if you were to just try to bring up the lower-use states for some reason, your beneficiaries might not like it all that much because their liability would go up as well. And when that went up probably Medigap in that area would go up, and employers up, and all that sort of stuff. And it's doubtful that increasing use in the lower-use states would improve quality, as we saw from the previous slide.

So what we've been talking about so far is state level use. The only point of this graph is to say that even if variation by state were eliminated you'd still have variation at other levels. For example, this is county per capita service use, unweighted in this case, in Iowa, which people often think of as a fairly low-use state. The point is that use here varies by a factor of two between the high and low-use counties. So even eliminating variation at state levels probably wouldn't eliminate variation per capita at the county level or any other level you want to

calculated it at.

DR. REISCHAUER: Do you have any ability to do this for more than a one-year period? Because once suspects that the --

MR. GLASS: These would jump up and down.

DR. REISCHAUER: -- the outliers are small counties and you have one heart transplant and it --

MR. GLASS: Yes, we could do it for that. Since our point here is just to show that it varies it doesn't make -- but, yes, one would think that that would smooth it a little bit. I think actually we tried it and it didn't make too much of a difference. Counties might change positions but it didn't do too much.

Now what this also drives us to is to remember that beneficiary characteristics and provider practice patterns are predominantly local phenomenon, as you pointed out. Others have investigated at the market level, Wennberg and company have done that, and they've showed that supply of physicians and hospitals make a difference, and other things make a difference. So in your paper we started to do that a little bit. We have a few preliminary results but we're not going to go into them this month. We're going to

try to develop those a little more for next month.

So what's our preliminary conclusions? The first is this measure of Medicare payment that has often been cited as misleading for analyzing variation in Medicare spending and obviously they should use our measure instead. Most variation is caused by differences in the cost of inputs and differences in use arising from differences in health status; not a surprising finding. And the remaining variation could be caused by differences in practice patterns, difference in beneficiaries' characteristics and that sort of thing. Those have to be probably investigated at a lower level rather than the state level.

I think one of the more interesting conclusions so far is that higher quality doesn't seem to follow from higher use. Equalizing state payments by increasing use would increase beneficiaries' costs sharing in low-use states; not surprising. And the causes of remaining variation -- what are we going to do about the variation remaining after we've done all the adjustments we have? We don't think you can look at those at the state level very well and we're going to have to -- if we need to look at those we're going to do it at a lower level. In the paper

we use something called the hospital market areas and there are about 360 of them or something.

DR. ROWE: David, are you correcting for age?

MR. GLASS: Yes, I think so. When we do all the risk adjustment for health status that's in there.

DR. ROWE: For health status, that includes an age adjustment.

MR. GLASS: Yes, we've rolled that in there I think.

MR. SMITH: David, does the beneficiary characteristics include Medigap, employer wraparound? Is it possible that some of the service use is connected with the availability of supplemental insurance and the distribution of that across --

MR. GLASS: It probably is. I don't know whether we'll be able to get at it because it's a question of how do you find out what supplemental insurance people have in smaller areas. I think that's a little hard to do because of the data sources available on it. But I think Scott may be talking -- Scott is going to talk about supplemental coverage and how that varies in a little bit.

MS. BURKE: I wondered where in the calculus one

assumes the mix of services offered by a provider and what impact that might have. For example, we know the adjustments for teaching hospitals; they're quite explicit. But for example, the presence of an ER, the presence of research activities, that may or may not get picked up in the context of teaching. The presence of a psych unit. There was a particular mention of home health and long-term care and whether those were operative activities in the hospital. But I wondered whether or not there were other aspects of service by their nature that lead to greater utilization. I didn't see that mentioned. I just wondered if that was picked up through acuity or there was some other way of picking that up, or whether it had an impact.

MR. GLASS: I don't think we have any way of picking that up. We think it may be an issue like the presence, are there long-term care hospitals in the area or not. Interesting question. We haven't delved into it yet.

MS. BURKE: But specific to the hospital. Hospitals that have ERs get a certain kind of admission. You're likely to see certain kinds of behaviors. The presence of those kinds of services in an area are likely to lead to a certain level of acuity and a certain delivery of

service.

MR. GLASS: But that would be a very small area you're talking about and we certainly aren't going to drop to that -- I think even Wennberg and those guys look at hospital referral regions which at least have one large tertiary care hospital that does certain kind of things and usually include a whole number of hospitals in the hospital referral region. So I don't think anyone drops down to the single hospital level that I know of.

DR. NEWHOUSE: Let me compliment you particularly on the quality graph. I think that will add something. I was going to try to make Bob Reischauer's point somewhat differently. Some of the variation you observe even at the state level is random. What you're interested in is how much of this variation in some sense is systematic. One way to get at that is the way he suggested, which is to average several year, which is in fact how we do the AAPCC at the county level, and see how much variation remains, or how much you take down the variation when you average in more years. Because use of a year is really an arbitrary period. So you might want to consider that as a subsequent thing to do.

MR. GLASS: We'll do that.

DR. WAKEFIELD: Actually David asked one of the two questions that I had. David, I just want to say, I think you did a great adequate starting to help clarify some of the issues around variation so thanks so much for this work. How it gets used remains to be seen but it's a really nice start in terms of teasing apart some of these pieces. I think it's also a nice piece to accompany the information behind Tab D that we'll be discussing in a bit, because there too we get some good clarity brought to some of these issues.

The one question I've got for you is -- it's more of a comment. On the sources of variation in cost, specifically input prices -- this is a little bit of a second order item but I'm wondering if we might, when this gets written up, include a nod to the variation that we know is not quite on point all the time in terms of accuracy or fairness of some of the inputs like wage index payment without getting into the details. But saying that these are the mechanisms for payment. We know that within them they are not in all cases accurately capturing cost, accurately reflecting cost on the provider side in terms of accuracy of

payments. Do you follow what I'm suggesting?

MR. GLASS: Yes, I think Julian actually will be getting into some of that, how we might actually go about quantifying some of that.

DR. WAKEFIELD: It's more just if we could reflect that we know already from work we've done previously that there is some discrepancy in the accuracy of those adjustments.

MR. GLASS: From work we've done previously I don't think that was all that --

DR. WAKEFIELD: The wage index, for example.

MR. GLASS: I thought that generally supported it.

DR. WAKEFIELD: Yes, so I'm saying, could we reflect that here when this is written.

MR. HACKBARTH: The problems with the wage index I think tend to be more hospital-specific problems. For example, the hospital that's close to a boundary and ends up with a wage index that arguably is much lower than they ought to give, given their labor market area. But the analysis that we've done looking at the wage index overall would seem to indicate that it's actually a pretty good proxy. For example, it correlates very highly with the cost

of living differences across the country. So in this case we're stepping back and looking at the big picture as opposed to the very legitimate hospital-specific issues that sometimes come up with regard to the wage index. But in the aggregate it's actually pretty good.

DR. WAKEFIELD: I take your point and maybe then -- obviously what you're suggesting, Glenn, is to not necessarily go there. I guess my concern when I read this was, the takeaway that somebody could have reading this, assuming that we've got the payment policies just right. And was there the possibility that that could be contributing to some of the variation, if you don't have those payment policies just right. But you think that's too far a step removed from this discussion though.

MR. HACKBARTH: No, I think it might well be worth it to make this distinction clear. Here we're talking about aggregate analysis. That does not mean that there are not legitimate hospital-specific issues about payment fairness. It's just not the question that we're answering here.

MS. BURKE: I wanted to just follow up just to ask a further clarification. To what extent will these indicators pick up the -- and it may be through the wage

index-- pick up the difference in staffing patterns and how much of a contributor? For example, the use of RNs as compared to LPNs, which is a substantial difference in cost that's incurred by a hospital, and that varies around the country in terms of the availability, the choice of how one staffs up. To what extent and how is that picked up, or is it, or does it need to be?

MR. GLASS: It's not picked up at all in the data we have.

DR. NEWHOUSE: It's just the DRG payment.

MS. BURKE: Yes, but I'm not sure that the DRG payment fully picks it up either.

DR. REISCHAUER: It's the average.

MS. BURKE: Right, it's the average. But if part of this exercise is to understand some of the variables that exist that lead to differences --

MR. ASHBY: [off microphone] Could I clarify that point? As the wage index is constructed today it would, unfortunately, be picking up the exact factor that you're talking about.

MS. BURKE: Because you'll have a higher input price for --

MR. ASHBY: Yes, because it will be registered as a higher input price. We have long said that the wage index should neutralize that factor and that's what we refer to as occupation mix. So when the wage index is fixed along those lines, one would think it would contribute to a further narrowing of the geographic variation, because in fact occupation mix is raising the values in large urban areas in states like New York, Massachusetts, and the like, and it is tending to do the reverse in some of the smaller, sparsely populated states.

DR. NELSON: I join the others in complimenting you, David. This is very well done.

In the text you touch on capacity as a factor with reference to physician population ratios being a variable that influences expenditure. I'd like to push that a little further. If we begin with the hypothesis that one of the major factors is capacity, both on the hospital side as well as on the physician side, do the curves look the same for Part A as Part B? Do Part A expenditures to some degree parallel Part B? Do they go together or are they incongruent ? Is the curve either wider or tighter?

If it would be possible to examine that further I

think that would be interesting to see.

MR. GLASS: We can look at that.

MS. ROSENBLATT: I want to add to the list of people complimenting the chapter and I particularly liked the chart on quality versus dollars.

One way of dealing with the effect of the large claim that Bob mentioned would be to truncate any individual's claim as well as running multi-year. You could also see what a truncation does. What this opens up in my mind is the AAPCC county rates. It might be interesting for us to try to blend that into that chapter. We're answering one question but it certainly leads to that question.

I should know the answer to this but maybe somebody can help me. The ratio that we're talking about being misleading, is that the starting point for the county rate calculation or did they map it back to the beneficiary as well?

MR. GLASS: No, the AAPCC starts with the same number that we started with here, the fee-for-service by county.

MS. ROSENBLATT: So it is mapped back to the beneficiary.

MR. GLASS: Yes. That's in fact where we get this from, the same database.

MS. ROSENBLATT: But it still leads to the question of, is the AAPCC starting point, which is the county fee-for-service rate, an appropriate starting point?

MR. GLASS: The objections we've had to that in the past are small areas bouncing around, which is why we're looking at the state level. That isn't an issue I don't think.

MS. ROSENBLATT: But I guess the point I'm trying to make is if there's a lot of unexplained variation then does it make sense for that to be the starting point? That's a question.

MR. GLASS: For M+C? I think that goes back to our usual discussion over it seems to be small an area in some places, too big in others. You'd like to approximate market areas more reasonably.

MS. ROSENBLATT: I'm just suggesting that maybe that should be added to this chapter.

MR. GLASS: Yes, I guess we could.

DR. REISCHAUER: Let me add my compliments to you and to Dan, who I know can't be here. I think this is

really an excellent piece of work. I had one question which was just a clarification and then a comment, which I'm not sure I agree with but I think it's worth exploring.

My question for clarification is, you've made adjustments for what you call Part A and Part B participation rates and I wasn't quite sure what that really meant. It's really the ratio of people who have A but not B. It's not the individual rates of each which --

MR. GLASS: No. Some people have Part A -- in some states a different proportion of people have Part A only, and others one will have Part B only, and we just adjust -- it makes almost no difference at all. It just seemed the right thing to do.

By the way, I was told that the fee-for-service numbers we're using we think are -- are apparently three-year averages as they are.

DR. REISCHAUER: The second comment that I want to make has to do with the quality versus service use chart which is sort of the bombshell chart. At one extreme you could say, the more services you provide, the worst quality is. That would be a stretch but it would be a good headline.

I'm thinking as an economist, factors of production are paid less in some places than others. Somebody might argue that they're less efficient. They're seemingly the same factors but they really aren't. Maybe you should run the same chart not adjusting for price differences.

DR. ROWE: Can you explain that again, Bob?

DR. REISCHAUER: Factors of production can be paid differently because the market is different, or in local area cost of living is different, or whatever. Or in fact they are less efficient. We call an hour of labor the same, but it really isn't. The skill level is different, et cetera. It would be interesting -- but we're making an adjustment for these price differences and the price differences -- and maybe we shouldn't when we're looking at the quality.

So take extreme example, it takes four visits -- I don't want to use a state here or I'll get a lot of hate mail. It takes four visits to a doctor in Mars to get the same results as one visit in Pluto. And the doctors on Mars have a wage rate that's one-quarter what the doctors on Pluto have. Would we care?

DR. ROWE: I guess what I was trying to understand is whether your correction -- the total cost corrected for all the inputs and everything else are a function of the kind of unit costs and the volume. So we have total costs and an axis, or something like that, and then quality on the ordinate, or vice versa. It would seem to me -- what I was trying to do was get to an analysis that didn't have the unit cost in it and just had the volume and looked at the relationship of volume to quality. But it sound like -- that's why I was asking you whether that's where you were going. Is that another way to say what you were doing?

MR. GLASS: That's essentially what we have.

DR. REISCHAUER: That's what we have. But what I'm saying is, what if you spend $100 on Pluto and $100 on Mars, what's the quality outcome in those two situations?

MR. GLASS: We can certainly run it that way and see what it looks like. We'll leave it to you to interpret it.

MR. HACKBARTH: David, the graph that's labeled beneficiary weighted state level per capita expenditures adjusted for input prices, the fifth one in the packet, is that just input prices or is that all of the policy

adjustments like teaching adjustments and the like?

MR. GLASS: No, that is simply input prices. We did the other ones later. We didn't show it in this one.

MR. HACKBARTH: They weren't in this packet.

MR. GLASS: Again, it turns out if you do it at the end of the process -- we did it at the end of the process because those include not just cost factors but also the policies such as -- like the IME over --

MR. HACKBARTH: In fact that might be one way to characterize that there is some --

MR. GLASS: That's why we did it last.

MR. HACKBARTH: A certain amount of the variation is by design. It's the result of conscious policy. We can argue whether it's good policy or bad policy, but it's fully an intended variation. Then there's a residual that is not explained by that.

One take on this is, for some people unless you read it very carefully, might be that the variation isn't as big as it seems at first glance. For people who aren't reading carefully they may see that as being at odds with Jack Wennberg's work which emphasizes how big the variation is and how important it is. I don't see this work as being

at all inconsistent with Wennberg's. We're just talking about difference pieces of the puzzle. I think it will be very important to present that clearly so that there's no confusion about it.

MR. GLASS: We'll try to do that. All that we've done at the beginning here they've already adjusted for before they start talking about variation.

MR. HACKBARTH: Basically Wennberg is talking about the residual.

MR. GLASS: Right. And we're trying talk about --

MR. HACKBARTH: The other stuff.

MR. GLASS: The simpler stuff first.

MR. DURENBERGER: I'm assuming that this product is going into a June market to be read on the Hill and places like that because the issue of state-by-state equity has been raised, and I'm probably the first guy that raised it, at least the first member that raised it. Sheila knows that and I spent a lot of time with this sort of thing.

I watched the evolution of the Medicare Justice Coalition, the fight over pay equity. Then I watched the congressman last year who ran his campaign on this. So I'm looking at when I'm reading this, I'm trying to pretend what

impact is that going to have on that same congressman or on Chuck Grassley, the chairman of the Finance Committee or something like that.

I sort of come to the conclusion that explaining the difference between what Jack Wennberg has been doing for 35 years and this is a subtlety that's going to get totally cost on a whole lot of people unless it is somehow repositioned. I'm trying to struggle with how best to reposition it so you can get maximum value from the research, which is very good, but also maximum impression that there's more to this issue of how they pay in Medicare then just 1,099 in Banner, Nebraska versus 9,000-something in St. Charles County, Louisiana, or my favorite, Miami and Minneapolis.

The point is there is more to it than that. So when I think about how to position the issue initially, how to create why we're doing this, it's not so much a response to the state-by-state equity as it would be a legitimate question that we should raise, as all payers should raise, as to whether or not things like overuse, underuse, misuse, and so forth are in some way facilitated by the payment system. And then what is it about the payment system that

causes overuse. And then the research says, overuse does not improve quality. I think this is what this one tentatively says. Jack's will say, overuse areas or overexpenditure areas actually have worse access. There's some tentative conclusions we could come to if we're thinking about this as public policy.

But the point is, what role is the payment system playing in achieving the result we want or the result we don't want? Then I would guess that would lead us to a research agenda which says, okay, if you want to change this, don't do what Durenberger foisted on you and his crowd in the mid-'90s which was the floor, and Mary Wakefield and others. We said, let's just raise the floor, and now they're raising floors and things like that. It would lead you then to some form of a research agenda that would say, if they want the spending system or the payment system to achieve these particular ends, then we need do the following.

I told Joe I read with interest the piece that the Harvard group had in the latest issue of Health Affairs which is a long research agenda. It looks like to the year 2010, something like that, to get to the answer.

DR. NEWHOUSE: You can up the AHRQ budget and get it done faster.

MR. DURENBERGER: My point simply being, we're really dealing in such a simplistic environment where if you look at the stuff on -- and we've been perpetuating this. You look on its face, it looks like inequity. Just to say, it's not the inequity that you think it is I don't think helps as much as if you give them another reason that they ought to invest in a process of finding out what is the best solution to the problem for Iowa or whatever the case may be. So it's just kind of like, how do we set it up? I'm not arguing against what's in here as much as, or as well as the rest of you did, but how do we set this up for its presentation in June?

MR. HACKBARTH: In several different places in the papers for this meeting this issue comes up, that the relationship between quality and cost, or quality and utilization may not be what people suspect; that more is better. The one chapter where we delve more specifically into the policy responses is in the discussion of incentives for quality. As you'll recall there's discussion there are about how to reward providers who are providing high quality

while using fewer resources. Not that that's the end of the conversation by any stretch, but this is an important theme as I see it of various chapters in the June report.

We're running out of time here. We've got a few more people. Carol, Nancy-Ann, Joe, and then Mark.

MS. RAPHAEL: I was just wondering if we knew anything at all about the percentage of dually eligible in the states, because to some extent I find that a proxy for high utilization. I don't know if that's true throughout the nation but I'd be interested if we had any information on that.

MR. GLASS: I'm sure we have data on it. We haven't put it in here. I don't think we've tested that as an explanatory variable.

MS. RAPHAEL: There is something in the Medigap chapter.

MR. GLASS: Right. But there is data.

MS. RAPHAEL: Then the other observation I would have is, Americans love rankings and here we're ranking states. Are they going to would remain anonymous in our report? Because I can really seen a request by states to where do I rank in all of this, and which is the number one

state, and which is the 50th state. How do we plan to handle that?

MR. GLASS: Mark, you can answer that one.

MR. HACKBARTH: As I've recall the Steve Jenks piece listed states so the quality rankings are public and certainly the cost rankings are no secret either. Personally, I don't think any of this is confidential in any way so I think we ought to include it myself.

DR. MILLER: Yes, I think you've put your finger on a dilemma that comes up in all of this. We felt that this question was really important to investigate because people are talking about it, but I fear the notion that people will ask, cut it this way, cut it that way, cut it this way. At some level there may be something to publishing things in the report and saying, we looked at this information. I fear the second wave that comes behind it and has the staff just churning through thing multiple different directions. That I am going to try and hold the line on.

But the dilemma was to answer this question at all, it just seemed so much is being talked about on the Hill that to leave it alone entirely also was a problem. So

it's a dilemma.

DR. REISCHAUER: I think it gives a very misleading impression to actually put the states' names in here because these are rank ranks and you could have 30 states that are imperceptibly different from one another but because of the way you do the axis on a ranking it makes it look like something is going on that maybe isn't really there.

MS. DePARLE: CMS uses quartiles for that reason.

MR. HACKBARTH: If I were to do it I would actually put an appendix that has the raw data by state as opposed to just the ordinal ranking. I agree with your point on that.

We need to bring this to a conclusion. I want to give a couple people who haven't had a chance to say anything an opportunity.

MS. DePARLE: I will be very quick. I thought this analysis was terrific and it really moves the debate forward on these issues. Just focusing back on the charts and the analysis about the relationship between states service use and quality of care, I realized I wasn't clear after reading this and maybe it should be clear about

whether -- are we talking about states beneficiary service use or are we talking about spending? At some point you say spending.

MR. GLASS: It's what we call adjusted service use, and we think we've taken a lot of the spending factors out of it.

MS. DePARLE: So it really is mostly service use.

MR. GLASS: Yes, we're trying to get it down to service use.

MS. DePARLE: Can we say anything about what services we're talking about? Can we say anything more about --

MR. GLASS: We could probably say something about Part A and Part B.

MS. DePARLE: Because that might be interesting, if we were able to characterize those quality indicators that CMS came up with, about where they would fall. And to get to Dave Durenberger's question, something like the beta-blockers that's captured in the DRG somewhere. Just in drilling down to see whether the payment system can somehow in some way facilitate or encourage one type of utilization versus another. I don't know whether it's possible to look

at that.

MR. GLASS: We're not going to be able to get to that I don't think. And whether the payment system could even be expected to solve all these things --

MS. DePARLE: No, but I think it's interesting to think about, so I just wondered how much data we had on that.

MR. SMITH: I'll try to be brief. David, I'd belatedly join others in saying I found this both informative and provocative, so in that sense it was a terrific piece of work and I appreciate it.

Dave Durenberger's question seems to me raises the question of how to -- he raised the framing question. One way to read this draft is it vindicates the payment system. Saying that we don't have problems with the payment system isn't going to work in this environment. But it may be that the way to frame this is the focus on the unexplained residual, really to try to vindicate the payment system. We've got practice patterns and we've got beneficiary characteristics. We talk about those later when we talk about Medigap, when we would talk about dual eligibles that Carol raised.

But instead of writing the chapter to make the variation go away, to write the chapter so that we focus on where the sources of variation really are, and you do that it seems to for me at the end when you raise practice patterns and beneficiary characteristics and we ought to say more about that.

But actually I wanted to add a third item, which is the question that Sheila raised a little bit earlier, is there a Say's law, a build it and they will come phenomenon here as well?

Is there something on the supply side which is an important piece of understanding utilization variations? I don't know that we have the data to get at that, but it seems unlikely, and particularly when you read this back to back with the physician service utilization draft, there's a subtext there that suggests, and Wennberg's stuff suggests that there's something about the supply side which is important to understand. To the extent we can I think it would be useful to add that as an at least worth exploring piece of an explanation of the residual.

MR. GLASS: We might be able to show a correlation but we couldn't show a causative -- they build it and they

came or was everyone wanted to come there so --

MR. SMITH: I understand. I think taking note of it would richen the mix in a useful way here. I understand that we don't understand chickens and eggs.

DR. NEWHOUSE: I actually want to speak against that for just that reason. That is, for all we know more doctors or higher priced specialist doctors are in areas where people are sicker. Therefore, we don't -- it really is the case that we don't know how to attribute this variation.

So I would have us try to stop with the beneficiary characteristics and -- because I just don't think one can interpret -- the problem is, if you do this it will invite the interpretation that what we need to do is reduce the supply in the high rate areas or boost it in the low rate areas and we don't really know.

MR. SMITH: I think we don't know, Joe, but I don't think we can produce this collection taken in its sum and not say this question bubbles up. Now we may want to do that in a way which expresses a great deal of caution, as you appropriately raise but I don't, at least I couldn't as I tried to read this stuff on a plane over the weekend, I

could not put away -- the missing explanatory variable here is the supply side of the equation and at least we ought to say that, even if we can't say much about it.

DR. NEWHOUSE: I think they can certainly raise the issue of what to attribute the residual variation to, but I read this as, of the gross variation how much can we explain with these factors. The framing issue is really, is the glass have empty or half full, having come to that point. I guess we'll leave to -- in terms of further analysis I would not want us to go down that road I think because I don't we have anything to say when we get to the end of it about what to do.

MR. SMITH: I don't think I know enough, but I'd be interested in knowing whether the road ought to be traveled.

DR. NEWHOUSE: One small note. I do think we need to be very clear about what time period we have because the slides and the figures in our book say 2000 and now you're saying three-year average.

MR. GLASS: We'll clarify that.

MR. HACKBARTH: Okay, we need to move on.

Thank you, David. Good work.

Next up is health insurance markets for Medicare beneficiaries.

DR. BERNSTEIN: Good morning. Before I start I want to go through a couple of quick points. The bottom line here is that sorting out what's going on in different markets for different insurance products, or other ways of supplementing Medicare in different parts of the country for different kinds of beneficiaries with different needs and different preferences is challenging. That's what we really want to do here is to lay out some of the reasons why it seems useful for us to take a closer look at some markets, which is what we plan to do.

Secondly, I want to emphasize that the goal here today is to focus on these issues from the perspective of the beneficiaries. Sometimes the discussion is going to shift to what's going on from the perspective of plans or insurers. Those issues are clearly important. We're going to talk about them in the chapter as we develop it but we don't have time to do everything at once. I'd also mention that whereas David's presentation was billed as a 101 level, this is an AP class. We're kind of assuming that the material that we talked about in developing the chapter in

the March report is still relatively fresh in your mind. If I skip over anything important or you need some background information that's not here, Scott will fill you in.

So what we want to do here is to look briefly at some interrelated aspects of market structure, quickly move through some preliminary analysis that Scott has been doing and talk about some of the issues that have come up earlier today in terms of what kind of data are out there and what you might be able to glean from them about different kinds of insurance and other supplementation, and then to talk a little bit about we plan to do in the June report and some more in-depth work we plan to do thereafter.

The first of the interrelated issues that we're trying to use to frame these concepts is the importance of the difference between individual versus group market products that are available to Medicare beneficiaries. These products can look pretty different to beneficiaries. When it comes to individual insurance beneficiaries are kind of on their own when it comes to purchasing Medigap policies or to looking at their choices among M+C options. As we've talked about in previous sessions, the M+C market was pretty volatile there for a couple years. The choices for

beneficiaries who do have a choice among alternative plans can be pretty hard to sort through.

Medigap is very different. The reforms enacted in OBRA 1990, which included standardizing the policy types that can be marketed to beneficiaries reduced the level of confusion considerably and reduced the potential for abuse in the Medigap market, but it can still be a little bit complicated for beneficiaries. There are or there may be, in addition to policies I through J, high deductible options, and a Medicare Select options. But not all of these options or even all of the basic policy types are marketed in all areas. Scott will mention a little bit of that later too.

I'd also point out that once beneficiaries have made their initial choice of a Medigap plan after they reach age 65, many of them stay with that plan for a very long time. About one-fourth of beneficiaries still have the same pre-standard policy they had when the OBRA reforms were enacted in 1990.

The employer-sponsored market --

DR. REISCHAUER: Jill, is that one-quarter of the people who are still alive or one quarter of all --

DR. BERNSTEIN: It's one-quarter of the policyholders. It's using NAIC data. Of the policies that were sold, about a quarter of them -- or that were paid for in that year, a quarter of them were prestandard, close to a quarter. There are also a large number of people who are in plans which are not open, are no longer open and haven't been open in at least three years. So it's clear that even people in standard plans, there's some evidence they don't move around a lot either.

Back to employer insurance. Employers can purchase group insurance on behalf of retirees or they can contract with M+C organizations on behalf of groups of retirees. They subsidize some portion ranging from none to all, usually most, of the policies. These contracts can include a range of benefits covering both Medicare-covered and non-covered services. In the last couple of years CMS has made some important changes to make it easier for employers to work with M+C plans to set up contracting arrangements which allow employer groups and unions to have greater flexibility in the design of the benefits packages that are negotiated with the M+C plans.

For beneficiaries, group versus individual

products can look very different. The group benefits are not standardized across employers and there can be some variation in the structure of the benefits among the choices offered to employees. Most employer coverage is designed in what they call carve-out, which means that beneficiaries end up having, after Medicare pays its part they have about the same level of protection that working employees have using their employee-based insurance. That means that most of them have more comprehensive coverage than Medicare. Most have drug coverage. Most have coverage for some supplemental services such as either dental care, or eye care, vision care, things like that. But they also may have higher out-of-pocket liability at the point of service with respect to copays and deductibles and those have been increasing over the last couple of years.

The final point here is that for most retirees who have employer-based coverage there's no choice at all when it comes to the market. Choices are made for them by their employer and except for large public employers and large private sector employers most only have one or possibly two options when it comes to picking up retiree insurance. It's basically you take it or you don't.

Related to the issue of group versus individual markets, we come to the issue of federal and state regulations which applies to these policies. Medigap is subject to federal standards and most states have adopted regulations based on the model regulation that was developed by the National Association of Insurance Commissioners. However, a number of states have enacted additional law and regulation governing Medigap. Some states have extended open enrollment and community rating provisions for disabled beneficiaries under 65 who are not given these protections in federal law. Some states mandate community rating for all beneficiaries. Some have extended the open enrollment protections which may apply to all or some of the Medicare policy types.

There were two figures in your mailing materials that were put together recently by NAIC to try to summarize all these. I'd caution you, however, in looking at those data that each state does it a little bit differently. The fact that they're in one column or the other doesn't mean they're alike. Some of the them offer protections for plan A, or plan C, or plan A and C and F, and some of them for different numbers of months. You really have to look at

them on a state-by-state basis to see what's actually involved.

That's actually the point here. For beneficiaries, the difference in how states regulate Medigap can affect the availability of the policies. Their regulation can also affect how much the policies cost, and there are differences in how tightly states review rate increases, and deal with market entry and exit, and deal with consumer complaints and grievances.

There are also two special provisions of Medigap I'd like to mention briefly that I hope we can deal do with more in the chapter. Those relate to the innovative benefits and Medicare Select. Both provide mechanisms for introducing additional benefits and/or greater flexibility into the existing Medigap framework. Federal statute allows insurers with the approval of state insurance regulators and the federal government to include innovative benefits not otherwise available if the benefits are cost effective and do not comprehensive the principle of standardization, which is a matter of interpretation.

These can include vendor discounts for products or services. CMS believes that this could be a vehicle for

expanding choice in the Medicare market. There's currently a survey the field by NAIC which is asking states about all of the applications they've had for innovative benefits and we hope to be able to include some of the findings from that work in the June report.

Employer-based supplemental insurance is generally exempt from state regulation, at least among self-insured plans, and is governed by federal law, primarily ERISA but other things as well. Benefits, coverage, disputes, grievances, et cetera, aren't local or state issues per se here. They're employee benefit issues that might involve employers located in national headquarters hundreds or thousands of miles away.

Finally, the way that state regulation and provider organizations that bear risk or contract with organizations that do bear risk also vary significantly across states. This can affect how providers organize, or provider groups are organized, and whether insurers or health plans choose to do business in a state at all. This means that beneficiaries in different jurisdictions may be more or less likely to find a particular plan or an insurance product when they go to look for it.

Finally, the way that health insurance products are organized with respect to how they bear risk has implications for beneficiaries' exposure to risk, and also how stable their risk -- their liability is over time. In the M+C program, plans assume full risk under capitation, although as we mentioned in our last report in the new PPO demonstration there is some risk sharing between the plans and Medicare. Over the past several years M+C plans have had to increase premiums, increase cost-sharing, and cut back on additional benefits. For many beneficiaries this means that coverage appears unstable.

In the Medigap market, premiums may increase from year to year and there's considerable variation in the degree to which that happens and in the degree to which states focus their attention on rate changes. But the proportion of out-of-pocket expenses borne by beneficiaries for covered services is fixed for each policy type. This is something that beneficiaries appear to value highly, the fact that when they go to the doctor or go to the hospital they're not going to have to pay out-of-pocket. Of course, this doesn't deal with the significant proportion of health care costs that are not covered by Medicare for which the

beneficiary is entirely at risk.

Employer-sponsored plans involve very different -- there's a lot of variation in the cost-sharing arrangement between employers and the plans, and considerable cost-sharing on the part of the beneficiaries. Under ERISA, employers can make significant changes to benefits as long as they have reserved the right to do so, which most of them have done, and as long as it's okay to do so given their contractual relationships with employee groups. There have in fact been significant reductions in coverage and increases in cost-sharing in retirement plans over the last few years, and these are projected to increase in scope over time. If these plans decrease in value some beneficiaries may decide that other products, including Medicare managed care or Medicare Select or PPOs or whatever actually provide better deals for them.

The bottom line is this, what's out there for beneficiaries involves a variety of products that has evolved in different markets but which interact with each other. Some beneficiaries have no real choice when it comes to supplementation. Some do, and their needs are made complicated because of their trade-offs in the way these

different kinds of products are structured. As policymakers contemplate different approaches to Medicare reform, we think it would be useful to take a look at where people have ended up in the current ecosystem of insurance markets, and to look at how different federal policies and state policies, as well as market factors, have affected beneficiary choices which Scott is going to walk you through.

DR. HARRISON: In this section we are making a small first step in looking at the diversity in markets in terms of the coverages that are held by Medicare beneficiaries by state. We believe that in most cases states contain more than one distinct insurance market, but some of the important features of the markets are determined at the state level such as Medicaid and insurance regulation.

Next time we will look at some metropolitan area data as well as demographic and other market condition data. Nonetheless, we do see great variation among states in the insurance choices made by beneficiaries.

Most of the data used in this section come from the March supplemental of the 2002 current population

survey, the CPS, which measures coverage during the year 2001. The survey contains insurance coverage data for over 23,000 non-institutionalized Medicare beneficiaries with at least 200 beneficiaries from every state. We would like to note here that the relatively small sample size, particularly in the less populous states, can lead to imprecision in the state estimates and we will follow up on these results with further investigation, so take some of these numbers with a grain of salt. All the states listed here are in alphabetical order except where we got dyslexic.

The CPS data show that nationally 32 percent of Medicare beneficiaries are covered by employer-sponsored supplemental health insurance. The percentage with employer-sponsored coverage range among states from a low of 16 percent to a high of 47 percent. This slide shows those with the highest and lowest percentages of Medicare beneficiaries with employer-sponsored coverage. Some of those states with the highest levels of employer-sponsored coverage are those states that we view as having highly unionized workforces. Hawaii has an employer mandate for worker coverage whose affect may transfer to higher retiree coverage as well. Those states with relatively low levels

of employer-sponsored coverage include sparsely populated rural states.

The CPS data show that overall 14 percent of Medicare beneficiaries also have Medicaid coverage. At a state level, Medicaid covered between 5 and 28 percent of Medicare beneficiaries. This slide shows states with the highest and lowest proportion of Medicare beneficiaries who receive coverage from the Medicaid program. Many southern states have a high proportion of Medicaid enrollees, but some other states do as well. States with a low proportion of dual eligible enrollees include several Midwestern states.

The CPS data show that 28 percent of Medicare beneficiaries across the country have Medigap supplemental coverage. That figure is corroborated by data that we have from the NAIC. At the state, however, there are sometimes large differences between the two data sources. Both data sources show that there is a large variation at the state level with coverage percentages ranging from single digits to over 60 percent. This slide shows states with relatively high and low percentages of beneficiaries covered by Medigap plans based on the CPS data, and there are asterisks on the

states where the NAIC data differs considerably. The states with the highest levels of Medigap coverage are all states in the north central part of the country that are largely rural. These states also tend to have relatively low level of employer-sponsored supplemental coverage.

Now for this slide we have switched to use the NAIC data. Here we find that Medigap policies which include a prescription drug benefit, plans Hi, I, and J, constitute about 8 percent of all Medigap policies sold across the country. I should say of all standard Medigap policies. It throws out the pre-standard ones.

NAIC data show that there is considerable state variation in this measure with policies H, I, and J accounting for as much as 27 percent of all standard Medigap policies, down to 1 percent in several states. I should note that in some of those states there's really only one insurer selling any drug policies.

Some of those states with the highest percentages of beneficiaries in Medigap have some of the lowest proportions of them with drug plans. We'll have to figure out if there's something going on there. Similarly, a couple of states on the list having the highest proportion

of drug plans have lower rates of Medigap coverage.

Many beneficiaries also supplement Medicare by choosing a Medicare managed care plan. Unfortunately, the CPS did not ask beneficiaries whether they were enrolled in a Medicare managed care plan and therefore I used CMS administrative data to see what percentage of each state's beneficiaries were enrolled in managed care plans.

In 2001 we took the -- we have newer data but we wanted to be consistent with what we were using -- 15 percent of Medicare beneficiaries were enrolled in either M+C plans or Medicare-based cost HMOs. Medicare managed care penetration ranged from zero to over 40 percent among states. The nine states named on the low end of this slide had less than 1 percent of their Medicare beneficiaries enrolled in Medicare managed care plans. Some of those states did not have a plan offered to their residents. The states at the high end all had at least a quarter of their beneficiaries enrolled in Medicare managed care plans.

After incorporating all currently available data we applied several methods using different data from the available sources to identify which states have a disproportionately high share of beneficiaries without

coverage other than traditional Medicare. We found that Arkansas, D.C., Georgia, and West Virginia to be most likely to have the highest percentage of beneficiaries without any supplemental coverage. Three of the four states were on our list of states with low Medigap coverage and the other, Arkansas, was on our list for low employer-sponsored coverage. We intend to investigate these states further and we would expect to have at least one or two of them on our list of study markets, and Jill will discuss the study markets in just a moment.

Although there were some states that had less coverage overall, we did a few simple regressions and found that, perhaps not surprisingly, that in general there is a substitution between employer-sponsored coverage and Medigap coverage, and also between Medicaid and Medigap coverage. We did find that there wasn't a significant trade-off between Medigap and Medicare managed care penetration and we'll look into that further. We are aware of other studies that have found some relationship so we will do further analysis. We hope to do some multivariate analysis and get back to you next month on that.

Jill will now tell you more about our plans.

DR. BERNSTEIN: We divided this up into a two-stage process. For the June chapter what we hope to do is to flesh out the descriptive analysis that we started here. What we want to do is to see if we can identify patterns of coverage, relate them to some of the structural characteristics of particular states or MSAs or market areas, do some multivariate work to try to sort those out, and the ultimate goal is to come up with some examples of markets which illustrate particular patterns of coverage, areas where this -- why are their areas where there is a lot of drug policies being sold and the Medigap market seems to be flourishing compared to markets which are still dominated by employer-based insurance? And what are the implications of those different types of markets for different kinds of beneficiaries? Who has coverage? Who doesn't have coverage? How are the markets played up?

So the goal is to work through the patterns of the markets to look at some local factors, to do some additional multivariate analysis, to do some demographic analysis, and to end up with a set of four or five prototypical markets that we'd like to look at in greater detail to flesh out some of the questions that we raised earlier about how these

different things work.

The next phase is to actually go out and see those places. Basically to turn off the computer and to open the window and go out and talk to people on the ground level, to talk to employers and to insurers and to local experts on health policy and planning, and consumers, and consumer advocates in some markets where there may be heavy concentrations of retirees from the federal government or VA facilities that are dominant in the local market, to talk to them about their view about what's going on the ground in those communities. And also to spend some time pretending to be consumers, which we all will be soon, getting on the Internet, calling consumer advise lines, et cetera, trying to find out what it looks like from their perspective in terms of the options that are available to them.

Then to bring all that information to bear on some questions about how some of the factors which affect the growth of these markets, like state regulation, like rules about entry and exit, like rules about community rating, or how premiums are handled, or guaranteed issue, or whatever have affected the development of different kinds of products, which now apply differentially to different kinds

of insurance that are out there and then maybe be able to bring all of that to bear on some analysis of what would happen under different kinds of scenarios. We're trying to build markets that work better for getting different kinds of insurance products to beneficiaries over the long haul.

We'd really like questions or suggestions for where this ought to go.

MS. ROSENBLATT: I thought this was an excellent start. It's a very interesting topic. I have in the past been a critic on the tone used in connection with Medicare supp and I want to compliment you both on the tone. It so far is excellent and hopefully that will continue into the June report.

I do have one suggestion and, Jill, as you mentioned, you have to be real careful when you read something about regulation because it's very different. I was thinking as I was reading the stuff about the state regulation that maybe a ranking of regulation from the most extreme form of regulation which I would consider to be preapproval of rates to the lesser form, so maybe a high, medium, low type of regulation versus what is available in the marketplace would be something interesting to look at.

DR. REISCHAUER: I always knew that the Medicare supplemental market was a confusing one and now I'm confused even more. In your description of Medigap you say that a quarter of the folks in Medigap are in group plans and group plans usually purchased by employers or unions but sometimes by associations like AARP. Then I'm going to the CPS information and I'm asking myself, where are there? Are they in the employer-sponsored category or are they not?

DR. HARRISON: It's even worse than you fear because --

DR. REISCHAUER: I'm sorry I asked the question then.

DR. HARRISON: When you look at the NAIC data in some states AARP is a group and in some states it's an individual.

DR. REISCHAUER: But I'm thinking about the CPS data.

DR. HARRISON: The CPS data is supposed to be -- it's usually not that the employer buys you a Medigap policy. It's that they might help you pay for it. So it would still be considered Medigap if you're buying a Medigap policy.

DR. REISCHAUER: So the employer doesn't contract with a Medigap provider?

DR. HARRISON: They might do that but then I think they're typically not going to give you the standard package. I think that they're going to coordinate more with their other retirees and non-Medicare eligibles. It could be that maybe --

DR. REISCHAUER: But where does it go in the CPS?

DR. HARRISON: I could go into both.

DR. REISCHAUER: That's reassuring.

DR. HARRISON: The CPS categories we have now are not mutually exclusive. But the total for Medigap looks similar to the total we get from NAIC. So we are assuming --

DR. REISCHAUER: Which includes the group.

DR. HARRISON: -- that's what Medigap is, it's the individually purchased.

DR. WAKEFIELD: Just out of curiosity, do we have any idea about how many Medicare beneficiaries qualify, are dual eligibles and so qualify and are enrolled in both Medicaid and Medicare versus -- benefitting from both of those programs, versus those who may be eligible but are not

enrolled? Do you have any sense of what that looks like?

DR. BERNSTEIN: There's some discussion of in the March report chapter. It varies by state to state. Nobody believes any estimate that's ever made of -- of how many people who are dual eligibles are not enrolled. There's been some research on it. We know there's a lot of people in every state who are eligible for Medicaid who do not sign up for it. That also varies from state to state because of the way that states do outreach, or for a lot of other reasons.

We've looked at the CPS estimates versus other data sources on the number of dual eligibles in the states and there is variation. Everybody who's ever done this has found some, but ours are generally -- they're generally consistent. We have a sense. None of the numbers are particularly ones that you'd want to take home with you and memorize.

DR. WAKEFIELD: Two other follow-up to that, if I could. You mentioned that you're going to be, in your case studies probably doing interviews with FEHBP and VA administrators. I know this is a stretch, but if you happen to choose any state that also has a Native American

population at least I for one would be interested in a little bit of a take there. We're getting a lot of -- there are a lot of discussions now with the aging of that population that historically, while there's variation across the country, historically that was a population the longevity of which was not very favorable. However, they're aging out too now in the aggregate, and there's some interesting dynamics going on between IHS, and then as soon as folks become eligible for Medicare and what they have access to there. So just if you happen to be in that area, if you'd keep an eye out for it.

Then last point. I don't want to sound parochial -- first time ever, I'm sure -- the North Dakota data -- I hate to even mention the state -- you've got this listed on the chart in terms of Medigap, prescription drug coverage. You've got the category of states that have the most participation, 1 to 3 percent with those prescription drug benefit policies. I didn't think we have any of those three in North Dakota frankly.

DR. HARRISON: We can check the data, but it could be actually that you used to have them and people -- you can never kick people out. Medigap policies are guaranteed

renew. So it could be that these are all old policies.

DR. WAKEFIELD: There's still alive and well.

DR. HARRISON: But I thought I found current -- I went and looked and I thought I found at least one drug plan in every state.

DR. WAKEFIELD: I think not. Let's just say, will you double-check that?

DR. HARRISON: Yes.

DR. WAKEFIELD: Because, frankly, I made a call on this yesterday because I thought even over the last number of years that we haven't had any of these three plans, and at least I told state yesterday --

DR. HARRISON: Have you checked with AARP? I don't know if it's them but --

DR. WAKEFIELD: No, I haven't checked with AARP so maybe that's it.

DR. ROWE: I think this is very interesting and I agree with Alice about the level playing field that's been established here in terms of language. Just a couple suggestions.

One is, I think it's going to be very helpful to show some information over time because there's been these

dramatic changes in the availability of retiree benefits through many corporations, and people not familiar with that should see that, and changes in Medigap over time. I think that it might be very helpful to show some changes over time also in premiums, which in Medigap are rising substantially.

I think it would be helpful to, rather than just indicate what percent of people have retiree benefits from employers versus Medigap versus whatever, to make sure it's clear what the differences are in the structure of the programs. For instance, Medigap has first dollar coverage. It really doesn't give any incentive for that much cost-sharing or a reduction in utilization. Whereas many of the employer-based programs have a lot of copayments, a high deductible, they may have an HRA arrangement, whatever, that gives much more incentive to reduce expenditures.

So rather than just Medigap versus -- it's not like you're getting the same thing from Medigap that you're getting from your corporation. There are differences in the structure of these things and I think that that influences who takes them and who doesn't, and the kinds of performance. So that would be a helpful thing to describe.

You said that you didn't see a trade-off between

Medigap and M+C, and I thought that was interesting, and you sounded like you thought it was interesting also. I think the analysis I would do is with the Medigap H, I, J versus M+C, because it's the M+C that has the pharmaceutical benefits. So it's really the H, I, J that has the pharmaceutical benefits and that's where you might see a relationship. So I would look at it that way.

A word about the PPOs, just because they're there and they should be mentioned. It's not a big part of the program but certainly it's there and it's something that CMS seems to be talking about more and more.

And the last comment was about the states. I don't think I understand fully why we're having such a state-oriented discussion today. I know that's the way Congress is elected and all that, but it seems to me that it's not that informative. It doesn't go that much beyond showing that there is variation. There are 50 states and some are higher and some are lower in these things, and it's kind of obvious why that is, as you point out, because of where certain employers are, et cetera. It just seems to me that it's just going to create some problems because people are going to say, my state doesn't have this sort, or it

does have that, or you've got it wrong, or it's unfair, and it really doesn't inform the discussion that much.

But if you're going to do it, and then you said you might do some MSAs and other things, I would suggest that you consider the possibility of looking at the 10 CMS regions, because some of the proposals that are being discussed about Medicare reform seem to be based on consideration of larger units of analysis than county and seem to be based on these 10 CMS regions. So to whatever extent this kind of analysis is coming at the same time that other proposals are being discussed in Congress or elsewhere, in addition to states and MSA regions or rural regions, whatever you're going to do, those 10 CMS regions might be informative.

DR. HARRISON: We started with states because we wanted to get a clue as to what markets to look at. Some of the data we really only have by state. Medigap stuff really is only by state. So what we're trying to do is get clues as to which markets to really go into for our study markets.

DR. MILLER: Just to say that differently, it's correct, we're not headed towards doing this analysis by state. We're headed towards doing this analysis in selected

areas that we think represent a typology of markets, then we can look at how this market develops, look at how this one, does it inform how you might want to enter a given market.

The state stuff was really, I think, intended at this preliminary stage to illustrate stuff that we might be looking at. Is that fair, Scott?

DR. HARRISON: Yes.

MR. HACKBARTH: I just want to second Jack's point about looking at trends over time. One of the issues here, of course, is that it's in a state of flux and the trends are not good trends in terms of availability of coverage. As I recall, our June report from last year on the Medicare benefit package actually had quite a bit of information about what was happening to employer-sponsored coverage and availability of Medigap. I think reiterating that is worthwhile.

DR. REISCHAUER: Just to comment on Jack's point and defend a bit looking at this by state, Medigap is, to a certain extent, regulated and licensed by states, number one. And number two, Medicaid most certainly varies by state. So while I appreciate that there's -- because I plop you down as a random person in the state of New Jersey, that

doesn't increase the probability that you'll have employer-sponsored supplemental insurance. What matters it whether you worked for Bell Labs or not.

MS. ROSENBLATT: I was going to make that point as well because I think the regulatory environment is a key variable that I'm hoping we look at. But there's another variable that may or may not be able to explain some of the state variation and that may be, does one health plan have a leading market share? I'm thinking, some of the states where the Blue plan has a lot of market share may absolutely dominate the Med supp market either because they want to or because they're forced to. So that might be something to look at.

MR. SMITH: On Jack's point about trends over time, I think it's important. Just a caution, particularly on the employer-sponsored stuff, Jack. We're going to see a surge in the number of Medicare beneficiaries with employer insurance, which is misleading. The number of working people who will eventually have employer-provided insurance is going to sharply decline. But in the next decade, the number of Medicare beneficiaries with employer-supplemented insurance is going to soar because of the pattern of

retirement, particularly in the public sector.

DR. ROWE: I think that's a good point. I think there are too -- if I can respond to that. There are two different graphs one can envision, or a discussion. One is the number of companies that are offering retiree benefits, and that will go down from 60 percent-plus a couple decades ago to 30 or slightly less than that now. You could even characterize what's offered as a strong versus a weak benefit, or a robust versus a less robust benefit and you would see even a further decline in the total value because benefits are being cut back.

The second curve is the number of people who are Medicare beneficiaries, or the proportion of Medicare beneficiaries who have access to a benefit. If you plot that over time you're going to see this secular effect that David is pointing to. Maybe doing those two things will be really helpful in terms of pointing out when the problem is going to hit and why the behavior in the market now isn't consistent with what you think is this looming crisis. I think that's the point.

MS. ROSENBLATT: On that point, I think FASB 106 started the decline in employer-sponsored coverage. Now for

private employers it's probably the combination of the FASB 106 impact as well as the increase in cost. But there's now GASB, which I'm less familiar with, but in picking on David's point about the public employers, I think there's a new requirement that is similar to FASB which would probably serve to decrease that population, but I don't know when it takes effect. I just don't know the details of it.

MR. SMITH: I'm not sure about the accounting provision, but again, the phenomenon has to do -- the population of people who will be receiving employer-paid benefits and the population of people who are eligible for them are going in opposite directions. This is a residual phenomenon. Jack, the 60 percent that had employer-sponsored retirement coverage that Jack refers to a couple decades ago are now retired or retiring. And the pattern, particularly in the industrial sector and the public sector of very heavy retirements in the next decade, that population is going to bulge at the same time that the underlying market is deteriorating sharply.

MR. HACKBARTH: Okay, thank you very much.

Next we have a discussion of the sources of variation in the hospital financial performance under PPS.

MR. PETTENGILL: Good morning.

The discussion this morning, as Glenn noted, is about sources of variation in financial performance among hospitals under PPS. I'd like to introduce Kathleen Dalton, to my right here. She is out of the Sheps Center for Health Services Research at the University of North Carolina, and she has been doing a lot of work on this topic for us, keeping her occupied most of the past year. Before that, she's done valuable work for us on the indirect medical education adjustment, methods and findings; and also on the PPS wage index.

The work we're about to describe this morning is a follow-on to the material you saw that Jack Ashby presented at the October meeting when he presented descriptive information about variations in hospital financial performance. There's probably not anything here that is going to be shockingly new, but it is different in the sense that Jack was talking about descriptive data, relating performance to individual variables, and this is a multivariate analysis where we look at the effect of an individual variable while controlling for others that also affect performance.

The work from this project will, along with some additional work that we will do between now and the April meeting, will be included in a chapter in the June report.

For the presentation this morning, I'm going to talk a little bit about the background and motivation for this work and then Kathleen is going to talk about the objectives, methods, and preliminary findings from the work. And then I'll come back at the end and talk about next steps.

The motivation for this project begins with this picture, which is one that you've seen before, or something very like it. This shows the distributions of hospital's inpatient margins under PPS and Medicare margins, overall Medicare margins, in blue and red respectively, I think. It looks like red and orange, actually. So much for that. I'm color blind anyway.

The lower of the two, the wider and lower of the two distributions, is the inpatient margin.

In both cases, the variation is very wide, as you can see. The 10th percentile inpatient PPS margin value is minus 14 percent. The 90th percentile is 27 percent. For the overall margin, the comparable figures are minus 16 and

plus 16.

Every year we see the same thing, and again, it's consistent with the data that Jack presented in October and you saw something similar in January when we were talking about the update.

In addition to that, we have perennially systematic differences in margin levels across groups of hospitals, as shown in the next -- wait a minute. They're out of order. Apparently, this is a slightly different file than the one we expected to have. Sorry, technical difficulties.

Okay. It's really nice to have somebody around who knows what they're doing with this thing. It isn't me.

Okay. Now you see why I was calling them blue and red. No?

[Laughter.]

MR. PETTENGILL: I am color blind, forget it. Or color challenged, or something. Now they're in the right order.

Here we have, on the left-hand side, inpatient PPS margins for four simple groups, rural and urban hospitals with and without the special policy-driven PPS payment

factors or payment adjustments, which include the IME adjustment above the cost relationship, disproportionate share of payments, and special adjustments for certain rural hospitals.

The right side shows what are called box and whiskers diagrams that indicate the amount of variability within each of those groups in inpatient PPS margins. On those, the higher horizontal line on the box is the 75th percentile. The lowest line on the box is the 25th percentile. 25th and 75th percentile, respectively.

The other horizontal line are just ways of identifying outlier observations.

The unit of observation here is the hospital. It's important to remember that. How margins are distributed across hospitals is different from how they would be distributed if you weighted by the number of Medicare beneficiaries receiving care in the hospital. In fact, if you think about the overall margin, for example, roughly 49 percent of hospitals have an overall margin that is below zero, negative. They account for 37 percent of Medicare patients treated in hospitals.

49 percent of the hospitals have an overall

Medicare margin that is negative, but they account for 37 percent of the patients. So patients are disproportionately receiving care in hospitals that have positive margins.

Of course, the same thing applies within these groups. These diagrams are not weighted by discharges, but they could be. For example, the urban hospitals that receive special adjustments account for 41 percent of all hospitals, but they treat 64 percent of the patients. That's that last bar and the corresponding box on the far right.

What to make of all this variability depends on why it's occurring, and different people look at the variability and -- yes.

MS. DePARLE: Julian, that last chart, is that overall Medicare margins on the left?

MR. PETTENGILL: That was overall, yes.

People look at the variability and they sometimes make inappropriate inferences about that, attributing much of the variability to the payment system. Part of the purpose of this study is to find out to what degree that payment systems factors are, in fact, responsible for the variability. And also, what else seems to matter.

Variability is not either unexpected or undesirable. Remember that there was no variability, or almost none, under cost reimbursement. The fact that we have variability is actually, in some ways, a good thing because it represents the reward that people get for producing care efficiently.

Some of the things we already know are that we have policy-driven payment factors that make a bit difference and Kathleen will talk more about that in a few minutes.

Other differences that we may find may indicate that the payment system is either not operating exactly as it was intended. For example, if we find errors in the way some of the variables are constructed or the way they're applied. But it's certainly possible that we also find that, for example, there are market factors that the system does not now account for that we might want to think about adding to the payment system.

Then, of course, there are other possibilities that we find, management behaviors that account for part of the variability and performance and we probably wouldn't want to do anything about that.

And then, of course, there's purely random variation which also will exist, and I assure you we'll find that, too.

Now Kathleen will talk about what she actually did.

MS. DALTON: Thank you.

We had two major objectives in designing this study on the variation in the margins. First, we wanted to disentangle the contributions of the payment system from the contributions of the hospitals, as Julian just described, both the contributions that the hospital's own decisions made, and also those that might be related to the external environment in which the hospital functions, most of which I think we would assume is not under the hospital's control and is therefore a different policy issue.

But second, we wanted to develop an approach that would be generalizable, that we could apply to other PPS settings when we get comfortable with it now that we have that payment in several other areas, and also that we could apply over multiple years.

This is a diagram of the way we approached variation. It pretty much reflects the way we structured

our model here. We can think of three main sources for the variation in performance. As we just said, those related to the payment system, those related to the hospital itself, and those that are related to chance, which is to say the random influences.

Now the PPS formulas, as you know, have several components that are intended to match the payments to cost. So one of the problems can be measurement error in those components where they're not functioning as we think they should be.

We also have several components that are not intentionally linked to cost. So those are areas where we have to some policy-related reason for directing resources to some hospitals in excess of cost or theoretically it could work the other direction. So I tend to refer to those as policy components to the payment formula throughout here. And both of those would affect the margins.

On the hospital side, we're going to divide those hospital characteristics into the sort that reflect the environment. So those would be market conditions, the demographics of the patients served, supply characteristics in that area, competition, those sorts of characteristics.

We're going to separate those from the characteristics that we think reflect management decisions. So those would involve product mix or efficiency and issues of quality. Mind you, issues of quality are not really easily measured and we recognize that. So of the hospital characteristics, some can be measured and incorporated into the model but quite a bit is what we call unobserved. That is to say, unobserved to those of us who are constructing the model.

The random error that's left over has to do with what's unobserved that we have failed to include in our model but it also has to do with a variety of very small things that would affect any individual hospital in any individual year. Because this is a one year analysis, a cross-sectional analysis of the differences across hospitals, what we've got here is a model where random fluctuation from year to year would show up as unexplained. So in this particular instance, year to year volatility would also be part of the random component here.

The analytic approach we took is very similar to the Medicare average cost function. Many of you are probably familiar with that because that's the one that's used to estimate the IME coefficient. Except that, in this

case, what we're interested in predicting is the margin, not the average cost per case.

So what we did is we used a two-equation approach. We have two equations that are simultaneously estimated, one for payments and one for costs. The approach, because it's simultaneously done indirectly, it produces a performance measure and the performance measure is the ratio of payments to costs. It's a little like your Medicare margin that you've been looking at. It uses the same data. It's a slightly different ratio.

For example, a payment ratio of 1.2 simply tells you the payments are 20 percent above cost and a payment ratio of .85 would tell you that payments are 15 percent below cost.

Throughout this talk I'm going to tend to use payment ratio and margin interchangeably. They really have slightly different interpretations in an accounting and a financial sense, but don't hold me to them because I tend to use of them synonymously.

I don't want to spend much time going into the methods here but I'll just quickly talk about some of the advantages of the approach that we took. We could have just

estimated the payment margin directly in a regression, but separating the estimates the way we have, separating the numerator and the denominator from that ratio, has a few advantages. It allows us to include what we already know about the payment formula in the model and we can include them as what we would call constraints or forced assumptions in the payment estimate.

So, for example, we know exactly how a case-mix index, or rather the DRG weight, affects a particular payment. So we can force that into the model and that eliminates some of the estimation and makes it a little more accurate.

At the same time it keeps the flexibility of the original cost model, so that we are able to, for example, test the effects of other cost factors, those that are not already in the PPS formula. And we can test whether the effect of a particular factor is uniform across different ranges in the values. So we can look at the effect, for example, of case mix on cost. We can look at it separately for low case-mix hospitals or high case-mix hospitals.

We can also test the extent to which some of these factors which occur jointly in our hospitals may be

influencing each other. So that when you find them together they may have a different sort of an influence on the hospital than if you find it alone.

So all of those are the characteristics of a cost model that we can include in this two-equation approach.

The data we used are all the standard PPS system files that you've seen used before. We have hospital cost reports. We took operating cost and operating payment data from these.

But in addition, we had used some data from the Part A claims file. We took this data and constructed a new length of stay variable for the hospitals. It's a measure of the ratio of the hospital's actually length of stay to the expected length of stay, defining expected as what would have occurred if that hospital had had the national average length of stay for each DRG. So you go back to each hospital's mix of DRGs and recompute what its average would have been if every case had stayed the average, the national average for that DRG. So we found that to be a fairly helpful tool to control for the difference in case mix but still consider what the hospital's length of was relevant to others.

Now for purposes of model development, we've used data from the federal 1998 year. At this time, we're updating it with some 1999 data and we'll probably run it for some early years. Probably the earliest would be 1992 because we're interested in looking at the stability over time. The choice of the year simply had to do with when we began the analysis. We would like to say that whatever findings we have, whatever that structural relationship is, is consistent from year to year. So actually the choice of the year is not that important, or should not be that important, we would hope.

So this is what we want to ask of the model. We're interested in what the independent effects are of each factor -- so hence the multivariate modeling -- of PPS profitability. We want to know if some of the factors influence each other -- if some of those factors are different when they occur together, they influence each other, then we also want to know what are the effects on profitability. Mainly we want to know are the payment factors operating as we intended them?

In addition, I think, we asked the model to help us understand what was practically significant. So not

necessarily what is statistically significant but what was practically significant in our findings.

We want to know how important the effect of any one variable on the margins is, in context, given the total range of PPS profitability and how many different factors we have operating at once.

Now this is actually a more difficult task. First of all, because a lot of these factors are correlated and they're distributed differently across the sample. So to try and make the results more intuitive what we did is we used a simulating procedure. So we created simulations where we could hold the effects of all of the other factors constant and then trace out what happens to a typical hospital if we just change one factor at a time. In that way we could get a sense of the relative impact of any one or the other.

So the steps on the simulations were first that we needed to figure out what was a realistic, what we call a base case hospital, something that we could hold constant. Then, having defined a base case hospital, we would use the model results to predict its payments and its costs and then we would start to alter the value of one factor at a time

and trace out -- in this case we give you graphs -- the effect of that one factor on that base case hospital.

As you can see from the first bullet, we tried to pick attributes for sort of a garden variety facility, with an average case mix, one in an area where the wage index was one, one that did not receive any special policy adjusts for teaching or disproportionate share or any of the special rural adjustments. So it was just receiving the base DRG.

However, it's probably important to stress that the definition of the base case isn't really central to the analysis. If you change the base case, you're only going to change your starting point. What we're after here is the change. So if you consider, if you wanted to consider how this would look at a very small rural hospital or a very large academic teaching center, you would certainly have to consider the effect of the variables that are more likely to occur there, such as the teaching adjustment. But you would also have to alter your starting point. But you would not necessarily alter the rate at which the factors change profitability.

I'll walk you through a couple of examples. I'm going to build the graphs slowly to try to orient us all.

For the walk-through, for the examples, I picked to variables. I picked a case-mix index first because it's a good example of a pure cost adjustment. It's only supposed to account for cost differences. It has no other function in the system.

And then I picked the IME payments because that has an additional policy component where it's supposed to adjust for cost plus something else. So I thought it would be a good example to see how both of them work.

So this is a hypothetical example, what we're going to start on, and it's probably best if you focus on the graphs for a while. This is not the data. That's what I mean by hypothetical. I'm just going to show how it would look in theory, if everything was working perfectly.

On the left you see two parallel lines. Again, the top one is supposed to be red. It's red on my screen. I'm not sure what happened in the translation. And the bottom is dashed. It's a good thing I dashed it, so at least you can see the difference.

As we know, the case mix is supposed to be cost-based. So if it were, what you would see is that these two lines should have exactly the same slope. They should be

parallel. And before anybody points it out, I know they don't look parallel on that. They're supposed to be parallel. Just pretend that they're parallel. I've been staring at it for a while.

That's a good one, the Doppler effect. I'll think of that for my next excuse. I can't explain it.

As I say, what we're interested in for this model are the slopes of the two lines. If they're parallel then we can say the effect of that one factor, in this case the factor is the thing that's at the bottom across the X axis of the graph of the case-mix index. The effect of that factor will not influence the margin.

Sure enough, if you look to the right, in the square on the right, there you've got the predicted -- I called it predicted margin. It's actually the payment-to-cost ratio. So payments and costs move in the same direction. That's going to be a flat line. So that would be your ideal setup. And this is if case mix, which is to say the DRG weights, are working perfectly.

Now before we move on, I'll just comment on that right-hand line and whether or not it should be at one. It doesn't matter how high or low that line is right now.

Whether it's above one or below one, that is to say whether that base case hospital is operating at a profit or operating at a loss, has only to do with the characteristics we chose for the base case and it has to do with the underlying adequacy of the standard rate. But again, that's not the focus of the analysis so much. That's just our starting point.

You can see this particular base case is slightly over one. My recollection is that payments were about 6 percent over costs.

Now, this is the same set of graphs but this is the actual data. You know what, I think I've bypassed entirely, when I was talking about data, so I'm going to raise it right now, an important thing.

When we went to the 1998 sample, we removed the hospitals that have since that time converted to critical access hospital status. They're no longer paid under PPS so we thought that that would be an appropriate thing to do. It is important to keep in mind, though, that that's a large group of very select hospitals who were doing very poorly under PPS. So that act, removing them, does in fact change our results somewhat.

I want to try to remember that. I'll point it out when we get to a point where the result really look different than they would have, had we left these very small rural facilities in.

So now we're looking at the actual results on the case-mix index. The first thing you want to note is, of course, that the lines are not parallel. That dashed line, which is the lower one on the left-hand box, is flatter than the payment line. That indicates that the change in predicted costs per case is less than the change in the payment per case for every increase you've got in that DRG weight.

You can see then on the right side, where we've got the margin plotted, that as the CMI increases this base facility would get a higher and higher margin.

Now what you might also notice here is that that bottom line does not appear -- you might need really good eyes to see it. But this line right here doesn't have exactly the same slope all the way up. Now this is because of the way we structured the model. I know you probably can't see it, but take my word for it.

We really had, we thought, reason to believe that

perhaps the way the relationship between the DRG weights and average cost per case might be different in a low case-mix hospital than in a high case-mix hospital.

So what we did is divided the sample into pieces. And we estimated the bottom piece separately. It's actually three pieces and there's a break right about there, I think, where the case mix, it would be about 1.08. And there's another break where the case-mix is about 1.4. And sure enough, we did fine that for this bottom area right down here, actually the case-mix weights work pretty well. Those two lines are effectively parallel. The slopes are not statistically significantly different, is what we would say. Above 1.8, the slope here, this slope is flatter than this slope.

So above here what we could actually say, the implication is that the DRG weights are overstating the cost differences. That would be the message to carry away from that particular difference.

And you can see over here that this line is fairly flat, below 1.8. As I just said, they don't seem to affect it. And then the margin starts to increase here because of the difference in the way that the index payments and the

way that it affects cost.

Now I put a line in here, right here at 1.25, just to help orient you because that's the value of the case mix we chose for the base case hospital. That's the only reason that line is there. And I put a here just -- it's a horizontal line -- just to help you to focus on the difference. That's all that is.

We can look at the same data here for indirect medical education. And we have a slightly different thing on. You can see for IME, this bottom dashed line here, that's the cost line. So you can see that as the teaching intensity goes up, the cost goes up. So we all know that. We're familiar with that phenomenon, that there is a significant cost differential according to the level of teaching.

This is the payment line, however. You can see the payment line goes up considerably faster. So the result is the higher your intensity of teaching is, the higher your margins. So this is the contribution to the margin that is there because the adjustment for teaching is greater than cost.

Now in this particular instance, unlike the case-

mix index, this may be the intention. There's a part of that IME formula, in fact, that's deliberately made over cost. So you can't entirely say that this is a problem in the formula. Some of it is intentional. But with this data I couldn't identify what was intentional and what was not intentional, simply that it's there.

So what I've done here is -- I should probably backup and just ask if there are any questions about this approach because I'm about to use it for three or four slides in a row.

What I've done here is simply plotted the margin graphs of the three main cost-related components to the system together. And I've added a couple of lines here to help orient us. The horizontal and the vertical lines here are placed at the 25th and the 75th percentiles for the distributions. So those horizontal lines show you what is the interquartile range for payment-to-cost margins for all the hospitals in the sample. So that just helps you understand where the important range is, where you want to focus. Then again, the vertical lines show you for each of the different factors what the 25th and the 75th percentiles are.

You can see the line we've already looked at for case-mix index but hopefully the little box in the middle shows you where the bulk of the hospitals are.

You can see, on the wage index, we have a similar sort of picture actually. In the wage index we also estimated it in pieces. We estimated the piece for hospitals in labor markets with an index value below one and then we estimated it for above one.

We found, quite interestingly, that the relationship between the payment adjustment and cost adjustment was quite similar, below one. But above one what happened is the payments went up a lot faster than the costs. So at this point we have another instance where it looks like there's a measurement problem in the formula that contributes to the variation.

Another example is the outlier, but of course what we're expecting to see in the outlier is a little different than what we expect to see in the other two. On these top two graphs, if everything worked perfectly, as I said, this would be a flat line.

Down here, if the outlier policy worked perfectly we still wouldn't have a flat line because this is a stop-

loss sort of an arrangement. You're expected to lose a little something on every outlier case. So you would expect this line to be slanting down just the way it is.

I cut this graph at .3. That's about the 99th percentile of the distribution of the proportion. The .3 would mean a hospital has -- 30 percent of their payments are, in fact, outlier payments. Let me rephrase that. Outlier payments were 30 percent of the DRG payments. That's fairly high and that includes 99 percent of hospitals. We have a few hospitals who get more. The graph was just difficult to see if I put it in there. It extended all the way to .8 or .7, I think.

Anyway, I think the important point here is that by putting the graphs together and putting them on a similar scale over there on the left, that payment-to-cost margin scale, you can compare the slopes of them and you can get a sense of the relative importance, how much is one contributing compared to the other.

Until I did this, I would have probably guessed that outlier payments reduced the margins in large hospitals a lot more than I can see here. That line is flatter than I thought it would be. The wage index, of course, that line

is more steeply sloped than I thought it would be. And I really didn't know what to expect for case mix, so I couldn't tell you.

But I think the idea of putting them on one graph with the same Y axis, the idea is to help you compare the relative influence.

We have the next graph does the same thing but I've put the three main policy adjustments. And you can see that these lines are a lot steeper than the earlier cost-based ones, which means only that the policy related adjustments contribute more heavily to the variation in margins than whatever it is that we found in the cost-based adjustment.

Again, this is exactly what we knew. I mean, this is not surprising. We all knew that each of these -- certainly that IME and DSH contributed to the differences in the margin. It was interesting to me that the rural hospital-specific payment amounts, those are the special payments we make to sole community providers and Medicare-dependent providers. For those that receive them, those are also appear important contributors to the variation in margin. I was surprised to see how much that was.

I should also just mention that I told you that these vertical lines were the interquartile range for whatever this variable is. But in this case, for these three graphs, it's the 25th and 75th percent for hospitals that actually get that policy adjustment. 80 percent of hospitals don't get IME, I think. It might be 75. And I would think over half of hospitals don't get DSH.

MR. PETTENGILL: It's about half.

MS. DALTON: About half? So you're looking at the 25th and 75th percentile just for the group that gets it.

We're going to have one more of these. Bear with me. This is the equivalent graph, but I've plotted the effect of some of the hospital characteristics, the operating characteristics, that are not part of the payment system.

I'll talk a little bit about each of these. Volume is obviously a fairly important variable to investigate and to control for if you're looking at anything that's based on a hospital's cost per case. We did look at the volume again in four pieces. We divided it into hospitals with fewer than 1,000 discharges and hospitals

with between, I believe, 1,000 and 10,000, 10,000 to 20,000, and over 20,000, something like that.

What we found is, as suspected, there is an effect, it's what we would call an economy of scale. There is in effect a volume on costs per case. But since volume is not part of the payment formula that means also there's an effective volume on margin. But it only exists right here in the middle area.

Down here, it's hard to say because the scale of discharges is so wide across our hospitals that this graph is compressed. But down here, if you were to look at the group of hospitals below 1,000 discharges per year -- and that's pretty small now. That's an average census of probably between 10 and 15 patients per day.

Down below 1,000 it's actually quite flat. Now that's something that is different now that we've pulled the CAH hospitals out. If I had left the CAH hospitals in the sample you would have seem something that was quite consistent with what you saw a few years ago, when we were talking about the low volume adjustment. But that difference is now gone. It's gone for good reason because we pulled 500 or 600 of the lowest performing hospitals --

lowest performing from the prospective of prospective payment, at least -- out of the sample.

At any rate, there doesn't seem to be much of a volume cost or a volume margin relationship at the low-end. There's a slight one in between. And above 10,000 it doesn't seem to make any difference, either.

This one down here is occupancy. And occupancy has an effect on the margins pretty much in the direction that we would expect. There aren't very many hospitals out in this region of occupancy rates of 70 or 80 percent or above. And they tend to be the big tertiary centers that are there.

I think, if you'd asked me before I ran the model, I would have expected this line to be a lot steeper. Either I was mistaken in my expectations or it's possible we're not very good at measuring capacity, so we don't have a very good measurement of occupancy rates.

Over here we took a look at the effect of relative wages on the margins. Now the wage index controls for market-to-market differences in relative wages, but within any given market an individual hospital's wages could be above or below its labor market average. So this is what

we're looking at here. It's a ratio of the hospital's hourly wage to its labor market hourly wage. That is, the labor market used for its wage index. It ranges from about .7 to 1.4. Most of the hospitals are in this middle range here. It's pretty tightly distributed. It has a fairly substantial effect on margins, for those that are at the outer range. You can see that the 50 percent here is quite close to the middle.

Finally, we have this length of stay variable, which is the one I mentioned earlier, which is really the ratio of the hospital's actual to its expected length of stay. And you can see that has a very strong effect on the margins. The hire your length of stay is relative to the national average, for that makes the DRGs, then the lower your margin is. So all of this is as expected.

What about the effects some of the other variables, the effects of other hospital services? Well, there are other hospital characteristics in the model that aren't continuous measures. There are things that either are or aren't. The hospital either has it or doesn't, or operates it or doesn't operate it, or is located here is not.

It's a little harder to plot their impact. I can't go through the same mechanism. But you certainly can still compute the difference in the margin between a base case without it and a base case with it. And I use as an example here those that are providing certain post-acute care services. So I had to redefine my base case as a hospital that doesn't have any subproviders. And now, what happens if they offer long-term care? Here, by long-term care, I mean skilled nursing or swing beds. I'm not talking about long-term acute. The effect is about 2.4 points in that payment-to-cost ratio.

And that base case hospital that operates nothing has a ratio that's somewhere between 1.01 and 1.02. So we're adding 2.4 to that, to give you some perspective.

If they operate the home health, the independent effect of home health was about 1.9 points. Interestingly, when they operated them together it was 4 points. So those two factors seem to add to each other.

We didn't find much effect for hospitals that were operating rehab or psychiatric subproviders.

And imported thing to keep in mind is that our model is already controlling for length of stay because we

had that expected length-of-stay variable. So whatever we're seeing here, it's not because their managing discharges more quickly. It's something else.

I think the implication would be something about what we might call an economy of scope. Certainly, an ability to more effectively use your fixed costs and spread your overhead out on more programs. That might be it, although that would not account for why we don't see it in folks that are operating rehab units. I'm not quite sure what's going on here.

MR. HACKBARTH: Kathleen, since the measure of performance here is the inpatient margin, wouldn't this be distorted by the cost allocation issue? And this could be simply an artifact of cost allocation between inpatient and these post-acute services.

MS. DALTON: Right, if they operate them then they have the ability, then some of that fixed overhead will have gone there. Absolutely.

Although, I'm not sure that's artifact. I think we might equally say that they're making better use of their overhead by offering more services.

MR. HACKBARTH: Well, part of it be that but part

of it could be simply how costs are allocated.

MS. DALTON: Ah, but they aggressively allocated to other areas where there used to be cost-reimbursement. Sure. Sure.

Although, I'm surprised that we haven't found it in rehab and psych. We're not quite sure, but I think that is a pretty good -- I mean, I think that's certainly a possible answer there.

Other hospital characteristics. Even with everything that we've put in the model we still find the margins show a big difference by ownership and location. If we had this model perfectly specified, we would love to see differences between the Midwest and the Northeast and the South and the West go away. We'd to know what those are, since geographic location, in and of itself, isn't a good cause for anything. Obviously we're not there.

Ownership also has a very big impact on it. And in fact, ownership and region are things that you have to group because it has a different impact in some regions than in others. So this is a case where we were careful to combine the variables before we measured them.

We see, depending on what region you're in and how

you define your base case, we found the payment-to-cost margins as 18 percent higher in for-profit institutions as in public institutions, for example.

Depending on the region, the base case margins for publicly-owned facilities ran between .95 and 1, for example. And those same facilities modeled as for-profit would raise that ratio to 1.05, somewhere between 1.05 and 1.15. So relatively speaking, that's a very big effect.

Now the thing is that when considering ownership, the difficulty with interpreting those findings on ownership is that we don't really know how much of that is what I would tend to call treatment effective and how much of it is selection effect. A little bit of jargon, but you can think of what that means, is you have to assume, for example, that the investor-owned firms are going into hospitals and identify and choosing hospitals where they think they can do well. So those are hospitals that are already going to have characteristics that make them look like winners in the Medicare situation. So a certain amount of it is selection.

On the other hand, once there, a certain amount of it certainly would be or could be aggressive management. And so that would be what I would call treatment effect. In

this sort of a model where you're just looking across hospitals in a year, you're not going to be able to separate those two. But definitely it is a strong effect.

So anyway, how much of the variation so far in this sort of single-year cross-sectional analysis, have we been able to explain? Well, everything that we put in, the payment factors and all of the other characteristics, length of stay and occupancy, region, rural or urban, ownership types, all of it combined we explained about 42 percent. So that's leaving us with a chunk, certainly well over half.

What would be in there? Some of it is, I think, clearly related to market characteristics that I think we could measure and we're trying to do that. This is still preliminary and we'll build on the model some.

Those would include -- we do need to put more information about local market supply characteristics, more about the demographics of the population. We would certainly like to account for managed care in the area and the level of competition that way. We have county-level variables to do that. We would probably incorporate some of the measures that we saw -- was it one year ago or two, when we studied rural hospital markets? Because at that point we

did construct, for 1999, some fairly elaborate demographic measures for the hospital market that was constructed from areas where the patients came from. So not just the county where the hospital was located, but the patient-origin market.

So we will try and see what that does to the model. But a great deal of it, I think, is attributable to what's unobservable. These are not quite measurable differences in quality and in management effectiveness.

There's also a random component. And as long as we're just looking at a single year, that's quite possibly a very large one because there's a lot of variation from year to year.

There's a lot of volume volatility. About a fourth of the hospitals in this sample have fewer than 1,800 discharges a year. That's just not much. That's a very small hospital. And in other work that we've done, at my center we've done, in conjunction or under contract with the Office of Rural Health Policy, we have studied a lot of this volatility in hospitals and where it exists and how it's associated. These small hospitals have not only much more volatility, but the costs are much more sensitivity. So a

given 10 percent change in your volume in a year in the number of discharges has a much bigger effect on your cost per case in a small hospital than in the larger ones.

And all of that, I think, contributes to the unexplained portion that we have here.

I also got a very helpful suggestion from Dr. Newhouse a couple of days ago, which I followed up on, where he suggested a way to get out what may be at least an upper bound of the underlying, just totally random variation that we should not expect to get to no matter much we improve on this model.

I followed his approach to it, and that might be as high as 20 percent. So you're looking at 58 percent, and it may be that as high as 20 percent is just pure random and we're just not going to get at it. So in that case, the 42 percent looks up bit better, when you could think of it as well, we've explained half of what is potentially explainable. Another way of looking at.

On that random component, you know, year-to-year variation simply cannot be captured in a cross-sectional model. As I said, there is much greater demand fluctuation in these small hospitals. I think this is something we need

to be looking at in our further applications. It needs a different study design. It needs a study design with multiple years. There are ways to get at it but I think that we should focus on this in the coming -- not by June, mind you. That we could not do. Not by the June report, but perhaps in some further study.

Anyway, how to summarize all of this and pull it together a little bit. I guess we can say most of the variation that we can account for is attributable to the payment system factors. Some of the variation is due to problems in the case mix and the wage adjusters. We've seen that. But as expected, I think, the bulk of the payment system contribution belongs to the policy adjusters.

Now, because a lot of these factors are positively correlated, that is people with lots of teaching or high DSH -- not people, hospitals -- also tend to be located in the markets with high wage index and tend to have high case mix. All of these tend to occur together.

I think we may have more of an influence than it may appear when you look at these individually in the graphs the way I showed it. I think it could have a slightly more policy -- stronger policy influence because of it. The

different factors may be compounding each other and that's something that we need to keep in mind.

As a group, the hospital choice variables do have a substantial effect. Not as big as the payment variables combined but still substantial. Individually, any one of them may a modest effect, certainly compared to the policy adjustment effect.

But I think, before we do too much on the contributions of the hospital characteristics, we really need to get a better understand of what's going on those differences by region and by ownership.

I'm going to turn over the rest of this to Julian.

MR. PETTENGILL: Which will be exceedingly brief.

Basically, this slide says it all. We're going to try to deal a little bit better with some of the things that we see as current limitations in the preliminary findings, like exploring differences in market circumstances a little bit better. We'll plug in some of the variables that we have in hand. But you have to recognize that one of the main limitations there is data. It is very hard to get data that really capture a lot of the market circumstances that you would like to explore.

But we will do the best we can in the short run and try to do that for the June report and come back to you in April with a draft chapter that includes that material.

We also want to test the consistency of the findings over time because one of the key questions here is whether, as Kathleen said, if you've identified the structural relationships here among the variables then that should hold up over time.

And the other issue we want to explore for the June report is this length-of-stay variable which is very interesting and very powerful. What is associated with that? How are hospitals able to have very low ratios of actual-to-expected Medicare length of stay in places where they do that?

And then, in the longer run, I think there is some other work that really needs to be done, including exploring more fully the dynamics of performance over time. From earlier work we know there are hospitals that perform well systematically and consistently over time, and likewise there are a bunch of hospitals that perform poorly systematically over time. And then there are hospitals that move up and down and around over the course of a three or

four or five year period. And we'd like to understand better what's going on with them.

So that's pretty much it.

DR. NEWHOUSE: Kathleen, thank you for doing this. There certainly are a lot of substance here to chew over.

I've been thinking about my own contribution to the Kathleen Dalton full employment act, in terms of Glenn's question about the effect of adding the post-acute facilities and the issue of whether that was economies of scope or accounting. It seems to me one way to get at that, that would also have some interest in its own right for the Commission, is to go to the most of Medicare margin. That if it's accounting, then it should mostly go away. And if it's economies of scope it shouldn't.

Then just one other observation in passing. There was a debate at the start of the PPS that mostly disappeared, but I'm sure Julian remembers, about compression. As I read your findings, with respect to CMI, you've actually find anti-compression.

MR. PETTENGILL: We stretched it.

DR. NEWHOUSE: You stretched it, yes.

MS. DALTON: Although if I could say,

interestingly enough, that graph looked different when the CAH hospitals were there. So I think there's something going on at the low end that we need to understand better.

DR. NEWHOUSE: Although there's nothing in the debate about -- this is a kind of theoretical thing that would have led you to think it was an artifact of CAH hospitals.

DR. ROWE: One of my questions is I was wondering what the impact of taking the CAH hospitals out was because that's not a small proportion of rural hospitals. It's a big proportion. One of the problems with the report is you're going to have data on rural hospitals which people are going to interpret as rural hospitals when, in fact, it's a subset of the rural hospitals. When CAH's are not there, people may miss that. You might want to present data with and without them, if you can, or whatever. Some of the factors may not be relevant to them because of the way they're paid. I think that may be a big effect here and it may be misleading.

You probably covered this and I missed it, but did you take into account whether a hospital was for-profit or not?

MS. DALTON: We did.

DR. ROWE: Was that a contributor?

MS. DALTON: Oh yes, the margins for a for-profit hospital, controlling for everything else, are still considerably higher everywhere but the Northeast.

DR. ROWE: So the proportion of the unexplained variance is after you take out the proportion that's explained by whether it's for-profit?

MS. DALTON: Yes.

MR. SMITH: Kathleen and Julian, I found this very helpful and useful. A quick question on hospital choice. Does it make sense to try to add some measure of Medicare intensity? As one of the things that might -- you will be less sensitive to the Medicare margin if you are less Medicare intensive. And do we find a measure of intensity adds to some of the explanatory power of the hospital choice?

MS. DALTON: I have not -- intensity meaning Medicare utilization as a payer mix? I should put that in there. It's not one I've tried yet, and I should. It's a good suggestion.

MR. DeBUSK: Kathleen, Julian, I enjoyed this

section. It certainly brings up a lot of questions, as well as lead to potentially the answer to a lot of questions. But I've got some simple questions here. What is the spread on the wage index on a national basis?

MR. PETTENGILL: It roughly runs from about .78 up to about 1.5.

MR. DeBUSK: What's the total payout in the DSH annually?

MR. PETTENGILL: Total payout?

MR. DeBUSK: Yes, by Medicare, of the disproportionate share.

DR. STOWERS: About $5 billion.

MR. DeBUSK: About $5 billion?

Kathleen, I find the compounding effect really interesting here. The best I recalled, the wage index comes along at the end of the formula; right?

MS. DALTON: Right. That's one way of thinking of it, yes. They just multiplied one after each other. So yes.

MR. DeBUSK: So the synergies, when you pull that in proportion to the base, something is going on mathematically here to make this thing continue to go

skyward.

MS. DALTON: Right.

MR. DeBUSK: It's hard to explain.

MS. DALTON: If you've got an advantage because of a measurement problem in the wage index, for example, and in this case what we saw in the wage index could occur for a variety of reasons. It could be because there is some systematic difference in the measurement of average wages in high wage areas versus low. Or it could be because the labor-related share of payments is set too high. I'm inclined to the latter explanation but that's not the only possible one.

But if, in fact, you're enjoying the benefit of too high a labor-related share and you're in a high-wage area, so you're getting your payments adjusted upward and you're getting too much of your payments adjusted upward, you get your whole payment including IME and DSH and the base. Everything gets adjusted upward. So the effect is bigger.

I would say that there is a fairly complicated thing going on in the interaction between eligibility for DSH and eligibility for teaching adjustments. I left them

separate in this analysis. As you well know, anyone here, teaching -- this is a very complicated subject and I didn't want to get bogged down in the teaching estimate, per se. But that really needs some more careful splitting out and examining, as well.

What I was referring to is the overlap, the difference between those that get both and those that get one or the other.

DR. REISCHAUER: Kathleen, I think this is a very interesting piece of analysis and it raises all sorts of interesting further questions.

Am I right that when you were looking at the scope of hospital services, that these are dummy variables? I mean, did you try the fraction of home health and SNF business versus inpatient? As opposed to yes or no? Because it's sort of like some of these things have three SNF beds, or something like that. It's really not a big deal.

Then right along the same line, why didn't you include outpatient Medicare services versus inpatient, as also another one of these variables?

MS. DALTON: Those are all excellent suggestions.

In this particular model, I didn't use the intensity of the long-term care beds, the size of it relative to the size of the inpatient operation. I could. We have that data.

With home health it's a little more difficult. The data is not that reliable because it's coming off a part of the cost report that's a little -- it's just got more problems in it where you have to look at home health revenue compared to total revenue. And you tend to lose a few more hospitals because they have clearly out-of-range values.

But you're right, I think it is important to do that, Possibly even just to divide it into small, medium, and large on those dimensions.

The outpatient is very important. I agree with you. I think we need to capture the relative size of the inpatient from the outpatient book of business.

DR. REISCHAUER: Another question about this analysis and whether this would be a useful test. We had the effect of outlier adjustments and it slumped downward and that's the right way because you pick up a fraction of the excess costs if you're a hospital.

But I was wondering if we had multi-year data for this kind of analysis? Could you look at the change in the

slopes of that line to see whether there was increased abuse of the outlier adjustment over time? That if we had 2002 data, might we find that line sloping upwards? The tenet effect.

MS. DALTON: How will I answer that? We certainly could do multiple years. The thing about the outlier line in earlier years is that the formula has changed. And so it's going to look different as we got rid of day outliers, as we change the threshold, or other factors that would make that slope differ from year-to-year.

I did try, even in this data, just testing the sensitivity. If I pulled all the hospitals for whom outliers were more than -- I think it was 50 percent DRG payments. They're not many, but I was worried that that extreme value would, in fact, influence the estimate. And it did.

If you pull them out, that line slopes downward more steeply. In other words, there are some of those hospitals whose profits are not affected by it. And so it's watering down the effect a little bit.

DR. REISCHAUER: This was the hospitals with -- what did you say, over 50 percent?

MS. DALTON: Where outlier payments were more than 50 percent --

DR. REISCHAUER: Is that of the DRG payments?

MS. DALTON: -- of the DRG payments, yes.

DR. REISCHAUER: Did they have positive inpatient margins?

MS. DALTON: I don't know. I would have to look. That I didn't do. I simply took them out of the sample to see was that small group biasing this? Or was at least my estimate very sensitive to that extreme group. And the answer was yes.

MR. PETTENGILL: Bob, you have to remember, this is 1998 data for the most part and that's before the full flowering of this effect.

MS. DALTON: If anything, it's gotten worse.

MR. PETTENGILL: So it would be really interesting on 2000 or 2001.

DR. REISCHAUER: The fact that the line sloped down steeper when you took the people who were supposedly losing the most money on this out, it makes you think we should have to turn the graph around.

MR. PETTENGILL: Right, but there's a difference

between what she has now and the 1998 data. Maybe you have what, 20 hospitals like that? Or maybe even fewer. Versus 120 or whatever. It's just going to get stronger and stronger until these new policies go into effect and then it gets wiped out again.

DR. WOLTER: I was just going to say it would be interesting, if possible -- and maybe case-mix index is a proxy for this -- but it would be interesting to see if we can match any of this up with actual DRG mix. I think there's a definite sense that certain procedural and surgical DRGs have more profit associated with them than medical.

In fact, I think anecdotally there's lots of behaviors around the country aimed at marketing to certain types of patients. And then, of course, if we could put that analysis together we put could match it up with urban/rural region, for-profit/not-for-profit. I think that could be a valuable contribution, if we could put that together.

Secondly, I was just trying to connect this a little bit with the presentation on the variation in expenditure per beneficiary. Of course, that's different

than inpatient PPS margins. But I think if some would take comfort in the fact that the variation in expenditure per beneficiary is reduced after payment factors and policy factors are taken away, others would take this presentation and take no comfort in it whatsoever, but rather conclude that it only proves that there's inequity.

And so, back to Dave's question earlier about how we frame that particular chapter, we may want to think about that, as well.

MR. HACKBARTH: I agree with Nick. which is one of the reasons why when were talking to David, I thought using the phrase intended variation and unintended variation is a way to get at that. This is a conscious design of policy. Then we can argue about whether it's good policy or not and make reference to this analysis in that discussion.

DR. WAKEFIELD: Kathleen, would you comment just little bit more on in the overheads random component of the unexplained variation, volume volatility specifically.

You talked about both your work here and then some other work that you're doing that -- I've tried to notes and so now I'm trying to read my notes, and it's not easy.

But you were talking, I think, about greater

instability in demand year-to-year for low volume facilities. I forget what the cut-off was, but for low volume facilitates. So would it follow then that that random component is a potentially larger source of variation for low volume -- which tend to be in rural areas but not just -- for a larger source of variation in terms of impact on the margins? And then later on, I suppose, whatever implications that has. But could you comment a little bit on linking those two?

MS. DALTON: Because there is more volatility in demand and there's greater sensitivity to that volatility in demand, is what we think we've found from this other work in the low volume hospitals which are predominantly rural hospitals, then there is more of that -- what shows up in this cross-sectional analysis, it looks like unexplained variation and I've been calling it random. But of course, to the extent that I can say it belongs to this group, it's no longer quite random. We can call it pseudo-random.

It's more fluctuation in this small group. it is there. The thing to remember about that is we're talking about fluctuation. So that's not contributing to the lower average margins that you talk about. What that contributes

to is bouncing up and down. So you have people who are doing well one year and doing poorly the next year, well one year, poorly the next year.

So if you think, sort of if you lay hospitals out in a quadrant of folks who do poorly and folks who do well, and you looked at it in one year and in another year, you have some that are poor in all years, and some that are well in all years. And then you have some that bounce back and forth. That's the group that we would be talking about, to the extent that volatility affects where they are in this curve in one year.

DR. WAKEFIELD: Which then might have an impact on your hospital characteristics management decisions. I guess I'm asking. In terms of CEOs of hospitals being able to position their facility for profitability if a lot of the patients they're caring for are Medicare patients, and they're a low volume facility with a lot of that instability year-to-year. I guess these are in separate boxes but maybe there's some interplay there to them.

MS. DALTON: Certainly that probably has implications for the occupancy, since it's bouncing around.

MS. DePARLE: Nick asked my question but I'm not

sure I heard the answer, which is whether it's possible to drill down more and see whether some of the variation is accounted for by hospitals that perform more of certain procedures or DRGs? is it possible to do that?

MS. DALTON: Sure, you could have a variable that had percent cardiology DRGs to total or percent surgical to total. I hadn't thought about doing it, and that's an excellent idea. We could do that, right? That's an excellent idea and not hard to implement.

MR. PETTENGILL: Don't expect it for June.

MS. DALTON: Maybe not by June.

MR. DeBUSK: On page 17 of the handout, the summary of margin effects of other hospital characteristics; volume, occupancy, relative wages, and length of stay, I think from some of the people I've talked to in Florida right now they're -- to use the old saying, they're selling themselves out of business. They are just covered up with admissions of Medicare patients and occupancy.

The dynamics that are taking place because of this large percentage of Medicare patients, they claim, is quite unusual. And therein may lie an opportunity.

And Mark, this is one of the things I mentioned to

you, is about what's going on in Florida. I think there's a real snapshot of where we're headed with some of the challenges going forward as the baby-boomers come of age.

But there's some unusual things going on down there and some big, big hospitals. And this is happening now and this data is five or six years old. So what's going on? I'm not so sure we know what's going on. Well, we don't know what's going on.

But at this point, I think there's a real message here. There's an opportunity to look into the future perhaps somewhat, and say what is the dynamics? What's changing? What's happening in Florida where these admissions are hitting an all-time high with Medicare patients? Because there's definitely something going on in the care and the effect it has on caring for these people and the cost.

MR. HACKBARTH: Good work. We look forward to hearing the next installment.

We are close to lunchtime now. We will have a brief public comment period. Since we're running a little bit late I'm going to limit that to no more than 10 minutes, and it could even be less than that.

It is less than that. Okay, we will adjourn now for lunch and reconvene at 1:15. Thank you.

[Whereupon, at 12:10 p.m., the meeting was recessed, to reconvene at 1:15 p.m. this same day.]

AFTERNOON SESSION [1:35 p.m.]

MR. HACKBARTH: We are missing a few commissioners right now but we've got a lot to cover this afternoon so I don't want to fall too far behind schedule. We'll round up the missing commissioners as quickly as possible.

First on our agenda for this afternoon is an analysis of the growth in the use of physician services.

DR. WORZALA: Good afternoon. I'm going to start this presentation and then I'll turn it over to Kevin about halfway through. As a reminder this is a continuation of some work on growth and the use of physician services that you saw in November of last year and then also as part of the March report. We're building on the workplan that you looked at in November and are moving towards a chapter in the June report.

Historically, growth in spending on physician services has been a difficult issue for Medicare to address. Various different policies have been adopted over time, including expenditure targets and managed care, among others, and in this project we're looking in more depth at trends in the growth in use of physician services and the specific factors that might account for that growth. The

idea is that a better understanding of why service use is growing should allow us to better target policies aimed at controlling growth in spending.

This is very much a work in progress. What you have here is an outline of the proposed chapter. As I go through it I'll try and give you a sense of where we are. You've seen general trends in service use growth and trends by type of service. I'll review those in just a moment. And then your briefing papers included some new results that we'll present today looking at growth by geographic area. Then we'll present the results of our first analysis looking at factors affecting growth starting with professional liability. Another analyses are also planned, of course, as outlined in the briefing papers.

Finally we'll review the kinds of policy options that this work might inform. I'm sure you noticed that that part of the chapter is in outline form at the moment and we're very interested in your guidance there.

We won't be bringing you any historical data right now because you've already seen it, but the general trend in the use of physician services so there was very high growth in the 1980s. That did moderate in the 1990s after

introduction of the physician fee schedule. Then we do see future acceleration projected by the CMS actuaries.

This table shows the analysis of growth from 1999 to 2002 as published in the March report. To remind you, the measure of service use is the sum of relative value units for all services delivered without adjustment for local prices. We applied the 2002 RVUs and conversion factor to each year to allow for comparisons over time. The measure represents resources used per fee-for-service beneficiary and it captures changes in both the volume and the intensity of services delivered. The data come from the 5 percent sample of the physician supplier claims in each year. The average annual growth rate from 1999 to 2002 was 3.6 percent for all services. When you look at it by type of service there's considerable variation, and these are betos categories. That's a classification system developed by CMS.

Evaluation and management services experienced the lowest rate of growth at just under 2 percent per year. The volume and intensity of procedures grew at about 4 percent that annually for procedures, and tests and grew at 5.6 percent. The highest growth rate that we observed was for

imaging services which had an average annual rate of growth of 9 percent.

MS. DePARLE: The first column, what are those numbers?

DR. WORZALA: That's the actual value in 2002, so when you take the relative value units and sum them up and multiply by the 2002 conversion factor it's a measure of the resources used per fee-for-service beneficiary. So it's analogous to a dollar amount but it's not the same as expenditures because we've taken away some of the things --

DR. NEWHOUSE: If everybody were paid at the same price this would be dollars?

DR. WORZALA: Exactly. Right. So we've taken away any of the local adjustment to payment for input prices, but it is analogous to a dollar. So you could say that fee-for-service beneficiaries, if everybody were paid the same, we spent $739 on physician services for a beneficiary. Does that makes sense?

MS. DePARLE: Sort of.

DR. WORZALA: Kevin, did you want to add anything?

DR. HAYES: No, I think that really captures it.

So it's the dollar's worth of care that someone is receiving in each of these categories.

DR. NEWHOUSE: I think Nancy-Ann's problem, maybe she's not sure what the units are and maybe it's just best interpreted as an index number.

MR. HACKBARTH: In the market that has a geographic adjustment of 1.0, right? So in that market we'd be talking about spending $739 per --

DR. WORZALA: Then if you look at the numbers under all services, do sum to 739, so we're just apportioning all services across the service lines.

MS. DePARLE: So if I read this, the spending on something like tests was relatively small but the average annual growth of that over the 1999 to 2002 period was relatively larger than some of the other where the actual spending was hired.

DR. WORZALA: Right.

MR. DeBUSK: Why is this?

DR. WORZALA: That's what we want to find out. Hopefully by the end of the April meeting we'll be able to tell you, at least some of it.

MR. DeBUSK: It might have something to do with

the legal profession.

DR. WORZALA: I'm sure we'll get into that a bit later.

Given the large growth in volume for imaging services, we chose to focus our initial geographic analyses only on that line of service. So what this map shows is the level of service use in 2001. Due to data limitations really for the denominator, fee-for-service beneficiaries in area we could not use 2002 data and are limited to 2001. We are hoping to expand to 2002 soon.

The unit of analysis here is the payment locality. That's the geographic unit used to adjust payments for differences in input prices, so things like the practice expense, GPCI, the PLI GPCI. There are 87 payment localities, of which 34 represent entire states. The other payment localities represent large urban areas such as New York or Chicago, or portions of larger states. Particularly, California and Texas have a number of payment localities within the state.

The measure of service use is the same. It's representing resources used for imaging services on a per-beneficiary basis, counting only fee-for-service

beneficiaries. Those areas with the lightest shading are the lowest quartile of service use. Those with the darkest shading are in the highest quartile of service use.

As with the geographic variation analysis you saw this morning, we did map service use to the beneficiary place of residence, not to the place of service delivery. We use the denominator file to identify the population by locality.

This table shows the pattern of growth in use of imaging services by geographic area as well as the relationship between the level of use at the beginning of the period, or 1999, and the rate of growth over the period 1999 to 2001. Again, we're looking at payment localities with the same measure of service use for imaging services. You look at the four quartiles based on average use of imaging services in '99. Quartile one has the lowest use, quartile four has the highest use. That's reflected in the second column there.

The use of imaging services did vary by a factor of almost two between those with the lowest service use and those with the highest use, so varying from 57-sort-of dollars on average to 113. But when you look at the average

rates of annual growth there's a slightly opposite pattern where those with low use initially, or quartile one, have a higher rate of growth over the period, and those with the highest use have the lowest rate of growth. So the difference in growth rates you'll see is not quite as stark or as large as the difference that you saw in the level of service use.

We have two different hypotheses that might explain this trend of lower growth in areas with higher use and vice versa. One is these is more statistical where you could have some regression to the mean, and the other might be some sort of saturation hypothesis where those areas with high level of use simply have less room for additional growth in use of services.

Finally, the last column on the table captures the contribution of both the initial level of service use and the subsequent growth in service use to the overall growth. So when you look at the overall growth in imaging from '99 to 2001 the average annual rate was 9 percent. The question is, for each quartile when you look at both their level and their rate of growth, how much are they contributing to that 9 percent growth overall?

What you see here his that quartile one, which does have the highest rate of growth but is combined with a lower level of service use, is actually a relatively small contributor to the overall growth. By contrast, the third and fourth quartiles which had lower growth but much higher initial service use contribute more significantly and they do account for about two-thirds of the overall growth. This does illustrate that if policymakers are concerned with the rate of growth in service use, you shouldn't focus simply on areas with the highest rate of growth. Areas with high use are equally important.

Our analysis of geographic variation and service use is both descriptive, as I've presented here, and analytic, supporting our investigation of the factors that might account for the growth to start to answer Pete's question. The first area that we were going to look at is professional liability and that's where Kevin comes in.

DR. REISCHAUER: Can I ask a question? Do the quartiles have the same number of beneficiaries in them or are they service area?

DR. WORZALA: They're not beneficiary weighted in defining the quartile, but then when you construct the

services --

DR. REISCHAUER: But then the last column you can make no sense out of it at all.

MR. HACKBARTH: Did you beneficiary weight the last column?

DR. WORZALA: Yes, the last column is. The last column is, but in defining the quartiles we didn't do that.

DR. ROWE: You may have done this and I may have missed it, but in your analysis -- I don't know if this is possible. You might be able to look at it in one specific area. In my experience there are two things that you have to look at. One is the total use of imaging services, and the second is the total number of imaging machines. You get a very different analysis.

What happens is when there's a new machine or machines are added to a market where there might be relatively low use, they tend to get scheduled up pretty quickly and there's not a lot of resistance to having any particular test scheduled, because we want to use the machine. When you get a saturated market, then people start to have to wait for these tests and physicians are much more rigorous about who's going to get the MRI versus who can

have a CAT scan or a regular film because they don't want to wait, et cetera. So it's a kind of demand and supply issue with respect to the number of machines. That might explain why the areas with the lowest utilization on an absolute basis have the highest growth, because those are ones where machines are just becoming available and there's relatively low threshold to get scheduled, et cetera.

So that's just the way it works within a medical center and a hospital and a community. I don't know if you have the data available on the number of units as opposed to the number of tests, but if you did it might make an interesting secondary analysis. You might explain some of the variance here.

MS. BURKE: Glenn, may I ask a question or do you want to wait and just finish the whole --

MR. HACKBARTH: If we can wait I'd just as soon get the presentations out.

DR. HAYES: So we've seen some variation in use of services by type of service and by geographic area. So the question now is whether we can explain those different patterns in growth. Recall back in November we talked about a workplan for this topic and the thought was that we would

try and identify various factors that might explain growth in use of services, analyze some data to see which factors are most important, and then if appropriate, identify some policy options that the Congress or CMS might consider. So this initial step here represents our effort to fulfill that plan.

We can think of a number of different factors that might affect growth in use of physician services. We've talked about some of them this morning. We talked about some of them just now. Things like technology diffusion, changes in practice patterns. The Commission has been concerned over the years about shifts in the site of care and so on. So all of these things could conceivably play a role in the growth patterns that we see.

As a first step in trying to pursue these different factors we have focused on this matter of professional liability or medical liability, whatever term you prefer. The idea here is that because of fear of medical liability suits it's possible that physicians are ordering extra tests and procedures just to protect themselves and practice what has been termed defensive medicine. We chose this topic for different reasons. Part

of it has to do with the availability of information on the subject and I'll get to that in a second. But the other is that this topic does illustrate the way that we can proceed from a topic that might affect use of physician services through some kind of an analysis and ultimately maybe some recommendations regarding policy.

So looking at this first bullet here our question for now is do areas with higher professional liability insurance premiums have higher growth in use of physician services? As you can see here, we're using this idea of professional liability insurance premiums as an indicator of the risk of medical liability lawsuits. Certainly, we would expect that the level of these premiums is determined in large part by the number of lawsuits in an area and the amount of awards in those lawsuits.

From an analytical perspective we've gone about trying to address this question by using as our measure of PLI premiums the geographic practice cost index in the physician fee schedule for PLI. This is an index that CMS maintains. It's based on collection of data on PLI premiums for the different payment localities that Medicare uses. You can see once again we're focusing on imaging services as

a high growth type of service.

MR. DeBUSK: Kevin, a certificate of need will come into play, which states have certificates of need and which don't, because that's going to determine the number of units in that state.

DR. HAYES: Sure. There are many, many factors that we can pursue. There was talk this morning about supplemental insurance coverage. There's just a long list of possible candidates that might help us understand why use of services is what it is. I think the goal here is to go through analyses of these different factors and we hope get to the point where we achieve a level of understanding of what the more important factors are and then we can turn the Congress and say, okay, if you're worried about these factors, here are some recommendations from a policy standpoint you might consider, given that understanding of the important factors as a backdrop.

So let's just talk for a second about this PLI GPCI that we have available to us. This index varies by payment locality and it ranges from a low -- the GPCI itself is centered around a value of one. It ranges from a low of 0.28 to a high of 2.7. 0.28 is in South Carolina. The

whole state is a payment locality. And 2.7 is the GPCI for the city of Detroit, just to give you an ideal of what we're dealing with here.

If we then say, what do we see when we try and compare the GPCI and use of imaging services? This table gives you a first pass at our results. It's structured pretty much the same way as the table that Chantal showed in that we have classified payment localities into quartiles based on the value of this GPCI. The second column over here you can see what the average level of the GPCI is for each of the localities ranging from 0.5 up to 1.4.

That next column over is interesting in that it begins to show us what might be some kind of a relationship between use of imaging services and the level of the GPCI. We can see a steady increase here from 69 on up to 101. Before we proclaim this as the answer I'll just alert you to the fact that I've got some caveats to talk about in just a second or so. But in any case, this is an interesting result and prompts us to look further in this area.

The next column over shows the average rate of growth in imaging services, use of imaging services for each of the quartiles. We see the highest rate of growth is for

the first quartile; the quartile with the lowest average service use. Then we see a decrease in the growth rates down to 7.9 in quartile four. There is a negative correlation. If we calculate a correlation coefficient for this we get a coefficient of minus 0.22. But when we look at the individual quartiles the relationship is a little less clear and that we've got quartile three there misbehaving with a growth rate of 9.4. So that breaks up any clear trend that we might see here. But nonetheless, there is some kind of a relationship there.

Then finally we have the contributions to overall growth of the type that Chantal showed. I'd just point out here that we've got -- the first quartile is contributing 2.2 percentage points to our total of nine, but then the fourth quartile is making the same contribution. That once again shows that combination of the baseline use rate working with the average annual growth rate and you can get a high contribution to the overall growth with this combination of either low baseline, high growth or high baseline, low growth.

Our next slide then just lists some of the caveats that we'd want to put on all of this. The first thing would

have to do with the limitations of our measure of PLI premiums, this GPCI from the fee schedule. There are a couple of things to point out about this. The first is that ideally we would have a measure of premiums that is for the physicians, the physician specialties, that are actually ordering these imaging services. But we don't have that. We just have the indicator for all physician specialties.

The other thing that we would really like to have is some sense of how these premiums are growing. After all, our primary interest here is in growth in use of physician services and it would be nice to have a compatible measure of PLI premiums, risk of medical liability suits, whatever it is. But once again, we just have this GPCI. It's an average for three years, 1996 through 1998, but it doesn't represent any kind of a growth in premiums type of measure.

Finally just coming back to that point about the data used to determine the GPCI, that is from '96 to '98. I'll just point out this one graph that you've seen before, something we put in the March report. It has to do with growth in PLI premiums over time. You can see by looking at this that with data from 1996 through 1998 we were in a period when premiums were declining or flat perhaps, but

since then, certainly for the period for which we have the use of services data, premiums were going up. It could be that imbedded in those growth rates that you see here there have been some differentials by payment locality. We just don't have that. It would be nice to have more recent PLI premium data. CMS is working to collect better information but we won't have that in time for the June report.

The other important thing to point out about this has to do with the views of some that this relationship between PLI and use of services could work in different directions. Our hypothesis here is that risk of a medical liability suit is what is leading to use of imaging services. But it's possible that the relationship works the other way. That greater use of services presents more opportunities for errors and that is what is leading to the PLI premiums that we see. Or it's some combination of the two, that we have a dual multidirectional relationship going on here. So it's an interesting situation that we confront when we look at something like this.

So that then brings us to what we might do in the way of policy options and how we might use analyses like this to develop policy options. What I would say about this

is that ultimately after we've looked at a number of these factors we might come up with some policy options that would fall into two different groups. One group would have to do with payment policy. Perhaps we would come up with some suggestions for how Medicare pays for physician services working through the fee schedule or some other mechanism like that.

The other possibility is that we would consider broader approaches outside of payment policy, disease management, for example. Karen Milgate will be presenting a paper tomorrow on using incentives to improve quality of care. If we think that maybe some use of services involves overuse of services, and if we view overuse of services as a quality problem, then maybe some of the ideas that Karen will be talking about are a relevant source of options for us to consider.

Then there is the matter of the ambiguous results that we get out of an analysis like the one that we've conducted so far having to do with this possibility of a dual relationship between the factor that we're looking at and use of physician services. It raises the question then whether we should rely just on this approach to reaching

policy recommendations and whether we want to just address some specific issues and develop targeted options, kind of moving along on a parallel track.

The next steps for us in this effort involve further analyses of factors affecting use of physician services, technology, shifts in site of care, the patterns and billing codes used to report services provided to Medicare beneficiaries, and so on. Then ultimately we would consider policy options as appropriate.

That's all we have.

MS. BURKE: As has been the case with all of these this morning it has been quite useful and I think gives us a framework for a terrific discussion. One of the things I wondered about as you were building a set of criteria to examine that might have an impact, not inconsistent with where Jack was going, I wondered about the presence of specialties, and the distribution of specialties and whether or not both the number of physician as well as their mix isn't a contributing factor. The presence of cardiologists, the presence of radiologists, pathologists, anesthesiologists. As you like at the imaging area as one of the areas of growth, the presence of a large number of

specialists who either have available to them, as Jack suggests, new imaging capacity because of growth in that or just as the nature of their practice, whether we know today whether the shifts that we saw occurring early on between the different groups of physicians as we tried to examine that previously, whether that still exists and what its impact is.

DR. HAYES: We do have pretty good information on the supply of physicians by geographic area, so that's certainly the kind of thing that we can pursue, and there's pretty fine level of detail in terms of the specialties as well as just numbers of physicians.

DR. STOWERS: Kevin, I just wanted to open up this PLI thing a little bit further. I think there's a difference in the PLI market where the risk, and therefore the premiums, are higher and stable over time. You would expect there to be less growth. But I think what's happened here, and I think you're absolutely right the secret is probably in the change in the numbers from '99 to '01 because if you look on the map you've got Mississippi, the Carolinas, Pennsylvania, some of the traditionally very low PLI states that are in the middle of the crisis with

quadrupling of their premiums. What's happening there is, I think the 11.1 percent growth makes perfect sense there in the use of their services because they're suddenly finding themselves changing from a low-risk PLI market to a very high-risk PLI market, and therefore you would expect that kind of response.

So I think if we look at stable situations and growth situations where there's been a change in the PLI, I think this is all going to make a lot more sense and probably confirm a lot more the fact that as the market changes to be higher risk you will see an increase in the growth. So I think we've got to get growth to growth there in looking at that.

MR. SMITH: Two points. Again, I found this very useful, Chantal and Kevin. This continues a day of useful stuff.

I wanted to make Sheila's supply point just as one of the things we ought to take a look at. But the other one that struck me looking at this map and trying to do a crude effort of figuring out what it told us, it also seems to me that beneficiaries characteristics may be very telling here. Intensity seems to me to line up with what we know about

retirement communities. Even Pennsylvania is interesting, Ray. It's got the oldest population in the country. And you mentioned some of the other beneficiary characteristics, access to the supplemental market. So things are going to line up in varying ways and I suspect we're going to find a multiplicity of causes here.

I would be a little bit careful about getting too far down the PLI limb before we look and see whether some other stuff tells us both as much and as little as that does.

DR. HAYES: I should point out this was meant to be an illustration of the sequence that we hope to go through with all these where we start out with a factor and see what the relationship looks like. Ultimately we're going to have to put all this together and sort it out and figure out which ones are more important and which ones are less. We hope that the most important ones then become the focal point, as appropriate, for policy options.

DR. NELSON: I again want to urge that we avoid a conclusion that volume growth is somehow evil and that policy should be directed toward controlling it, because certainly that's not the case with less invasive

cardiovascular procedures or colonoscopy or osteoporosis screening or other things in which we seek to increase volume appropriately. And probably that's true of some imaging services as well.

Secondly, you mentioned a shift of site of service and particularly with respect to imaging that may be a factor where previously more was done in the hospital and both the technical and professional components were separated and part billed to Part A. Now with freestanding imaging centers more and more will be both going to Part B. Now how much of it's appropriate or inappropriate is another issue, but I'm talking mainly to make sure that we don't include numbers that ought to be excluded.

The same could be said for drugs that are covered under Part B.

The third thing, I'd just underscore someone else said about avoiding connecting PLI with volume. It's hazardous because of the multiple additional factors. Probably the most important factor in volume in my view are the availability of facilities, services, and the marketing of those services. You certainly see that with direct to consumer advertising of not only imaging capability but also

of some physician-provided drugs.

MS. DePARLE: I agree with Alan, I think it's important that we not - and I don't think you have so far -- draw conclusions from the data about appropriateness or inappropriateness. I guess I wonder if we'll be able to get to that point by June. You've done a lot of work but it seems like there's still a lot to be done here. In particular, in the paper that you wrote you talk about looking at growth in service use by site of service. Alan alluded to this as well. You have some data about the growth of IDTFs but I remember seeing something recently about the growth in the performance of non-invasive imaging in physicians' offices as opposed to referring out to either hospitals or IDTFs. What sticks in my mind was something like more than 50 percent of the procedures now being performed by non-radiologists are in those other settings.

So I wondered if you had begun to look at that. And if so, do you have any data on that yet?

DR. HAYES: We can look at the setting where services are provided. It turns out that there's not a lot of difference, I think it's fair to say this, between IDTFs and physicians' offices in the sense that they tend to be

the same kinds of places, it's just that it's a difference in designation, one versus the other.

The other thing I'd point out is that since we wrote the paper even we have been looking at what seems to be a pretty extensive -- I won't say extensive but there is quite a body of work out there on this issue of self-referral. Is that what you're thinking about?

MS. DePARLE: Yes. So when I said -- I think there is a distinction between IDTFs and physicians' offices, if you can drill down into this, because there are physician offices where the referring physician is doing the procedure in his or her own office. My understanding is that that has grown a lot in the last few years. In that sense I think an IDTF would be different because those places are not -- those are typically staffed by radiologists and my understanding is that a lot of the growth has occurred in the non-radiologist offices.

DR. NELSON: What's IDTF?

MS. DePARLE: Independent diagnostic treatment facility.

DR. HAYES: The claims files have the variables that we need to find out who the referring physician versus

the physician who was providing the service. We just need to work with those variables and see if they'll tell us anything. We just don't know about the quality of the information.

MS. DePARLE: I think I said that wrong. It's diagnostic testing facility, not treatment.

MR. HACKBARTH: Just a word about the time frame here. I think we're still very much in the research mode here and I think we certainly will be through June and beyond. Whether we will uncover anything that we think is worthy of a policy proposal or not, I don't know. But if we do it would be for the next year's cycle. We would be working towards next March's report. So although we're trying to publish a useful price of work for June, we've got much more time than that to explore carefully this area.

DR. ROWE: I think this is very interesting. Putting my clinician hat on I'd like to make a recommendation I think might clean up the analysis a little bit. If you look in Table 1 of your chapter, you list the basket, if you will, of imaging procedures that you're including in this imaging global measure. If you think about it, defensive medicine, if it exists, is not really

doing chest x-rays. They've always been there. And it's not doing plan x-rays of the musculoskeletal system. It's really doing CAT scans when people have a headache even though the neurological examination suggest that there's nothing serious and they don't have a history of a seizure of a severe head injury of something. It's doing the MRI because somebody really wants one. Somebody wakes up with a sense of having a dread disease so it's doing the total body CAT scan just to make sure everything is okay, et cetera.

I think that you could clean it up a lot if you went down this list of imaging and you took out some of these things that probably aren't really relevant to your defensive medicine hypothesis. You could just do CAT scans and MRIs of the head and elsewhere and put those four together as a kind of variable, and then do your analysis. You might see it clean up dramatically because the regular chest x-ray would fall out. Maybe cardiac imaging I would buy. I can't believe people are doing lots of cardiac caths on people who don't have any reason to have a cardiac cath. That's hard to imagine because people die from cardiac caths. At a very low incidence, but they do. So it's really hard to imagine that there's much of that.

So really the issue is to be a little more selective and create a secondary, maybe advanced imaging category. I think that may clean things up a lot here.

MR. MULLER: Again I'll join in the compliments for the quality of the work. A couple of comments. In terms of the relationship of whether the liability leads to more testing and more testing leads to liability. There's been work done over the last 10 years in those Harvard studies -- and those are hospital-based so they don't apply to all physician locations -- that indicates that a relatively small proportion of incidents lead to malpractice. It's considerably under 20 percent. Sometimes you look at four, 10, 12. So the likelihood -- there obviously are intervening variables between incidents and liability. So it's probably not that likely that more -- by that logic, that the greater number of incidents would lead to greater liability in that sense because there's just so many things that happen in between the incidents and a liability claim being filed.

Secondly, and Jack and Alice and others may comment, but my sense is over the last eight, 10 years the price of imaging has gone down quite a bit in the private

market. I don't know what the Medicare prices are. You pointed out the prices for physician service in general, but I don't know what the -- I can't remember now what the imaging prices are for Medicare. But with that considerable price competition and in the rest of the world price going down sometimes does lead to more use, so my sense is part of the explanation can be not just the one that Nancy was suggesting in terms of the facilities being out that but there's a very remarkable drop in price, I think of the order of 75 percent in some of these in the last few years.

DR. HAYES: You're talking about the cost of the equipment.

MR. MULLER: No, the price that private insurers pay for this imaging as opposed to Medicare. I don't know what the Medicare rates have been over this period but the price paid, whether by self-pay or by private.

I just have a brief question of Jack. I agree with his sense of reclassifying the imaging base. But my sense is the kind of geographic variation work that was discussed this morning indicates that the CATs, in fact there's quite a bit of a variety, variation in CATs so they may in fact not just be always driven by pure -- so that you

may want to keep them in or not. I don't have a definitive opinion, I'm just really more asking a question of that. But I would definitely look at the price variable because I think the proliferation of these devices has -- you can't get them for $49 like Earl Scheib but you can get pretty close.

DR. NEWHOUSE: I guess I had a reaction somewhat similar to what I read as Glenn's, which was I wasn't clear where this was going at end of the day or how we were going to interpret it. I think consistent with Ralph's remarks about price, this kind of slide I think one could say this is where technological change is occurring. It's hard to make any normative judgment about whether this is good, bad or indifferent.

I also found it hard to interpret the growth rates because I would have thought over -- generally they were over a two or three-year period. I would have thought there's got to be a fairly large random component in that short a time period about just where particular providers go in, and where Jack's new facilities come in. I, frankly, didn't quite know what to make of it.

Then going back on a minor point, going back to a

discussion we had this morning about the geographic variations, I think the growth numbers here are presumably resident-specific, right? And the PLI numbers are provider-specific? So you have some across interference there.

MS. ROSENBLATT: Just a quick point. I too thought the chapter was good and I liked the idea of zooming in on the procedures that are increasing in volume, like you've done with the imaging. Just one comment on the medical liability. Those premiums are also going to reflect the regulatory environment in the state. Like some states have a cap, so that might be distorting the analysis.

MR. HACKBARTH: Any others?

DR. ROWE: A cap on?

MS. ROSENBLATT: The award, like California has a $250,000 cap, so that's going to affect the premium obviously.

MR. HACKBARTH: As opposed to claims.

DR. ROWE: But I think if we start adjusting the -- the premium is probably more influenced by stock market performance than it is by number of claims or presence of a cap. If you really look at why premiums are going up, it's as much because the market has gone down for three years

than it is changes in the number of awards, malpractice awards. So it's a hard thing to start to adjust.

MR. HACKBARTH: Any others?

Okay, thank you, Kevin, Chantal.

Next we have a series of presentations and discussions on post-acute care. Sally, I think, is going to frame the overall discussion; is that right, Sally?

DR. KAPLAN: Yes, sir.

The purpose of my presentation is to introduce the post-acute care chapter that will be part of the June report. The chapter is in response to your questions about three areas of post-acute care. This is ongoing work. What you'll see in the June chapter will only be the beginning. So that's either a threat or a promise.

The June chapter will have three main sections after an introduction, results from research using the post-acute care database, on differences between freestanding and hospital-based SNFs, and on long-term care hospitals. Today you'll have presentations on SNFs by Suzanne Seagrave, and on the post-acute episode database by Chris Hogan and Nancy Ray. In April we will return with the draft chapter which will include research on all three topics.

So Suzanne will be up next with the freestanding versus hospital-based SNFs.

DR. SEAGRAVE: Good afternoon. First I want to start off by reminding you of some of the issues we discussed this fall, and this is in reference to motivating why we're looking at the difference between hospital-based and freestanding skilled nursing facilities.

First, we noticed a difference in financial performance between these two types of facilities with freestanding facilities having a Medicare margin in fiscal year 2003 of approximately 11 percent and hospital-based facilities having a margin of minus 36 percent for fiscal year 2003. This is, again, the Medicare margin. This shows, obviously, apparent market difference in the financial performance of these two types.

In addition, we also showed you this fall evidence to suggest that cost in freestanding SNFs have been declining between 1998 and 2002, but GAO recently reported that hospital-based SNFs' costs may have been rising, at least between 1997 and 1999. They showed hospital-based SNF costs going from $461 per day in 1997 to $490 per day in 1999.

Also suggesting a difference in the financial performance of these two types of SNFs is that freestanding SNFs appear to have increased their participation in the Medicare program between 1998 and 2002 by about 3 percent, whereas over the same period the number of hospital-based SNFs participating in Medicare decreased by about 26 percent.

So this naturally led us to ask the question, why are these two types of facilities, why do they appear to be so different in terms of financial performance under the Medicare program? So in the next few slides I will discuss some of the observed differences between hospital-based and freestanding SNFs that have been previously identified in the literature. Then I will go on to discuss some very preliminary findings from our analysis of some SNF stay data that we've acquired in which we examine the populations and patterns of use by type of facility.

First of all, in the literature a number of studies have suggested that hospital-based SNFs may have a higher case mix of patients than freestanding SNFs. For example, MedPAC using 1999 data on APR-DRG case mix indexes found that hospital-based SNFs had about 11 percentage

points higher APR-DRG case mix than freestanding SNFs. Similarly, Corbin Liu and Associates in 2002, also using 1999 data and a slightly different DRG-based case-mix index found that hospital-based SNFs were likely treating a higher case mix of patients. They also found slightly higher use of cardiac care units and intensive care units in the hospital stay prior to entering hospital-based SNFs than in patients who entered freestanding SNFs.

There have also been examples in the literature demonstrating that hospital-based SNFs may have higher costs per day than freestanding SNFs. This is just one example of that. Liu and Associates, again using 1999 data -- and this is not adjusted for case mix, I don't believe -- but he found that hospital-based SNFs had almost twice the total per diem total costs and twice the per diem routine costs per day than freestanding SNFs.

Other observed differences previously noted in the literature include the fact that hospital-based SNFs tend to have about half the average length of stay of freestanding SNFs. The research also tends to find higher levels of nurse staffing and more skilled nurse staffing in hospital-based SNFs. As you can see, a study by CMS -- this is the

big nurse staffing study by CMS -- found substantially higher nurse hours per resident day both in total nursing hours and in RN hours.

Because there are still a number of unanswered questions about the differences between hospital-based and freestanding facilities and the implications of these differences for access to care and quality of care issues, we have obtained a SNF stay database from CMS. The database contains SNF stays occurring from 1996 through July 2001. I want to note that the stays in 1996 and 1997 are probably less complete and less reliable than in the later years. So we tend to only use the data points after about 1998.

Stays in the dataset are identified by a unique beneficiary ID, a unique facility ID, and a unique admission date to the facility. So this means, for example, that if you have a patient going from a hospital-based to a freestanding facility those would be two different stays. So we will eventually try to link those up to create an episode.

This database is useful in that it links the claims for the SNF stay with the claims for the prior hospital stay and any rehospitalizations that occur after or

during the SNF stay. It links all of that with the OSCAR file which provides provider information such as ownership, type of facility, number of beds, location, et cetera. Then this is all linked with the MDS 2.0 file which are all of the beneficiary assessments that occur while the patient is in the SNF. So this is a rich data source.

I wanted to point out that this differs from the post-acute care episode database in that this looks, obviously, at the stay level rather than at the episode level. The database you'll hear about next looks at events at the episode level. This also concentrates only on the SNF stays so we actually capture all of the SNF stays that occur in Medicare in each year, whereas the episode database uses the 5 percent, so it's only a sample of those stays.

This slide presents a summary of the 200- data as well as a summary of the 1994 data. In some cases we have used 1994 data from the ProPAC June 1996 report. So this shows you that in 2000, in our data we had 1.8 million SNF stays accounting for about 1.4 million beneficiaries. 73 percent of these SNF stays were in freestanding facilities. Almost 15,000 SNFs are in the database and about 87 percent of these are freestanding. Just to compare, in the 1994

data there were 1.1 million SNF stays and just slightly over 12,000 SNFs. But if you can see, not as much changed as you might expect between 1994 and 2000. That's going to be a theme of this data.

This is to give you a look at the demographics of patients going to freestanding and hospital-based SNFs both in 1994 and in 2000. Again as you can see, not as much has changed over the course of these years as you might have expected. The hospital-based SNFs appear to treat fewer of the 85-and-older population, but this was also true in 1994. Similarly, hospital-based SNFs appear to treat more of the non-elderly disabled population, as they did in 1994. Interestingly, the population of non-elderly disabled treated in both types of facilities has grown over the period for both types of facilities.

This next slide shows the 10 most common DRGs going to both freestanding and hospital-based SNFs. It is in fact the same list, although for hospital-based SNFs the order is just slightly different towards the bottom. But interestingly, by the way -- it doesn't show on this slide but these are in fact the same 10 DRGs that were most commonly in SNFs in 1994 as well. Again, slight ordering

differences.

DR. ROWE: All this is just for Medicare, right? This is not for SNFs in general, it's just for people in Medicare.

DR. SEAGRAVE: Correct. We just focus on Medicare beneficiaries.

As you can see, DRG 209 is the most common DRG of patients going to SNFs. The percentage, 11.9 percent of the stays in hospital-based SNFs were accounted for by this DRG and 6.4 percent of the stays in freestanding facilities were accounted for by this DRG. So it appears that hospital-based SNFs are taking a higher proportion of their patients from this DRG. But the trend is that the DRGs appear not to be that different between the two types.

DR. REISCHAUER: This is like a hip replacement or a knee replacement? It can't be a reattachment. I mean, not many --

DR. ROWE: It's a joint reattachment. It's a hip replacement or a hip fracture, a fixation of a hip fracture.

DR. SEAGRAVE: The last bit of data that I'm going to show you today demonstrates again that hospital-based

SNFs continue to have about half the length of stay, the average length of stay as freestanding SNFs. Interestingly, the length of stay in both types of facilities has decreased at about an equal rate from 1994 to 2000.

So as I said, these are just very preliminary findings. From the literature and from our research of the database we find that there may be a slightly higher case mix of patients in hospital-based SNFs although additional research may need to be done. Some studies indicate that hospital-based SNFs may have higher nurse staffing ratios. Eventually we want to look into this more.

Demographic mix of patients appears the same in hospital-based and freestanding SNFs, but hospital-based SNFs consistently appear to treat a higher percentage of disabled beneficiaries and a lower percentage of beneficiaries 85 years and older.

The most common DRGs treated in SNFs appear to be about the same for hospital-based and freestanding SNFs, and this doesn't appear to have changed much since 1994. And the average length of stay in hospital-based SNFs is consistently about half that in freestanding SNFs.

Next steps. Originally we had wanted to examine

the differences between hospital-based SNFs in three categories: the types of beneficiaries, the use of the facilities, the costs. When I say that I mean the cost to the Medicare program, so Medicare payments to the two types of facilities. And quality of care in the two type of facilities. So our next steps are to try to examine Medicare spending for the two types. When I say that I mean we want to look all the way through the episode, from what we spend in the hospital, what we spend in the SNF, and any rehospitalization through the entire episode, to compare Medicare spending in the two types of facilities.

Then also we hope to be able to bring you quality of care with some preventable rehospitalizations that we're looking at between the two types of facilities. I just want to mention as well that we will look at some of this, we'll try to look at some of this regionally, if we can, as well.

So I welcome any comments or questions.

DR. NELSON: I think also it would be important to try and capture disposition, whether patients in a hospital-based SNF, for example, were transferred to a freestanding SNF in a more convenient location for the family, for example. They were stabilized in the hospital-based SNFs

with an intention of subsequently going to another. So whether they were discharged home, back to the hospital or to another post-acute care setting would be interesting.

I think also with respect to quality measures, things like bedsores, things of that sort that I believe are captured in -- in the what, OASIS?

MS. DePARLE: No, not OASIS. MDS I think.

DR. NELSON: Anyway, some quality measures other than just admission to the acute -- readmission rates -- that more particularly focus on the quality of post-acute care.

MR. HACKBARTH: Your first point may also help explain something that puzzled me, that the hospital-based have higher case mix but a much shorter length of stay, which would be consistent with the hypothesis that they're there for a brief period, stabilized, and then moved on to a freestanding SNF.

MR. MULLER: Consistent with the minus 36 percent as well.

MR. HACKBARTH: In terms of intensiveness of the services they receive during their stay.

MR. MULLER: And also then, when it's appropriate,

to move them to post -- home care and so forth.

DR. MILLER: Just to reassure you on this point, some of these discussions have already taken place and part of the reason that we're thinking that we need to look at this, hospital-based and then into freestanding is we see these lower lengths of stay and this question was coming up. That's why Suzanne was pointing you to the episode analysis.

MR. SMITH: Actually most of what I wanted to query about, Suzanne, was just done. We have hypothesized in the past that hospital-based SNFs were up to something else, something that the freestanding SNFs weren't. The data are, at best, murky about that, but one possible answer is the disposition, Alan. It may even be a facility and resource management issue that hospital discharge planners are less willing to take folks who are going to occupy hospital-based SNF beds for long. So it seems there's a lot to tease out here. The case mix difference is real but it is not as striking as our last year's conversation about they're up to something different would suggest. The demographics are the same, the DRGs are the same. So I think we need to look a little bit harder.

DR. NEWHOUSE: The demographics aren't the same.

They're much older.

MR. SMITH: Older in the freestanding SNFs, right. So I think we need to really try to plumb this notion about, if they are doing something different, what is it? It doesn't come easily.

DR. REISCHAUER: But it does in that they have twice the fraction that the freestanding does in people with these hip replacement, joint replacements.

MS. RAPHAEL: Actually, this is not the DRG for hip fracture. There is a different DRG. It's 236 that's hip fracture. It's not this number one, 209. So I don't know what 209 is exactly. It's hip replacement but it isn't hip fracture.

DR. ROWE: But would it be -- it's not worth mentioning but I think there are two kinds of hip fracture, subcapital and intertrochanteric. When you have replacement of a subcapital fracture you replace the head of the femur, and therefore it's a joint replacement. So 209 probably includes subcapital repairs plus hip replacement for people with arthritis, and the other one is intertrochanteric fractures. That's my guess, and that's why 209 gets to be so high. But I'm not an orthopod, so...

MR. MULLER: The fact that the costs are roughly twice and the case-mix index is maybe about 10, 15 percent more -- I'd have to go back to that sheet -- would cause me at least to look at some of the staffing ratios and so forth.

DR. NEWHOUSE: That's the DRG case mix. That's the hospital side case mix.

MR. MULLER: Correct. I'm just saying that the cost difference is considerably more than the average case-mix difference.

DR. NEWHOUSE: Yes, but you would really like a case-mix index for the SNF, not the hospital case-mix index.

MR. MULLER: Yes. So in terms of -- my sense, one of the things I'd be looking at here is just, if there's any kind of data we have on staffing ratios and so forth. My hypothesis would be that the hospital-based SNFs just follow the pattern more closely of how hospitals get staffed, whereas the freestanding being fairly separate do not. So there's a kind of a number -- of how hospital staff that falls into the hospital-based SNFs which probably causes some of the higher costs. Then obviously there's a question, is that consistent with what we need to be paying

for in terms of demographics and other characteristics of the population?

MS. RAPHAEL: When we looked at the updates for SNFs we noticed that the freestanding SNFs had really lowered their costs and really changed their mix of staff. Do we have any sense of what the patterns have been in hospital-based SNFs? Have they done similar things?

DR. SEAGRAVE: The only evidence that we have about this comes from the recent GAO study and they actually -- as I said, they found that the costs were actually rising between 1997 and 1999. Unfortunately, they were not able to look at costs yet for 2000. We may try to do that eventually because we have the cost reports now. But it did not appear in the early -- of course, those were very early stages, but it didn't appear in the early stages that hospital-based SNFs were responding to the PPS in the same ways that freestanding SNFs were.

MR. HACKBARTH: The freestanding SNFs, as I recall, the largest declines were right at the beginning of PPS; is that right?

DR. SEAGRAVE: [Nodding affirmatively.]

MR. HACKBARTH: So they were especially large in

'98 and '99. Here we see a quite different pattern for the hospital-based of continuing increases.

MS. RAPHAEL: If there were any possibility of your taking a look at that post-'99 I would be very interested in seeing that because I agree with what Ralph says, that the mix of staff here I think is driving the costs, and we need to understand if there have been any changes in that area at all.

Then I would be interested, for the young disabled population where we see a higher proportion in the hospital-based SNF, what the DRGs are associated with that population. Because that population tends in fact, in general, to have longer stays in post-acute, but in this instance we see shorter stays for hospitals and I'd just like to know a little bit more about that particular subset.

DR. WOLTER: I was just thinking of the SNF recommendation to take the 6.7 percent add-on in certain rehab RUG groups and spread that out into the non-rehab RUG areas. I don't know if you guys have posed the question, but does this information support that, conflict with it, or really not take us anywhere in terms of that thinking? In particular, the higher number of major joint replacements in

the hospital-based SNFs, intuitively I would think there would be more rehab done with those patients. It's sort of counter, in a way, to what we were thinking we were doing with that recommendation. I don't know if you guys have thought about that.

DR. SEAGRAVE: I did think about that and my first reaction -- we need to look at this in the data but my first reaction, since this is based on stays and not episodes these may be, as someone pointed out, these may be being stabilized in the hospital-based SNF then to move on to get rehab in a freestanding SNF. We don't know that at this point but that would be my hypothesis starting out. So we want to look at that.

DR. MILLER: And also some of that -- correct me if I'm wrong here, Suzanne -- some of that recommendation is based on analysis that just spoke to the development of the weights themselves when the SNF PPS was implemented, and some suggestion even before you got drilled down to this level, that the allocation wasn't quite right there. But I don't see anything at this point -- we can drill down and look at it -- that is in conflict with that recommendation.

DR. SEAGRAVE: No, I don't think -- this is still

at a very basic level. This is very preliminary and we started out kind of at a high level. So this doesn't really -- it's not at a deep enough level to really conflict or not conflict with our recommendation I think.

DR. WAKEFIELD: Just since we're doing a lot of hypothesizing here about what might be behind some of what you found so far, maybe one other possibility, and perhaps it's being driven by a number of things so this would just be one, but your finding that the hospital-based SNFs have higher nurse staffing ratios and the lengths of stay are shorter, maybe part of what's contributing to that is the fact that you've got higher nurse staffing ratios in terms of being able to move some of those patients through a little bit efficiently. If you look at least the inpatient side and the research that's been done in the last couple of years looking at complications linked to different levels of staffing -- that's on the inpatient side and we're talking skilled here, but there is that phenomenon that's been documented to some extent on the inpatient side, and linked to outcomes and quality of care.

DR. REISCHAUER: On length of stay, how do they treat patients who die? You obviously don't keep them

there, but you might get a very different picture if you dropped them from the analysis because one group, the freestanding has a lot higher fraction of people who are 85-plus and they might exit through a different mechanism, shall we say, than others.

DR. NEWHOUSE: What would you make of that?

DR. REISCHAUER: Some people are in the SNF for a long period of time and there is no exit in a sense.

DR. NEWHOUSE: You mean, these are people that are presumably terminal?

DR. REISCHAUER: Yes.

MR. HACKBARTH: Okay. Thank you, Suzanne.

Next is some further analysis of patterns of care and how they've changed pre-PPS to post-PPS.

Welcome, Chris.

MS. RAY: Good afternoon. I'm just here to introduce Chris. At the October meeting we discussed our plans to create a post-acute episode database and I just want to briefly review our motivation behind this. The goal of the database is to permit MedPAC to monitor trends in the use of post-acute care services, and our motivation was so that we would be able to assess the impact of the

prospective payment systems right now for home health and SNF services, as well as to monitor trends in the use of and payment for post-acute services post-PPS.

MedPAC contracted with Chris Hogan, Direct Research, to develop the episode database, which he has done using the 5 percent Part A and B files, and to conduct some of the analyses. We've worked pretty closely with Chris in constructing the variables and defining the episodes, and I'd like to acknowledge the other post-acute folks who participated in this effort, Sally, Sharon, and Suzanne.

The analysis that Chris is now going to present to you is our first analysis comparing where beneficiaries have gone pre-PPS in 1996 and post-PPS in 2001. I want to stress that we have big plans for this database and this is just the first in what we think will be many analyses to be completed from the episode database. The results of the analysis will form part of the post-acute care chapter for our June 2003 report so we encourage you to ask questions about the methods and the findings so that we will be able to bring you back any additional information at the April meeting.

Chris?

DR. HOGAN: Thank you. I'll just move right into my talk.

What I'm going to do today as briefly as I can is tell you why we're bothering to do this complex piece of research, talk about methods just a little bit, and then discuss some qualitative measures of the change in post-acute use between 1996 and 2001.

The next two slides talk about why we're doing this, why bother to do this. What is it that we're doing? We're putting all of the post-acute providers on one slide. We want all the post-acute providers, regardless of type of post-acute care, in one place so we can look at them all.

There's lots of different post-acute providers, as you know. They're all moving to their own separate prospective payment systems, they're all moving to those prospective payment systems on different timetables and there's potential for substitution across the various types of post-acute care. So staff got the idea, let's look at post-acute care as a whole, and that's what we're going to try and do. Ask what changed, and then maybe, if we can, look at some qualitative implications for access to care.

This is the timetable. I think I finally got it

right. Every time I put this slide in front of staff they tell me what I've gotten wrong on this timetable. This is the timetable for the transition of the post-acute providers to their prospective payment systems. The light gray bars are the transitions, dark gray bars are the prospective payment systems. What we are going to do, and I wish I'd put lines on this chart, we're going to look at 1996 which is pre-everything, and then we're going to look at '01 which is post-some of it but pre-some of the rest of it, as you can see. So the prospective payment system or transitions for long-term care and rehab facilities hadn't really started by the time we get to this 2001 year in the data.

So the payment system is changing an awful lot, and what Medicare is paying is changing an awful lot. These dollar figures are just totals out of a 5 percent database so they won't necessarily benchmark to anything you've seen, but this is just to show you from '96 to 2001 SNF spending was up, home health spending was down a lot, spending for the other types of providers was growing quite rapidly. The interesting things you can't see in a one year against another year comparison is that if we picked two different years these bars would look a little bit different. Home

health would be down almost no matter what you saw, but if we had picked a different year, for example, for SNF, the SNF bars would either be level or perhaps down a little bit. So this in part reflects the happenstance that we've picked 1996 and 2001 as the two years.

Now I'm going to tell you how we went about this, what's our unit of analysis. The unit of analysis is an episode of care. Five percent claims database. That's about 2 million beneficiaries. That's enough pretty much to say what's going on. That's enough people to look at. A post-acute episode is a PPS discharge followed by a stream of post-acute bills. The episode terminates in any of several ways. It could terminate with readmission to the hospital, with death, with admission to a hospice, or the claims stream may simply stop. If we don't see any more bills and we don't see you going anyway, we don't see you dying, we assume that you've gone back to your residence, either your home or your nursing home.

So we tracked the bills for any gap of 31 days or any other termination. We redid this with a 60-day gap to see if it made any difference and it made very little difference. There's a couple of tables in your report that

look almost identical, and the fact that they're almost identical means it doesn't make any difference whether you use a 31-day gap or a 60-day gap.

Finally, there's a type of care we want to track that's not really post-hospital care. We use the term in this paper, non-hospital home health care. That means the home health episodes that don't start following hospitalization. That's about the third iteration on that. A more elegant term we have since learned is community referral home health care. We're not talking about who owns the home health agency. We're talking about hospital. We're talking about the start of the episode not starting with a PPS hospital discharge.

So I can define the episodes. That's great. Then when you put these records into these episodes what you find is a tremendous mix. So you have to develop some sort of a typology, or John Eisenberg's word was nosology -- a nosology of the episodes to figure out what you're going to look at. So this is what we did.

The first five lines are post-acute care in the sense of post-discharge care. You can either go straight to home health and stay in home health. You can go to a SNF

and stay in the SNF. There are a bunch of episodes that are SNF and home health. Almost all of those are SNF care followed by home health. You almost never go to home health first and then back to a SNF. Those that were sort of a broken-up pattern and got put into the other category.

You could get discharged to a long-term rehab or psychiatric facility, or there's another category of mixed, just the things that didn't hit any other category. For example, part of a SNF stay that wasn't apparently attached to a hospitalization we had to put somewhere. Non-hospital home health care is the home health care that was community referral.

Finally at the bottom I decided to track hospice entry after discharge, hospice entries within 31 days of hospital discharge. Hospice has been growing rapidly and I wanted to see whether, for example, the discussion that came up in the last session, whether SNFs in fact were for terminally ill patients and whether the growth of hospice has relieved some of the burden from SNFs for those patients. I had to see whether the changes in mortality rates within SNFs could be attributable to people dying in hospice instead of SNF. We never got that far in this

analysis but the intent was to track the people who were moving directly into hospice now who would have gone through a SNF before.

This is the change in the total number of episodes. Once again, this is out of a 5 percent database so it doesn't really benchmark to everything but the relatives would be right for the entire population. As everyone already knows -- the dark bars are 1996, the light bars are 2001. This shows the decline overall in the number of episodes and the change in the mix. As everyone already knows, home health episodes fell precipitously, so you can see the first pair of bars, the 2001 level is about half of the 1996 level. That's Non-hospital home health care or committee referral home health.

The use of home health as the sole modality for post-acute care also fell quite a bit. SNF care rose. SNF plus home health was essentially unchanged -- fell a little bit -- and the others all rose somewhat, including hospice use. So it's a mix. Everything that involved home health went down. SNF plus home health went down the least among the home health episodes. And everything that didn't involve home health when up.

Length of stay fell right across the board. This is an interesting slide -- I don't know if you find it an interesting slide or not, but this is the average length of stay. Once again, the dark bars are '96, the light bars are 2001. Length of stay fell the most for community referral home health. Once again, I think that's already been pretty well established. The interesting thing is, length of stay fell for the types of providers who weren't on a prospective payment system yet. So I was not quite sure what to make of that but my first interpretation is there's a secular trend in the length of stay for post-acute care, changes in technology or what have you. I don't have an answer for that but the interesting thing here is, remember back to that slide that had the dark gray and the light gray bars, the long-term care rehab and psychiatric facilities, they weren't on a prospective payment system at this point and yet their lengths of stay fell as well.

So that's really the comparison of what happened in the aggregate. The number of episodes fell, particularly the number of home health episodes. More or less everything else went up. Length of staff fell across the board, fell most for home health that was not associated with a

hospitalization. I don't think that's the least bit controversial.

The next four slides are going to look at patterns of change to try and make some sense of this. The first slide says, you know there were tremendous statewide differences in the use of post-acute care and all this slide is trying to show you is that pretty much as intended with the new prospective payment systems, there was a tremendous leveling of the spending across the states. This chart tends to exaggerate differences because I literally sorted the states by their level in 1996, but I think the values here are about right and the conclusion is about right in that the states that had the highest use came down the most, the states that had the lowest use actually saw a slight increase in spending and perhaps the smallest decline in the number of episodes in total.

That's mainly driven by home health spending, because you all knew that home health had the highest regional variation among any Medicare service. But it's also driven by the spending in the other service as well. If we did this table solely for non-home health post-acute care spending you would find a similar looking though less

severely skewed table. A lot of words to say, the level of spending across the states was substantially more level in 2001 than it was in 1996.

Here are DRGs. So now let's move away from just looking at post-acute users to looking at all hospital discharges and ask, what fraction of those discharges had a post-acute episode associated with them? I'll take the DRGs and I'll group them by their use of post-acute care in 1996. So what I'm doing is using my 1996 patterns of care as my norm. I don't know whether it's right, wrong, or indifferent but it's what happened in 1996, and then look at what happens in 2001 for those same DRGs.

What you find is the DRGs for which post-acute care was typical -- in other words, 80 percent of cases or more in 1996 got post-acute -- the level of post-acute care actually went up from 1996 to 2001. The farther you go down that spectrum for DRGs for which post-acute care was occasionally or rarely used, the proportionate decline in post-acute use gets larger. So let me see if I can say that again in fewer words. The DRGs for which post-acute care was routine in care 1996, post-acute care remained routine in 2001. In fact it was slightly more prevalent. The DRGs

for which post-acute care was not routine and was only occasionally used saw more substantial declines in post-acute care.

This is a DRG-based analysis and that's great for post-acute care where you have the discharge event to define the population you want to look at. What do you do for the non-post-hospital home health care? There is no discharge. How do I find the people who would have been the equivalent of people discharged from hospitals? I couldn't think of a great solution so I ran a risk-adjustment model instead, and that's what this next slide is going to show you.

Here's what I did. I took beneficiaries' diagnoses in 1996 and their home health use, any use in -- I have a separate set of analyses for the dollars they used -- and I predicted their home health use based on their diagnoses. That's not a great concept because you know in theory it should be their functional status. But there are lots of diagnoses that are pretty good indicators of things stuff like functional status, like bedsores, like pneumonias, just generally the indicators of frailty tend to predict home health use.

So I predicted whether they would get home health

use or not based on 1996 patterns of care. Then I went to 2001 and generated a predicted value off of their diagnoses and compared it to what they actually got, and sorted them by the people at the left of this graph who had a high probability of use based on 1996 patterns of care, to the people at the right of the graph who would rarely have gotten care in 1996 based on their diagnoses.

What you find is, yes, there's declines across the board, but the declines are proportionally much larger for the beneficiaries who would have had a low probability of use in 1996. I graph that directly on the next slide.

What I want to say is, the diagnoses that predicted a high probability of home health use in 1996, the beneficiaries who had those still had a relatively high probability of home health use in 2001. And the beneficiaries who didn't have any clear markers for home health based on 1996 patterns of care had much more substantial declines in the use of non-post-hospital home health care.

There I just plot this directly. This is just the ratio of the bars in the previous slide, just to sum that up. So for the beneficiaries who had -- the beneficiaries

on the left are the one for whom I would have predicted a high likelihood of home health and they get about half of the level they had before, maybe 55 percent of the level they had before. The beneficiaries as you go farther down the spectrum of beneficiaries for who we would progressively predict a lower probability of use and the decline in use, or their use compared to predicted is lower. Meaning there was a bigger decline in use relative to their predicted value.

Let me sum it up. Home health care fell. All other types of post-acute episodes rose over this period. Episode length fell across the board, whether you're in a prospective payment system or not, episode lengths fell. It fell the least for SNF care, fell the most for community referral home health. Declines in spending were greatest for the states that had the highest levels of spending at the start of the period.

Post-discharge use of post-acute care declined for the most for the DRGs that had a low probability of use in 1996; declined the least -- actually increased for those DRGs for which post-acute care was routine or common in 1996. Non-post-hospital home health care fell the most for

the individuals who had a low probability of use. The individuals who had a high probability of use based on their diagnoses and 1996 patterns of care showed the proportionately lowest declines in use in non-post-hospital home health care.

The final two points are that we now have this lovely database available for use. It's a 5 percent sample. It's very easy to use. It's on a PC. And we want to know what you'd like to see next.

MS. RAPHAEL: First of all I want to compliment you because this is a very complex endeavor. I want to compliment the staff and you for really tackling this because I think this is a big step forward for mankind, to be able to look at post-acute across providers.

I had a couple of comments. First of all, how did you find out the DRGs for the community-referred non-hospital home health care users?

DR. HOGAN: That's a tough one. There are no DRGs, so what I did was I ran a risk adjustment model on all Medicare beneficiaries and said, how likely are you to use home health care in 1996? So I have their diagnoses laid out, 170 different categories of diagnoses. If they had a

lot of frailty diagnoses, for example, the likelihood was higher. So the denominator for that analysis is the entire beneficiary population. So there is no DRG-type event.

The way I sort those beneficiaries is by their predicted likelihood of using any home health in '96 based on their diagnoses. That's clear as mud, isn't it?

DR. NEWHOUSE: You're using the Part B diagnoses, right?

DR. HOGAN: Yes, I'm taking all the diagnoses off all the claims. That's right.

MS. RAPHAEL: Secondly, I just want to reiterate how astounding it is in terms of the drop in home health care. This kind of 50 percent drop in expenditures that you again document is just astonishing to me, and continues to be astonishing.

Another thing I am interested in is one pattern I have seen is that there is greater use of multiple acute care providers. So you have the SNFs and home health care and that has left of a drop, I believe, than home health care in its pure form. But I also believe there's been more of an increase in rehab followed by home health care. I'd just be interested in the patterns of multiple use of acute

care providers.

My main issue with this is this notion of who you're predicting what you would expect use to be based on prior use. As you say in your paper, the people who tended to get less home health care are those people who had congestive heart failure, COPD, pneumonia, the frail elderly population where their need was, I think your words were, was more ambiguous or harder to define. I don't want to see the word need used in this because I just don't think we have enough here to know who most needs home health care, or what the side effects are of not getting it. Because we see CHF patients who are in the hospital five times in the course of a year and who end up using other parts of the system.

But I think what is very important as I began to think about this is that one of the things that might be going on is that where it is harder to predict use and there's more likely to be variability in use, there may be reluctance on the part of providers to admit those patients. So you sort of go with the tried and true, those you know, those where you have, at the outset, a fairly good probability of being able to predict and manage utilization.

When you have your post-85 frail elderly, multiple conditions, heart failure, pulmonary disease, very hard to predict use. They are probably the ones who spilled over into long-term supportive care where we saw higher utilization patterns. So you're more skittish about being able to really say what their utilization and resource consumption is going to be, and therefore, you're less likely to admit them.

I have no proof of this. This is just my hypothesis as to some of what's going on. Because incentives should be that you would admit people who have lower needs and will have lower use. All the incentives should cause you to do that. But they're not necessarily causing people to do that in every instance, so there I believe there are other things going on here that I just would like to highlight and explore more.

When we talked about volume of physician services going up, I think Alan and Nancy-Ann both said, let's not say anything about the appropriateness or inappropriateness of this. I want to apply the same kind of measure to what we're doing here.

DR. HOGAN: Absolutely.

DR. NEWHOUSE: Chris, this was a terrific piece of work. I have one reaction that I don't know what to do about it analytically but I thought it ought to be mentioned in the text, which is that there's certainly some reason to think that some of the home health in '96 was fraud, so we may be straining to interpret what really wasn't, except that Medicare paid out some dollars.

DR. ROWE: Chris, I noticed in your paper that you defined people in the data set in such a way that you excluded people who died, who went to a hospice, and who were readmitted to a hospital: is that right?

DR. HOGAN: No, that just terminates their episode.

DR. ROWE: Terminates the episode. Okay. Because I think one of the interesting subgroups here are the people who get readmitted to the hospital. When you look at the different things that happen post-acute care, the one thing that's missing from your list of the things, you can have home health, you can have long-term, et cetera, is acute care again. Some proportion of those people were prematurely discharged from the hospital or they were sent to the wrong place when they went out of the hospital. So

they went home instead of to a nursing home where they really needed to continue to have intravenous antibiotics or physical therapy or chest PT or something, and so they bounce back into the hospital.

There are certain diagnoses in which this might be particularly common, such as certain infections or chronic heart failure, which I think is the number one DRG for recidivistic for readmission to the hospital. People with a wound infection post-op sometimes will bounce back with that kind of infection, or a lung infection. I don't know how informative it would be, but it might provide some sense of quality of care if we were able to look at readmission rates, which is not only an expensive experience for Medicare but obviously very disabling for the patient.

MS. RAY: Jack, let me just address that. One of the things -- I don't think we can do that for the June report but one of our plans for the summer and into the fall is to look at what I would call outcomes of care. That would be one of them, to look at rates of -- as well as looking into emergency department use, and also looking at rates of mortality. So that's on our future list of things to do.

DR. HOGAN: Let me pile on there. So part of the planning of this was we wanted to track the episodes and the fact it I just didn't get them tabulated in time for this presentation. For an earlier study done for MedPAC, this is a couple years back, the SNF patients who didn't graduate to home health, who stayed in SNF, just about half of those people ended up either dying or being readmitted. So I was trying to get the name of the paper changed from post-acute to inter-acute care because at some point the fraction of patients whose episodes end in a successful discharge to home was less than half for some of these categories. So yes, it's a very important point and would definitely like to bring that into the analysis.

MS. BURKE: I suspect there will be a difference between hospital-based and freestanding.

MS. RAPHAEL: Just in terms of what you're going to do in outcomes, the same way that the DRGs should not be the sole reference point here in predicting utilization and functional impairment levels are very, very important. When we look at outcomes, in addition to looking at readmission and ER emergent care, I want to be sure we have some measures on the functional side as well.

DR. HOGAN: If we could get the MDS, that's the issue. The MDS, I'm the one of the few people who's used that -- lovely data set, wonderful data set. You hear mixed views on that. That would be wonderful. We don't have that in hand yet.

MS. RAY: Not yet, but we have plans.

DR. WOLTER: I was thinking about readmission rates too and particularly this issue of there's been a change since PPS in a way in the product and more shorter term rehab, get people back on their feet focus, as opposed to maintenance of chronic illness. So for those patients who aren't being admitted now that are in that frail elderly or chronic disease category -- of course, we don't have data -- it's going to be more crude. But we could look at readmission rates. I don't know if you could look at cost per beneficiary of care in congestive heart failure and see how that's changed over the years. Then of course, this fraud issue probably does cloud things also in terms of how you sort all that out. But there may be a subgroup of patients now who are maybe not getting some things they should be, and if we could get at that it would be helpful.

DR. HOGAN: So that would be a chronic care

analysis then, to take the entire spectrum of care provided of congestive health failure patients, fit post-acute into that and see how that mix has change between '96 and 2001. Yes, we can do that.

MS. RAPHAEL: Take a subset; take CHF.

MS. RAY: Again, not for June but that's definitely in our long-term plans.

DR. STOWERS: I just had a quick question too, Chris. I know in your post-episode we're not including nursing home or going to home, but anecdotally with this change to the PPS there's a lot higher use of the nursing home as part of this post-acute care cycle. I know it's usually state funded or private instead of Medicare, but I think it's playing a much larger role in this picture since the PPS, so it would be interesting to see what change and what different role that stage of care is.

DR. HOGAN: I completely agree, and when we get the MDS we can tract that because we'll know. We have a rough cut at identifying the nursing home residents now by looking for physician visits in the nursing home and other services by the nursing home, but we didn't integrate that with this analysis. It's always a guess out of the Medicare

claims to figure out whether they're actually in a nursing home or not. But when we get the MDS we'll know for sure.

MR. HACKBARTH: Anybody else?

Okay, thank you.

Shall we proceed? We are well ahead of schedule for a change. This will make up for our last meeting where we were decidedly not ahead of schedule. But I'd just as soon end early.

So, Nancy, do you want to introduce the next topic?

MS. RAY: Back at the November meeting I presented a workplan to look at the relationship between dialysis provider costs and the quality and outcomes of care furnished by freestanding dialysis facilities. Let me just go back and review of little bit of the study motivation behind why we wanted to perform this analysis.

MedPAC in the past has observed a pretty big variation in the cost per treatment for freestanding hemodialysis composite rate services. It ranges anywhere from about $110 treatment to nearly $170 per treatment. MedPAC has also observed that for lower-cost facilities they produce more treatments on average with a given bundle of

inputs. We've looked at that by looking at total treatments per employee as well as treatments per station.

So we became interested in examining the relationship between efficiency -- and when I say efficiency I mean providers who have lower cost are saying that they are more efficient -- and quality of care and outcomes. What makes the dialysis area a little bit unique is that we do have some pretty well agreed upon quality measures and outcomes that we can use to compare quality and outcomes between facilities.

As far as quality of dialysis care, two measures that facilities have a directing bearing on is adequacy of dialysis and anemia management. Less direct measures include use of hospitalization services, rates of hospitalization, hospital days, rate of mortality as well as rate of transplantation.

I looked at the literature to see what else was out there and who else has done any kind of research like this and what I found is that there are no recent studies that examine the relationship between outcomes and quality of care and provider cost. Much of the literature has been focused on looking at other characteristics of providers,

including the providers' profit status and the size of the facility.

The results of those studies tend to be mixed. In the chapter which we will be presenting to you at the April meeting we will compare our results to what other folks have found. But one notable study is a study authored by some of the folks at CMS who showed few differences in adequacy of dialysis and hematocrit anemia status based on the facility's profit status.

So in order to address the question of looking at the relationship between quality and provider cost, MedPAC contracted with Chris to perform this analysis for us. As you've seen, Chris has lots of relevant experience in taking on this issue including his expertise in using Part A and Part B claims, and looking at other specific groups of beneficiaries, namely post-acute care users as well as folks at the end of life.

We are planning on incorporating the results of this analysis in a chapter in the June report, and like I said to you at the last presentation, we encourage you to ask us questions on the methods and results so we can provide those answers back to you in April.

DR. HOGAN: So for this presentation there's only one question, so it's a much simpler presentation, at least in theory. The next slide will be, what is the question we're trying to answer? I'll tell you a little bit about methods and move right on to the results. It's going to be a relatively short presentation I think.

The question is simple, do you get more if you pay more, or do the facilities get more if they pay more? Do the facilities with highest cost produce what appears to be a higher quality product? Facilities with low cost, are they stinting on care to the extent that you can see lower quality measures? The more general question comes up after you run the data. The more general question is, is there any correlation whatsoever between cost and quality for the freestanding dialysis centers? That's the question we're going to try and answer.

The obvious policy context here is adequacy of payment. You'd like to know if you raise payments and if costs are brought up to match payments whether you're buying yourself more quality by raising the amount that you pay these facilities.

General issues on methods. It's a very simple

question. It's a very difficult question to answer. Lots of data out there. Normally when you have a quality question you wring your hands and say, gosh, if we only had clinical indicators of quality we could answer this question. Well, I don't have that excuse. We have excellent clinical indicators of quality. They're coded on the claims. We have them for all the beneficiaries. It's still a difficult analytical question. Lots of confounding influences. You know there's been a strong upward trend in these quality measures over the last few years despite minimal increases in payments. So clearly what we find in any one year is going to be a different relationship, at least in the aggregate, with what we find in any other year.

Most facilities are very small. This is the thing I didn't realize till I actually had to go look at the claims data. The median facility has 70 patients. Where you would think of a hospital as having thousands of discharges, the typical freestanding dialysis facility has 70 patients. Differences in case mix matter a lot in terms of determining their cost, which I had not anticipated going into this.

We have to rely on cost reports for this. As an

economist I'm always a little dubious of accounting; I'm trained to be dubious of accounting data. Tough luck; it's the only cost measure we have. We have no patient-level measure of cost. The only place cost exists are at the facility level. We take them off the facility reports, we calculate an average per treatment and there's way to say, Mr. Jones cost a lot and Mrs. Smith costs very little. We don't have any information to infer that. All we know is the average of all the patients in that facility cost a lot or cost a little.

This is trying to mosey toward the conclusion at the bottom of the slide which is, of all the ways we could have done this analysis, to run it at the patient level with better risk adjusters but not very good cost measures, to run it at the facility level where we've got the cost but we have to aggregate the patient characteristics, the initial cut at this is going to be a facility-level regression so we'll have a few thousand observations on facilities and we'll take patients' characteristics and aggregate them to the level of the facility for our risk adjuster.

I should mention chain ownership but I'll bring that up at the end.

Quality indicators. Just so you know what we're talking about. Urea reduction ratio is just the fraction of the urea in the blood that's taken out during dialysis. The evidence is very good that if you don't take out at least 65 percent on the typical session that you get lots of bad outcomes, including higher mortality rates. The research also shows that if you take out more than that, if you do better that 65 percent, you get no particular benefit from doing that. So it's a very good, very hard line that you'd like to see. You'd like to see all patients achieve this at every session.

Hematocrit is just the fraction of your blood that's red blood cells. Kidneys produce erythropoietin which stimulates your body to produce red blood cells. When you go into kidney failure, you don't produce it. They have to give you these $10 shots, $10 of those shots that the Medicare program pays for, and that's the main treatment is to provide hematocrit and iron.

I was told I shouldn't get into medical stuff here with the doctors around.

The other three outcomes are -- this is for the lay audience. The other three outcomes are much less

directly related to what the facility does. The facility presumably has the dialysis adequacy and hematocrit within their scope of practice, so to speak. Death rates, transplantation rates, and hospitalizations are obviously going to be affected by many, many things other than what the dialysis facility itself does, but they are traditional measures of quality, or at least traditional measures of outcome for the ESRD program so they're included here.

I have to mention one thing about transplantation rate which is a fact that amazed me, and amazed me so much I put the slide in your paper. Medicare pays for less than half the kidney transplants in the country. The others are presumably paid for under the Medicare secondary payer provisions. So that when I go looking for transplants in the claims, my transplantation rate is about half of the true transplantation rate because I'm only finding the people that Medicare is paying for. So whereas my death rates benchmark to other sources, my hospitalizations benchmark to other sources, my transplantation rate, because it's based on claims, is only about half the rate that other sources show.

DR. ROWE: Why is that surprising?

DR. HOGAN: I just didn't realize that Medicare had so successfully shifted costs onto the private sectors. I guess that's what I didn't realize.

DR. ROWE: Because I think the private sector pays the first 30 months, and almost everybody who gets transplanted -- you know you're getting kidney failure, you have your family members tested. Ideally you get transplanted before you get on dialysis so you never really go to that step, or shortly thereafter beginning dialysis, so it makes sense.

DR. HOGAN: Let's look at the dialysis facilities, let's edit their cost reports a lot, partly to figure out which cost reports completely overlap with a year of claims. People would just have a cost report year that ends in September, I have to get rid of them because they're not going to match my claims data.

There are other items that are not particularly useful for calculating average cost but I wanted to look at. For example, they need to report the total number of doses of erythropoietin and their total spending on erythropoietin, and those are items that you don't really have to use to calculate an average cost but I wanted to

benchmark to make sure my claims and the cost reports matched.

I added the cost reports. I sort them by quartile of cost and here's what they look like. Starting from the right, the right-hand column is economies of scale. The expensive facilities are down at the bottom. The inexpensive facilities are up at the top. Look, the expensive facilities are all smaller than the inexpensive facilities on average. That made sense.

Private share, I'm going to skip over because I don't really have a good interpretation for that yet.

Rural -- perfect sense. The cheaper facilities in dollar terms are in rural areas where the wages presumably are lower.

The chains tend to be cheaper. The for-profits tend to be cheaper. And of course, the first column on the left gives you the spread in the cost across those four quartiles. As Nancy already mentioned, there is quite a spread in the average cost. This is the average cost per hemodialysis treatment.

Now I'm going to briefly describe the regression results without putting them on the slide because there's

just too many numbers and the regression results were not all that interesting. There are univariate tables in the report that show you there appears to be no one-way correlation between cost and quality from what I could tell. So to do a better job we ran a bunch of regressions. When I saw a bunch, there are lots more than you saw in the report.

Those regressions included not only the characteristics of the facility, the local wage rates, but a number of comorbidities for the patients drawn from their medical evidence record, including their weight which apparently is very important for determining dialysis adequacy, and basically as many other things as we could glean from the claims to put in as risk adjusters.

Most of the patient characteristics seemed to do about the right thing. So many of the comorbidities that are known to be associated with difficulty of dialysis indeed lowered the adequacy scores for the facilities who had those patients. Smoking was associated with a higher death rate. The sort of things that you'd expect to see in an observational study did show up.

What didn't show up is a relationship between cost and quality. So if I look at the composite rate only --

that is, only the cost of providing the dialysis and not the additional separately billable drugs -- we didn't find any relationship whatsoever between dialysis adequacy and cost, or anemia management and cost, or costs and death rates, or costs and transplant rates. When we did find a relationship it was a positive relationship between costs and hospitalizations. In other words, the patients who were more costly to dialyze were also the patients who were more likely to be hospitalized. I interpret that as being probably a residual variation in risk that wasn't picked up by the comorbidity factors that I included in the regression.

When I throw the cost of drugs into the regression and make that my measure of cost, including effectively the number of doses of these drugs that the patients got, because the cost per dose does not vary hugely, what you find is that the costs remain unrelated to anemia and transplant, but once again you get a positive relationship between higher costs and lower quality for dialysis adequacy, mortality, hospitalizations. I definitely interpret that as showing the patients who were sicker -- effectively, putting the drug costs in the regression is

like putting the number of physician visits in the regression. I'm measuring the number of doses of drugs that they got, and sure enough, the patients who got heavier doses of drugs probably were sicker.

So when all is said and done, having gone through this at some pain, my conclusions are not great. If there is a link from higher cost to higher quality, I couldn't find it in a single stage, ordinary regression. Now that's a starting point. I think Mark was pretty clear in our early discussion saying, you have to start an analysis like this somewhere. It's a very complex task. We started with -- I'm an economist. It's a knee-jerk reaction. I did a regression. I did several regressions. None of them showed me the sort of cost-quality relationship that I would like to see. That is, none of them showed me that if a facility had higher cost for the composite rate it showed higher quality measures as well.

Yet I have to admit, maybe there is a link there and I just couldn't find it. So we could try more sophisticated statistical methods, to the extent that you believe more sophisticated statistical methods -- or we can try other things. There are no good, what you call natural

experiments here. We would love to see somebody change the payment rate dramatically in one state and leave payment rates in other states and see what they change. We can't do that.

I'll tell you the best alternative I could come up with and it's this. You know that dialysis patients have to get dialysis all the time. And if they go on vacation they have to get dialysis while on vacation. And if they're on vacation for at least two weeks, we get a quality measurement out of that dialysis facility. So we actually have a subsample of relatively healthy people, who are healthy enough to go on vacation, of about 10,000 beneficiaries for whom we have quality measurements in two different facilities but it's the same person. So we could rerun this. I did a quick cut using a univariate and found nothing. But we could rerun this trying to find some relationship between cost and quality for those patients.

Other than that, your options get to be more sophisticated still. We could try and run two-stage models where we try and account for things. But the bottom line is, a simple look at this that we've done so far found nothing in terms of a cost-quality relationship. So the

main questions to you are, what else would you like to see and how should we pursue this?

DR. ROWE: I think this is very interesting. As I think about quality in dialysis patients I think about it in three ways. One is with respect to anemia, albumen levels, urea reduction rates and the ones that you used, kind of functional measures of the dialysis efficiency, per se.

The second is, I think the functional capacity of the patients. Are patients being managed effectively in such a way that they're able to continue to function, either working, or involved in their life, or some measure of their functional capacity, which is, after all, what it's all about. It they're uremic and sitting home with no appetite, vomiting and scratching all day long, they may have an albumen or a hematocrit that's okay but they're not being rehabilitated.

And the third I think of in terms of being hospitalized for specific reasons. You had hospitalizations in there, Chris, but it seems to me that -- remembering back when I was a nephrologist, people got hospitalized for several reasons. If they were related to their kidney disease as opposed to they happened to need an appendectomy

or something. They would have an infection, particularly an infection that was in their fistula or associated with dialysis. They would have volume overload because they were not being managed correctly with respect to their diet or the dialysis efficiency or something like that. They would have a vascular access problem. The fistula would clot and they needed to have a revision. And fourthly, they would have hypercholemia, a high potassium level which needed to be treated in the hospital because it was so severe.

So I'm making this up but those were the kinds of things that I recall being measures of quality, if you will, of different ways.

One of the things you might do, if the data are available, is you might try to parse out these hospitalizations and looked at it from that point of view. You may find some relationships between some of the intermediate variables and these different causes of hospitalization, if in fact we have those available. I don't know if you have any functional status data or not.

MS. RAY: Jack, can I clarify something you said? You said the albumen levels, so you're referring to their nutritional status; is that correct?

DR. ROWE: Yes. But again, I'm talking about managing the whole patient rather than the efficiency of the dialysis. I'm talking about how the quality of the care of the end-stage renal disease patient is getting, not how is the efficiency of the dialysis treatment, which is a different, more specific thing. Remember, we spoke some months ago about this. It's an end-stage renal disease program, it's not a dialysis program.

MS. RAY: Right. I guess my question to you though, is that a specific measure that you would like to add into the mix?

DR. ROWE: No, I was just responding to the general question of what's quality for these patients. I know you have experts who I'm sure can give you different perspectives or more modern perspectives on this.

DR. HOGAN: I should mention my silent partner in this. Bob Berenson has actually written a lit review for this which you haven't seen yet, and was looking at alternative measures of quality and that's going to be his last assignment then is to parse out some hospitalizations for us so we can have a better list of hospitalizations.

MS. RAY: The only other point I want to mention

about the vascular access is at least recent data from the U.S. renal data system has shown a shifting of some of the services for vascular access from the inpatient to the outpatient basis, so that would complicate this a little bit. But I think your point is valid.

DR. MILLER: Can I ask one thing to follow up on that? It's more a general question as to just broader measures of quality, outcome, quality of life. What are our capabilities of looking at that?

DR. HOGAN: Claims based? Claims based we could definitely get the hospitalizations. We had originally thought -- I had taken a cut at it early to look at infections that were dealt with in the hospital outpatient department rather than inpatient. But the only thing -- we were scraping the bottom of the barrel before we got Bob Berenson to look at this to say, claims-based measures based on physician services or emergency room visits or hospitalizations for cause, which we have not done yet.

DR. ROWE: I think Mark is referring more to functional status, activity levels.

DR. MILLER: Do we have any way to get any of that?

MS. RAY: Functional status, quality of life is not regularly collected for dialysis patients. There have been special studies performed for specific samples of patients by the U.S. renal data system, but it is not collected on a regular basis.

DR. NEWHOUSE: Maybe that's a recommendation.

MS. RAY: MedPAC did recommend that several years ago but we could certainly consider that.

MS. BURKE: Two things really. One was just a factual question. Remind me again what the breakout of the 50 -- on average we spend about what, $50,000 a year now on an ESRD patient? How does that break down?

MS. RAY: Dialysis care is roughly probably between 20 to 25,000. That includes the separately billable drugs.

MS. BURKE: Then the other 25 is just --

MS. RAY: Part A hospitalization accounts for roughly about 35 percent of Medicare payments. I will be sure to have a nice pie chart for you for the next time.

MS. BURKE: I think that would be an interesting thing to look at because that's always been a very interesting thing in tracking these patients.

The other thing is, I recall when I read this, there was a statement made in the key points at the beginning that suggested that providers don't appear to be stinting. That in fact there don't appear to be differences in transplantation rates, in mortality rates, all of those indicators. When I go to the study objectives and research question there's statement made at the beginning of those that in fact there has been controversy about whether or not mortality rates are higher, and whether there are in fact referral differences in terms of transplantation. So I wasn't certain whether this was a question that was asked and we presumed the conclusion, or the -- I wasn't sure how those two linked. Having made the statement at the outset and then having raised the question as a research question, whether we've actually sorted that question out, which I think are critical questions to ask.

The other question, and I don't know whether this remains an issue. It was an issue years ago and it may not be any longer, and this is the whole question around reuse and some of the quality issues, and whether that continues to be an issue between freestanding, and whether that continues to pop up in terms of an indicator. You're

looking at me like I've lost my mind.

DR. ROWE: You've touch the third rail of dialysis politics.

MS. BURKE: It was the old third rail. I'd thought we'd moved to a new rail. But it's still an issue?

DR. HOGAN: With regard to the research objectives versus that poorly written summary in the literature, most of the controversy in the literature is focused on for-profit status and I have shied away from that, mainly because I can't figure out what the policy implications would be if you found a difference. But that's not where we were focused. We were really focused on cost versus quality, versus the for-profit or chain versus quality if you want to. That was just my poor writing that confused those two there.

MS. BURKE: So are we in fact asking the question or have we established the conclusion as to whether there are differences in mortality, differences in transplantation referrals? Do we know for a fact that there are or there are not?

DR. HOGAN: As far as we can tell, there are no positive links from higher cost to higher quality that we

could find in the data set.

MS. BURKE: And we're not looking specifically at the question of the for-profit? Okay.

MS. RAY: As far as re-use is concerned, that's a tough issue. It's a very clinical issue and it is something that I have been told by others that the difference, that the trend in the difference over time, that the use of re-use has gotten better, improved.

MS. BURKE: Technology has to have --

MS. RAY: Exactly. As far as the agreed-upon quality measures that we look at that used by the National Kidney Foundation and CMS, we wanted to be consistent with what those organizations were using which is why we looked at the anemia status and adequacy and hospitalization. I think it's just more clear-cut using those measures then trying to get into the murky waters of re-use.

MS. BURKE: Because that was one of the fundamental questions around costs initially between the for-profits and nonprofits, and that was the escalation and the use, re-use, early on. Now that may no longer be --

MS. RAY: Right, and in fact that trend --

MS. BURKE: That may not differ between the two

sites.

MS. RAY: I don't know if that differs between the two sites any more, to be honest with you. That's, I guess, one response.

The second response is, the use of re-use, I would expect it to be declining now because the biggest national chain is no longer -- I mean, is converting their facilities to non-reuse.

DR. ROWE: I think the largest for-profit, Frizentius, is going to single use.

MS. RAY: For-profit, yes.

DR. ROWE: So that's in the opposite direction of the kind of bias --

MS. DePARLE: I just wanted to highlight, I think it's really terrific throughout the day but especially right now I think you've demonstrated the kind of analysis that can be done when we have both some quality indicators and the information, the data that we've more typically had about costs. It may still be difficult to draw conclusions. We can look at some correlations. But I think we're showing some real progress here, so thank you for that.

I've wondered, Chris, in your looking at this, you

were looking at a different question which was the link between cost and quality, but did you come to any revelations about payment adequacy? And did the issue -- one of the issues that the dialysis providers often raise with respect to that question is unallowable costs and that Medicare's payment system for them restricts them, and that they have to cross-subsidize from other places to pay for some of things that Medicare requires them to have like the social workers, and I guess the physicians, the staff physicians that are limited in how much they can pay. I just wondered if you ran into any of that, if you think it in any way influences the work that you did.

DR. HOGAN: Did someone mention third rail earlier? I am not really competent to talk about that at the moment. Unfortunately -- I should just leave it at that. I'm not competent to discuss that right now. I looked at those margins and my margins were actually, the extent that I did it, a little bit higher. But I have an edited data set. So I don't disagree with the margin calculation that was done here at all, if that's the basic issue. I took a fresh cut at the same data set and got basically the same answer. That's good.

Beyond that, they have a separate sheet on there for the adjustments to cost but I'm not comfortable enough to say that I would know whether I was looking at the disallowed costs or not. So I should just back away from that.

I did go to look at the 10-Ks that are filed with the SEC and the aggregate profit rates are fine, but that's a mix of Medicare and non-Medicare and you can't really say much.

MS. RAY: Can I address that question? Chris' analysis is based on Medicare allowable costs only. That's MedPAC's method of examining provider cost is based on the Medicare allowable. How I interpret his results is, that in our March report MedPAC concluded that based on Medicare allowable costs that payments seem to adequately cover the cost of efficient providers. I think what this study demonstrates is that efficient providers are able to furnish high quality care. So I think that our finding here supports our conclusion back in March.

MS. DePARLE: Have we ever examined -- I think this came up with respect to hospitals. Have we examined the issue of which costs are allowable under Medicare and

which ones aren't with respect to dialysis, and whether or not we think that's appropriate from a policy prospective?

MS. RAY: Up until this point MedPAC has just focused on Medicare allowable cost. I think that would probably be an issue that the commissioners would want to take on at the retreat.

MS. BURKE: But to a certain extent isn't -- because it's a composite rate, the calculus is essentially the allowable cost. I mean, they're given a rate. Is your question what's in the calculus?

MS. RAY: There are certain costs that providers contend that they should be able to include on their cost reports and they can't. The one is concerning the medical director reasonable compensation equivalence and the fact that right now CMS, the current regs for the medical director's salary is based on the 1997 number for internal medicine not for nephrology. So that is one issue that providers contend that they are not able to claim as much of the cost as they incur as they should.

MS. BURKE: But is there a question, to Glenn's point, is there a question of what's in the rate and whether in looking at margins that there are amounts that have been

calculated for the composite rate that are inappropriate?

DR. REISCHAUER: In theory, quality should be related to total costs, not to allowable costs. Presumably there's a very high correlation between the two.

DR. HOGAN: That's what I don't know empirically. I've heard this issue come up before and I'm not even sure I can divine that from the forms on the cost report, but we can at least look into it. There are certain things that must be subtracted and there's a separate sheet for that, but I don't know if that's all of it or not. So I need to talk to some experts on the cost report. We probably can't get the data to answer that question.

DR. MILLER: But the one thing to bear in mind here is that we're looking at variation of cost and quality and whether they're related to each other, and through many different takes on it he wasn't able to find a relationship. We're talking about covariation in cost and you're talking about, if it's this much cost or incremental amount above that for an allowable cost.

MR. HACKBARTH: So if the non-allowable costs were a constant added to everybody it wouldn't affect this analysis.

DR. NEWHOUSE: Or even if they weren't. Of the total variation in cost is hugely dominated by the allowable cost.

MS. DePARLE: But I broadened the question, because I agree the question that Chris was answering was about the link between cost and quality. I asked him about a broader view of payment adequacy and whether the issue of the non-allowable costs had come up in this. But I think you're right about your analysis.

DR. NELSON: I want to address the questions at the end. From the discussion it's not clear to me that this is the kind of research that we do very well. It involves a number of clinical variables. We haven't been able to find a cost-quality relationship with the cut that Chris has taken. So I wonder if this is something that someone else is better suited to do the research on than MedPAC.

I don't feel passionately about it, but it seems to me we've got quite a bit on our plate. As near as I can tell, this wasn't requested of us. And unless it's part of a continuum that is important to us, and it may well be, just teasing out the clinical variables that may answer this question about whether there's a relationship between cost

and quality when we have mainly access to claims data, and what Bob Berenson is going to go after, I'm sure that it's what we want to be doing.

MR. HACKBARTH: Any reactions to Alan? Nancy?

MS. RAY: Yes. What Chris and I have done is an extension of what other researchers have tried to do. The other researchers, instead of dealing head-on and looking at provider cost, they have used proxies for provider cost; namely, nonprofit versus for-profit status as well as the size of the facility. Some of those studies have shown, like ours, no relationship. That is, for example, the study from the folks at CMS showed no relationship between facilities' profit status and quality of dialysis; namely, anemia status and adequacy of dialysis.

Other researchers have looked at, again, the for-profits versus nonprofit status, looking at that versus mortality, access to the kidney transplantation list, and rates of transplantation. That's where the results tend to be a little bit more mixed. Some researchers have found no relationship, some researchers have found some relationship. That's where there is a difference of opinion.

So I think what MedPAC has done is used the

quality and outcome measures that others have used and have looked at the question where there's a policy issue involved, looking at the relationship between providers' cost and quality outcome, because there is a policy response to that versus the lack of response to just looking at the facilities' profit status.

So the fact that Chris has not found any results is consistent -- and I want to reiterate this -- is consistent with what some other researchers have found using recent data also.

DR. NELSON: If I can respond. That's fine, Nancy, and I don't argue with that, if we can indeed find a confident answer. If we can provide clarification to an otherwise fuzzy issue then I'm happy. But if we don't have access to the kind of data that it takes to formulate a confident answer, I'd hate to add to the confusion.

DR. REISCHAUER: I'd like to disagree with you Alan, in the sense that I think this finding is important and is interesting. Is it definitive? Is it locked up in a box for all time? No. Maybe there will be some better data and some better methodology, but my reading of the literature would say that this is as sophisticated an

analysis as is out there, probably more sophisticated, and that this is a question that is important for us to look at over time with respect to other types of providers. We have hospitals that are very expensive relative to other hospitals. Do they provide higher quality care? To the extent that they do, should that be reflected in payment policies of Medicare? We're at the beginning of this discussion and analysis, but I see these as building blocks that will lead to a more coherent payment policy in the long run.

DR. NELSON: I'll finish with this. I'm persuaded. I don't have any problem with it. It refers back to my earlier comment about it, if this is part of a continuum, if it represents an approach that we're going to take with our tasks in general then that's perfectly fine with me. I just hope that we are able to enlighten this issue.

MR. HACKBARTH: I for one would hope that we can more consistently look at quality when in fact there are measures readily available as in this case. I do think we need to be very careful not to overstate what we can say from the available evidence. But for us to not look when

possible at quality issues I think would be a tragic mistake for us. It's certainly an issue that comes up in all of the policy debates before Congress that this payment policy, whatever it might be, is harming quality of care. So if we can bring some data to bear on that question I think we need to seize the opportunity.

DR. WOLTER: I think a specific theme within the quality discussion would be this issue of the acuity of the patients. I think you said, Chris, that in what you looked at in terms of comorbid condition you didn't really see differences. But the hospitalization rates are a hint of something, and it would be nice, if we can't show a link between cost and quality to at least feel like there is some reason for the additional cost. If that reason is the patients are sicker or harder to take care of, or they're hospitalized more, as opposed to financial incentives or practice pattern variations, that would be worth uncovering if we could.

DR. HOGAN: I misspoke. The only part of the regression that did work were the patient characteristics. So we found a facility that attracted a lot of heavy patients had a low quality score. Facilities that attracted

patients with congestive heart failure had a low quality -- all of the comorbidities we measured worked very well. People who smoked died young, all those things.

The only part that didn't work was the cost part.

DR. WOLTER: But I think that's what you said, the comorbidities didn't correlate with the cost. Did you say that?

DR. HOGAN: The comorbidities correlated with the outcomes. But once you've accounted for the comorbidities, the cost and the outcomes were uncorrelated. Does that make sense?

DR. WOLTER: My specific question was, did you find anything in the risk assessment of the patients that would account for the cost differences?

MS. RAY: We didn't do that.

MR. HACKBARTH: Any other comments on this?

Okay, thank you. Good job, Chris.

DR. ROWE: Beyond this project, are we going to at some point have a chance to look more broadly at the experience of these patients beyond the dialysis quality-cost issue?

DR. MILLER: I think you're going to see work on

that -- I assume what you're talking about is some of the things that you've mentioned in previous meetings. I thin you're going to see work on that maybe as soon as the next meeting, and certainly this is going to be something that we're going to be taking up for an agenda in the summer. Are we going to see it as early as the next meeting? Yes, we're actually going to see some of it as early as the next meeting.

MR. HACKBARTH: Okay. That completes our agenda for today. We'll have a brief public comment period.

Very brief. Thank you very much. We reconvene at 9:00 a.m.

[Whereupon, at 3:53 p.m., the meeting was adjourned, to reconvene at 9:00 a.m., Friday, March 21, 2003.]

MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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

Friday, March 21, 2003
9:03 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair
ROBERT D. REISCHAUER, Ph.D., Vice Chair
SHEILA P. BURKE
AUTRY O.V. "PETE" DeBUSK
NANCY-ANN DePARLE
DAVID DURENBERGER
RALPH W. MULLER
ALAN R. NELSON, M.D.
JOSEPH P. NEWHOUSE, Ph.D.
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:	**PAGE**
Using incentives to improve quality in Medicare -- Karen Milgate, Sharon Cheng	242
Experience with market competition in fee-for-service -- Anne Mutti	315
Payment method for Medicare-covered outpatient drugs -- Joan Sokolovsky	337
Public comment	362

P R O C E E D I N G S

MR. HACKBARTH: First on our agenda this morning is using incentives to improve quality of care. Karen?

MS. MILGATE: Good morning.

This discussion is the third discussion we've had on this, although the first two were more in the form of introduction to the topic. And we will have one final conversation next month, in April. This is in preparation for a chapter that will be in our June report on using incentives to improve quality in Medicare.

In April, we anticipate bringing back some further analysis of how incentives might work in specific settings or types of care. So a little bit more drilling down.

Today, though, what we'd to cover in our presentation and then are really looking forward to the conversation afterwards, is just summing up what Medicare is currently doing with incentives to improve quality findings from a set of interviews we have done with a broad spectrum of private sector purchasers and plans. And then finally, having some discussion of how what we learned from the private sector might be able to be applied in the Medicare program.

Quickly, as we've talked about this in previous discussions, why are we talking about this? Why are incentives important? And why are so many different folks in the press and in journals talking about incentives for quality?

Current health system payment and other mechanisms are currently neutral or negative towards quality. This comes in several different forms.

In Medicare, the payment essentially does not differentiate between a high quality or a low quality product. Basically, all products are paid the same in terms of the DRG payments and other payments for providers. And sometimes, even there's higher payment for lower quality, such as the case in if there are complications due to errors in procedures that someone might -- a hospital might actually get a higher DRG if there's a lower quality product.

In addition to the payment mechanisms, you also don't have the same kind of markets working, in terms of consumers having information where they can really drive the market to higher quality product. Either good information doesn't exist for consumers, or there's also a tendency, at

least for the information that's out currently, for consumers not to use the information that's out there, or to think it's particularly useful for their purposes. So private and public purchasers are looking to other incentives to improve quality.

Medicare program currently does use a fair amount of incentives. CMS has been fairly aggressive in their efforts in this area. They use flexible oversight, and one example of that is in the M+C program. They allow M+C plans that reach a certain level of mammography screening not to have to perform one of the national quality projects which are required through the M+C regulations.

One of the other efforts that they're undertaking is public disclosure of information on specific settings of care. They've done this now for the Medicare+Choice plans, dialysis. The most recent setting was nursing homes. They also now have pilots in the home health area and have a voluntary program, at least, in the hospital area and hoping to expand that later on.

In addition to that, they are also looking to demonstrate different types of payment mechanisms. There's two, in particular, that we felt when we talked to CMS,

really fell into the area of incentives. And that was a shared savings demo. They don't call it that. They call it the Physician Group Practice demo.

Essentially, what it does is it's an attempt to calculate expected expenditures for certain types of beneficiaries with chronic conditions. First is actual, and then if there are savings to distribute those savings at least in part to the physician group practices. So, for example, if there's lower hospitalizations, to be able to capture some of those savings and give it back to the docs who put the guidelines and protocols in place that both improve quality and save dollars.

The other one we wanted to highlight was a disease management demo. In contrast to how disease management is current paid, which is usually on a fee-for-service basis, it would be a capitated payment to the disease management organization. And it could be a variety of different organizations. So this isn't the business of disease management. It could be a provider, it could be a variety of folks. With the concept being that paying on the basis of capitation would give incentives to the organization to better manage care across settings.

Other initiatives that CMS is undertaking also feed into incentives. They help build the infrastructure that we found that so necessary in the private sector to actually be able to put in place financial incentives. One way they do this is through the QIO program, where they provide feedback to hospitals and feedback to physicians on their performance and try to get them to improve themselves. And they have found some improvement through that mechanisms. And, as I said, it also helped build the infrastructure for the possibility of expanding their use of incentives by helping to identify measures sets and creating standardized data collection systems.

In an attempt to learn more about what's going on in the private sector, as I said before, we conducted quite a wide variety of interviews with purchasers and plans, providers, and quality experts on how incentives are used in the private sector.

I want to turn now to Sharon and she's going to go through some of the findings from our interviews.

MS. CHENG:

On your next slide you see what we found to be the most prevalent types of incentives that were currently being

used, were being implemented, and actually producing some results among the folks that we spoke with in the private sector.

The most prevalent incentive that we found was public disclosure. In fact, almost every one of our interviewees used some kind of disclosure, maybe a magazine of hospital ratings or report on plan quality or a website with facility-specific information. That was either their incentive or sometimes it was the first phase in implementing another type of incentive.

Another common type of incentive was payment differential for providers. We saw a couple of different models for this. We saw bonus payments or a percentage of payment that went to a hospital or a group of physicians for meeting quality goals.

We spoke with only one purchaser who currently used cost differentials. We found that was a somewhat less prevalent type of incentive than the first two, though several others indicated that they planned to implement that kind of incentive soon.

Those who did not choose this type of incentive did tell us that they often felt it wasn't feasible, either

because of a strong provider reaction that they had experienced or some enrollee resistance that they anticipated due to maybe the limitations of the measures or potential concerns about the impact on their enrollees.

Now I'd like to go through three examples of the types of incentives that we saw implemented and working out in the private sector. The first one is public disclosure. Our example for this one was PacifiCare. In California they release a quality index for each group of physicians to their enrollees.

One of the things we learned when we spoke with PacifiCare was that the progression was important. They began the implementation of this incentive by working with the physician groups, by discussing the scores and the quality measures with them. That allowed them to establish the credibility of the measures. They reached for measures that had already generally been used or developed, and allowed them to build acceptance of those measures.

It also allowed them to develop the data collection process. Here again, they tried to rely on existing sources of data. By working with the providers first, they provided feedback to those physician groups,

which built their expectations for the scores, how the incentive was going to work. And also, they heard from the physicians that the feedback itself was seen as valuable by benchmarking and providing them with quality information. That was a value to the physicians in and of itself.

After they worked with the physician groups, they then made those scores available to their enrollees. They did this right before the open enrollment session, so it had the maximum impact. They provided information on clinical and patient satisfaction scores. Satisfaction would be generally for the group of physicians, but also the patients could rate their primary care physician. Were his or her instructions easily understood? Did they feel that that primary care physician listened carefully? Then they would give the group of physicians a start if they were in the top 10 percentile for their score on that measurement.

After making that information available to their enrollees, they saw some results pretty quickly. By making that available right before open enrollment, within three months they found 30,000 new and returning enrollees had moved to higher quality groups of physicians. As a result, $18 million moved with those enrollees. They were in a

capitated plan. And that moved to the higher quality providers.

Over the course of using this incentive, they've also found that scores have improved on 18 out of the 26 measures that they've used over the years.

For our second example, of payment differentials. One of the things that we heard when we spoke to private purchasers and plans as they were implementing a payment differential was, interestingly, setting aside the pool of money was straightforward. The hard part was determining who got those dollars and how they were going to be distributed.

For our example we talked with Blue Cross-Blue Shield of Michigan. They put about $40 million on the table to improve hospital quality.

Their program, again, had a progression. It began with a system of scoring the hospitals for reducing inpatient admissions for services that could be performed on an outpatient basis. After a few years of using this score, they found that most of the hospitals in their system were already meeting it. And they thought that it was time to introduce some new measures and some quality information

into the scores that would be attached to this incentive.

They eventually have a mix so that it was 45 percent of new quality measures. Hospitals had to meet quality of care standards for such things as heart attack, pneumonia, complying with safe medication practices, or implementing a program of community health, of reaching out into the committee that that hospitals was operating in.

It's also interesting to hear that their scores and the information that they're using, they're also continuing to develop. They intend, in the future, to add a score for preventing surgical infections. And they're going to increase the mix of the score between the original measures and the new quality measures.

The distribution of those incentive dollars in this program remains a sensitive issue and it also has been changing as they've been using this incentive. In some years, hospitals attaining high scores were eligible for up to a 4 percent additional percentage payment on their Blue Cross-Blue Shield patients. In other years, this distribution method has differed and they'll continue to tinker with this as they work on the implementation of this incentive.

They, too, were able to share some results on this. All the measures of quality that they use in this incentive have improved. And the number of hospitals with the highest overall score has doubled between 2000 and 2002.

As our third example, we spoke with an employer that was using cost differentials. Here again, as we spoke with different people, we found a couple of different variations on a theme. Enrollee cost-sharing incentives that have been implemented or are planning to be implemented sometimes operate at a plan level, so there would be different cost sharing on the premium for the enrollees, and sometimes at the provider level. So there would be different copays as an enrollee went to different providers.

The employer that we spoke with was General Motors and they've decided to allow their enrollees to choose health plans based on quality and cost. Their target was to improve the plans by motivating the enrollees to choose higher quality, low cost plans.

So their scores are a blend. 50 percent of the score is based on cost effectiveness, and 50 percent of the score are based on quality measures. Hereto, they used measures, they reached for measures that already existed;

performance on HEDIS, accreditation status, and patient satisfaction. To motivate the enrollees to make a change, they offered lower premiums for the higher scoring benchmark plans.

There's a pretty wide range of premiums. You've got a premium range their on the screen, varying from $35 for a high-quality benchmark plan to $173 for a lower scoring plan.

As a result, a substantial number than enrollees did migrate to the higher quality plans and together GM and its enrollees in the health plan saved $5 million in one year.

This next slide are sort of some general observations that we've gathered from speaking to a variety of plans and purchasers using several different types of incentives. The first thing that we were encouraged to find is that in the private sector, the use of incentives is already somewhat widespread and, in fact, a Health Affairs article called it an explosion of report cards, which are usually attached to public disclosure incentives.

We found encouraging early results that these incentives appeared to work. Some plans and purchasers

already had some results to share in improved quality and, in some cases, some savings.

Many of the incentive programs that are out there are still new, so hopefully they'll yield some more results soon. However, when we spoke with plans and purchasers in the private sector, many of them noted that their relatively small market share limited their ability to impel providers in their community to change.

We also heard that incentives for quality were used as a negotiating tool. As providers and plans sought the annual rate increases, the payers weren't willing to increase payments without some kind of accountability on the part of the providers. That's when quality incentives were put on the table.

We also heard frequently that there was a progression and that that was pretty important to having an effective incentive program. Involving the providers in the development of the measures and the scores was important, and giving feedback to those providers even before, perhaps, those scores were publicly disclosed, was useful and was valued by the providers themselves.

Frequently we heard that the toughest issue was

finding the right measures and collecting and analyzing the data.

From our discussion some criteria emerged. What we've also done is we've given you a page summarizing the criteria that we've developed and we handed that out just this morning.

The goals must be credible, broadly understood, and accepted. To be credible, we heard that they had to be evidence-based to the extent possible. They should be valid and reliable. They should reflect a broad spectrum of the services that beneficiaries receive from the provider being scored. And to be broadly understood and accepted, we've heard that the providers being compared needed to be familiar with and supportive of the measures sometimes before they were even disclosed.

Benchmarks should not be so high that only a few attempt to improve. Many or most providers should be able to improve upon the measures, otherwise we felt that care may be improved for only a few beneficiaries.

Interestingly, everyone we spoke with based their rewards on attaining a goal, rather than another option, which would be rewarding improvement toward a goal. Another

interesting variant that we heard on this one was a program that had to maintain the gain adjustment. So that if a provider improved on some scores but slipped on others, they weren't eligible for the incentive in that round.

Incentives should not discourage providers from taking riskier or more complex patients. And to the extent that seeing healthier patients would lead to higher scores on the measured used, a mechanism should be included to mitigate those effects. We heard that using either appropriate case-mix adjustments or avoiding measures that needed to be risk adjusted were strategies that some in the private sector had used to avoid this problem.

And finally, we heard consistently that obtaining information must not pose an excessive burden on any of the parties involved. To the extent possible, measures should be based on data that is collected as a routine part of care delivery or for multiple purposes.

And now for this presentation, we're going to go back to Karen and she's going to explore how we would apply these incentives in Medicare.

MS. MILGATE: Because Medicare is already using a variety of non-financial incentives and also working to

build the infrastructure that would be necessary to go beyond non-financial incentives, and because the most prevalent ones we found in the private sector were differentials either to providers or cost-sharing differentials for beneficiaries, we wanted to spend a little time exploring how those two might work in the Medicare program, both looking at unintended consequences as well as some more practical implementation issues.

Before we get to the specifics of that, though, there are also some broad issues with Medicare taking on the mantel of putting in place financial incentives. First of all, and probably the most easy to identify issue is its size. Medicare has the advantage of being a large purchaser so therefore it can really get the attention of providers. And also, it's easier for Medicare to get valid data because there are just so many more patients that would be Medicare patients. It's an easier way to get -- it's easier to get valid data.

There is a disadvantage of this size, though, as well. One of the primary ones is up here on the slide. That is when you have a purchaser that's that large focusing on a certain set of measures, you're going to focus efforts

on those measures. Which means you're not going to focus efforts, possibly, on other measures which might be important for some individual providers or for regions or for types of patients that somehow aren't included in your measures that, of course, have to be as good and valid as they can be. You might miss some important problems.

In addition, when you have such a large entity who is a purchaser but also considered a regulator in charge of defining measure sets, it could possibly slow the evolution of measures. It takes a long time for standards to change in the Medicare program and one can also think of how it might impact providers if for one year there are a certain set of measures and there may be a need to move on because some providers have met those goals, but others are way behind. How do you determine how fast to move ahead with the evolution of measures?

Specific to provider payment differentials, as Sharon noted, while setting aside the dollars to pay providers differentially was -- as you can anticipate, might have been somewhat difficult negotiation. In fact, the mechanism was fairly straightforward. However, the issue came about in terms of how to distribute the dollars, and

then whether the measures were good enough to, in fact, pay dollars differently upon that basis.

So if the measures aren't good enough, provider differentials could disadvantage those with less resource or those who take riskier patients. For example, if you use outcomes measures such as mortality or complications and those are not appropriately case-mix adjusted, you could end up with providers trying to avoid those who are more complex or riskier patients.

On the other hand, if you used structural measures or some process measures that require resources in order to meet the quality goals, on the other hand you might then disadvantage those with less resources. For example, if you required hospitals to put into place computerized physician order entry -- some could clearly do it more easily than others.

Beneficiary cost differentials could create access problems and equity concerns. If the differentials actually worked and a large group of beneficiaries moved to the higher quality providers, it could place stress on the capacity of those high quality providers, and on the other hand threaten the viability of others who are lower quality

providers, or lower quality at least on your scores that you've developed.

And in addition to that, Medicare really has a responsibility to ensure the availability of affordable providers. So for example, if in a particular area copays for a certain hospital, that might be the only hospital that's available to some folks, went up because they were designated as a lower quality hospital, that could disadvantage some beneficiaries.

There are also some implementation issues. It is very administratively complex to identify measure sets for all these various settings of care. It's also a challenge to collect and analyze the data and design mechanisms for distributing either the lower cost sharing or the higher payment differentials.

Both these differentials would require new authority, new legislative authority to implement them. The provider differentials really, there's probably more precedent for those type of differential, as you all very well aware. for hospitals there is an adjustment for graduate medical education and for hospitals that take high levels of uncompensated care. For physicians there's an

extra payment available for physicians who practice in high manpower shortage areas. So there's some precedent for adjusting payment on the basis of some policy goal. And in this case, it could be the goal of providing a high quality product to the Medicare beneficiary.

On the other hand, there is currently no authority to waive beneficiary deductibles and copays. In addition, as you all know, a program has grown up around the Medicare, which is the Medicare supplemental program, which might limit the effectiveness of actually varying copays to the individual provider.

One thing I wanted to note that we heard somewhat from the private sector is how beneficiaries might perceive cost-sharing differences. For example, if it was applied to a physician copay and a beneficiary decided to stay with the physician, if these scores were calculated annually, in fact, their copays might go up and down, which might be rather confusing to the beneficiary, why is this occurring?

On the other hand, if they moved to higher quality provider, they might have a higher quality provider one year, but maybe the provider doesn't maintain or stay up there. So then their copay goes up when they go over there,

or they shift back to the physician.

Anyway, it just creates some potential confusion, particular at the individual provider level. We did hear that that was one reason why some plans didn't put those in place at the specific physician level, for example.

So what do we know? We know that Medicare is already using incentives and building the infrastructure to use them further. We've also identified that two most prevalent once in the private sector and discussed a little bit about how they used them and their implications for the Medicare program.

Our analysis has led us, at staff, to believe that in fact the costs of the possible unintended consequences and difficult implementation issues for beneficiary cost differentials, given that there are alternatives and a lot of work underway even before you would get to that to use incentives to improve quality, that we would suggest that the Commission focus its benefits, at least in this discussion, on financial differentials for providers. You all may want to discuss that further, but it seemed to us that the costs kind of outweighed the benefits in this case for that particular type of incentive for Medicare.

So the discussion that we've put in front of you here is whether Medicare should demonstrate financial differentials for providers.? And if so, how Medicare should use that demonstration authority? And if the Commission wanted to recommend that CMS use the criteria that emerged from what we saw in the private sector to help focus their demonstration authorities, we've suggested a recommendation that might do that.

In addition, we'd like to come back to you in April with several setting-specific or condition-specific suggestions where incentives might be most effective.

So the recommendations would be, first, that the Secretary should conduct demonstrations on provider payment differentials to improve the quality of care. And then, as I said, if the Commission wanted to be helpful in focusing CMS in its effort, to suggest that CMS use the criteria which emerged from the private sector analysis to determine which settings of care and types of incentives may be most appropriate for Medicare.

So this concludes the formal presentation. We'd appreciate your comments, both on the recommendations but also you have a draft chapter in front of you. So we'd like

to also hear comments on whether it's the right focus, if we missed anything important.

MR. HACKBARTH: I'd, in particular, like some discussion of the issue of provider incentives versus the beneficiary. My own view, and I talked to some of the staff about this, was that given the prevalence of supplemental coverage in Medicare, it's very difficult to translate an incentive down to the beneficiary level. And so if we're trying to provide some of assistance on where to focus efforts, it does seemed to me that that was naturally a lower priority. But if others disagree, I'd like to hear opinions on that.

Why don't we just go around the table this way. Ralph?

MR. MULLER: I'm pleased to see this chapter because I think it's very well a compilation of the thinking in this area.

I agree with Glenn that the incentives should look at the provider side first. And I also would urge us that we look at incentives that are fairly powerful. When you think about the traditional incentives for quality, they are right now, whether it's a doctor, a hospital, a nursing

home, or a home health agency or whatever, to be perceived as a quality provider in a setting where there is choice, and therefore get activity. It does work at times, that people do come to those places that are seen as better.

Obviously, in settings where there is only one of it, it becomes more difficult to have that kind of choice. And there's still an awful lot of evidence that people tend to choose their providers based on location rather than any other measure of quality.

But the obvious incentive, when one gets more patients, whether one is a doctor, a hospital, a nursing home, is a very powerful incentive and the traditional way that has worked over the years.

So as we think about this going forward, one of the criteria I would add to the list is that these be reasonably powerful because, as you point out very well in your chapter, there are a lot of counter measures that allow quality not to be rewarded. So you have to have incentive towards quality that at least the margin outweigh those for lesser quality or lack of quality or not paying attention to quality or just having activity.

I think the experience I've seen in some of these

efforts over the years is by and large if you have a kind of 1 or 2 percent incentive towards quality, and not necessarily 98 percent in the other direction, but let's say a powerful incentive to not focus as much on it, it just doesn't have as much of an effect on the margin.

Therefore, in the work that you're doing in terms of writing up some of the -- whether it's the PacifiCare one or the Blue Cross ones, I think it would be helpful in our analysis to get some sense of financial impact. So for example, you noted I think that 30,000 enrollees switched coverage. What is that on a percentage basis? What's the kind of one-year or three-year effect of them switching activity? Is that seen by PacifiCare as powerful in the longer-term?

If Blue Cross of Michigan is providing incentives to providers again, to some rough metric of proportionality, just how big an incentive is this is compared to other incentives that they have? Certainly, as they're gauging and guiding their behavior, they're making judgments all the time at the margins to where to put their efforts.

So again, I think, a very well done chapter and a very appropriate effort, but again I think it's important

that we get a sense of the depth and power of these incentives vis-a-vis other ones. Because there's always like 10 things going on at once, and it's important, if we're going to have the incentive towards quality, I think one of the reasons that all of the reports keep coming out, and you don't see much activity toward it is -- there's a lot of talk here, but not enough money and other kind of support to back it up and cause people to start acting in a different way.

MR. DeBUSK: I'm going to take a little different stab at this because financial incentives for the provider, I think, is a must in the system. But looking at this, there's two pieces. There's the process, PC-squared, the process and the production. Folks, we're over on the production side. We're on the tail end of this thing. You don't improve anything unless you get back into the process.

To illustrate this, I think in October Dr. Berwick, Dr. Jones, Opportunities to Improve Health Care, Crossing the Quality Chasm, Aims for Improvement, they very well illustrated the value of protocols and that you can get better outcomes and better performances with protocols.

Now let's go back and look at our system. We're

in a system, a coding system. We've been prospective payment for the hospital. We've got a system for the post-acute areas now, we've implemented the last one.

Within those diagnosis codes, those ICD-9 codes, lies a descriptor. And ultimately we go from that diagnosis code to a payment code. For devices, for treatments, the roll-ups, the 3M systems that roll all this up.

If you go back and you look at the protocols, application, and you tie it into the system, and you start measuring how well a provider is using protocols and pay on the participation on the front end of how well you do at this, at implementing the process, engaging the process and managing the process, the quality is going to be there.

But what we're doing is we're doing it in reverse. We're using the stick, in most instances.

I'll promise you one thing. It will not work. Been there, done that in industry. But there is a clear cut opportunity and it lies within the fact that we've got the coding system put together. It's not going to go away. It can't go away. But how do you reward a physician or a hospital? Are we talking about cookbook medicine? Absolutely. Absolutely. The outcomes, what the results of

this has very well been demonstrated.

Now, I'd like to propose a bullet point to go on page 31. I'd like to propose this bullet point. Protocols should be implemented in a manner that would allow financial incentives for the doctor. hospital, and other providers based on their participation. The data for payment needs to be taken from the diagnosis and payment code system.

The data collection should be seamless. It should be a part of the coding system. Unless you get it to where it could be managed and it can be collected on a seamless basis -- looked what happened up there with Hoyer and the guys at CMS. We come along with all these coding systems to do an OASIS. And to do an OASIS we only need about 22 of the 51 categories to make payment. But we've got all these other data collection pieces in here. As a result, it's real burdensome so they don't do it, a lot of it, or else they just whip through it.

But you back to the nursing home industry, all that, a lot of that data collection, it is the quality information. And it just doesn't get done or it doesn't get done properly.

So the opportunity, I guess to use Demming's

teachings of PC-square, it's very real. Is there a place to begin? Yes. And it's so much easier than what we're doing here. We're going to beat this thing to death, until we get out of this box that we're in and re-look at this and say is there an easier way to do it.

MR. SMITH: Sharon, Karen, I thought this was a terrific contribution to this discussion. But I mostly have questions. Let me begin with one that is connected to Glenn's observation at the beginning.

Do we have any experience -- and I was wondering about GM in particular -- with somebody in the Medicare supplemental market trying to use incentives? And what do we know about the effect on beneficiaries? Was GM's effort simply aimed at current employees? Or did it go to their retires, as well?

MS. MILGATE: I believe it was just their current employees. I think we even asked that question.

We are not aware of anyone using it in the supplemental market. I mean, you can think of ways that maybe it could be done through the premiums for supplemental. But I think Glenn's point on how it might impact using it for copays for providers is clearly true.

MR. SMITH: That seems right and I just wondered if, given GM's very large --

MS. MILGATE: We haven't but it's a question we could ask -- particularly go back to them and see if they thought about it and decided not for some reason.

MR. SMITH: Even just getting their thinking would be helpful.

I wonder, is the assumption. and the Michigan Blue Cross example is a good one. But is the assumption that the pot will be paid for out of savings? And does that take us to a way of getting to size Ralph's questions about the power of the potential pot? Where did the $40 million come from? What was the assumption?

MS. MILGATE: That's a very good question and we didn't specifically ask Blue Cross that, but we did ask some others that. And I won't name names on this one.

But what they said, particularly about the beneficiary cost-sharing, and the payment differentials for providers is a little bit different case. But the beneficiary cost-sharing, the cases we saw on that were based on both cost and quality information. I don't remember one that wasn't.

So the point there was in some of the earlier stages, in fact, it was only cost information. And in fact, it was a progression to move to put in quality information there at the same time. And the entity that we talked to specifically about how those added up, because clearly the purchaser or plan was going to pay more for the enrollees who went to the higher quality, low cost folks, because they were going to pay more of their share. And they said yes, there was a calculation there in what they would save because those were lower cost in addition to higher quality, as to what they would spend for encouraging enrollees to go there.

Now in terms of the payment differentials for providers, several folks told us it was very important that that be at least perceived as added dollars and not just for perception purposes.

MR. SMITH: Added dollars to the provider but not added dollars in the system.

MS. MILGATE: Added dollars to the provider -- well, to the system because we're talking about a context of a negotiation. So it's kind of hard to ferret out, is this really just new money that they set aside, or this money

they otherwise would have gotten in a payment increase? That's a hard question to ask an insurer to tell you about.

DR. MILLER: I just want to ask for a second, when were talking about this, at least at one point in time, I thought we were saying that they pretty much negotiate, the private employers negotiate what their premiums are and what they were going to ultimately pay for whatever set of lives. And then, within that, is how the differentials were --

MS. MILGATE: I would say that would be generally the mechanism, yes. So there would be some redistributive effects there.

MR. SMITH: Two last questions. I don't want to take too much time but Sharon, you talked about the importance of criteria that don't invite adverse selection. Have we had enough experience now with these plans to have some indication of what happens? Or are the perverse incentives that we are worried about, do they persist or do we have evidence to suggest that there are tools to avoid them?

MS. MILGATE: I would say it's mixed. The story is kind of mixed. The difficulty about that question is that while that was a big concern for those we talked to,

what concerned us most is that the way we felt like they -- I don't want to use the term got away -- but the way that we felt like they were able to use these measures and not cause as many problems as might occur in the Medicare program, is because they did have fairly low market shares.

So the providers were not as sensitive to it. They also said it was one reason they stayed away from some outcome measures. It was also the reason that they sometimes did not want to go to do cost differentials for their enrollees, because they weren't sure.

And the other mechanism we saw to try to mitigate the impact of some kind of encouraging providers to take riskier patients, of trying not to do that, was to take -- not to categorize say the whole provider as a high-quality or low-quality provider, but perhaps have a matrix of measures so they could be good on some and not so good on others. So that then, you had the whole panoply of measures, some of which didn't even need to be risk adjusted. That you had a real mix, and that people could then choose on those basis.

But I would say that we don't -- no one would say that we have great case-mix adjustment in probably any

setting. There are sort of a spectrum of how good you can get.

MR. HACKBARTH: I would think that the risk would be principally with regard to outcome measures. To the extent that you're using more measures of clinical process, the risk would be diminished. Although there could be issues about patient compliance and some groups of patients being more able to comply with the medical instructions, whatever they might be.

MS. MILGATE: Yes.

MR. HACKBARTH: But wouldn't it be principally in the outcome area that the adverse selection, the risk adjustment problems, would be greatest?

MS. MILGATE: Yes. And the big controversy in the New York Times...

MR. SMITH: One last question. Sharon, you said that universally the folks that you talked to on the private side had rejected improvement criteria in favor of benchmark and either you meet it or you don't. Could you talk a little bit about their thinking on that? Sort of what you learned from why they came to that conclusion?

MS. CHENG: Part of my impression was that it was

the most straightforward way when it came to scoring. It was easier to set a goal and then meet it or not meet it, than to try to score whether somebody moving from a 35 percent to a 45 percent was better or worse than moving from 80 to 85. I think it was a reaction on their part to try to take a little of the complexity out of the system.

There was also a sense that it was a little bit more palatable. That attaining the goal was somehow a little bit more worthy of rewarding than someone who was perceived, according to the score, to be on the lower end of the score and moving up but remaining on the lower end of the score. So I think there was a little bit of that.

I don't know that we heard too much struggling back and forth, as to why they didn't try some kind of mix or why others didn't.

MR. SMITH: Thanks.

DR. WOLTER: One of the things that interests me on this topic has to do with the organization of health care and then the infrastructure that it would take to really address these quality issues, and so a few specific points.

On number four on your implementing incentives, I think that there is an issue around information that isn't

just measurement, but it's implementation. As the information systems are now maturing, clinical information systems that allow order sets and clinical pathways to be standardized, I think we're going to see a lot of bang for the buck there, in terms of how we standardize care and end up with better outcomes.

So it seems to me an important contribution we could make is to be recommending that there be some investment made possible in technology and in information systems, that not only allow better measurement but are part of how you implement improvements.

I think, in some ways, that's almost counter to what number four currently says because I don't think concurrent financial systems are going to be the place where we make these improvements. So that would be one thing.

Another thing, aside from technology, as I mentioned, is just the organization of health care. Much of what we're talking about doing does require collaboration. We can talk about incentives related to the current financial silos, for example in the Medicare system, and that's fine, we can probably make some incremental improvements. But ultimately, if we don't provide a set of

payments that incent physicians, hospitals, and others to work together, I don't think we can really make a lot of progress on this.

In fact, the current payment mechanisms really don't provide any incentive or very little incentive for the various players to work together addressing quality issues.

Having said that, what is the answer? We're not going to solve that between now and June. But I think that something in the payment system needs to start happening that brings people to the table to work together. And I don't think it's an accident that the demonstration projects revolve around group practices or about the health plan level. We may want to explore that a little bit further in terms of our own recommendations.

For example, some very specific things. If there were payment for nurse clinicians and others who coordinate the care of those with chronic disease, that might be really a good thing because I think those are the activities that will really make a difference.

And then also Don Berwick mentioned this when he was here, but the whole issue of payment within a given time frame, and how does that work, and how do we set up

incentives in a twelve-month period versus a three or four or five-year period, that's another tough issue which we probably won't have a specific recommendation on, but we might want to make some comments about the fact that an investment, however we set it up now, it may take three or four or five or even longer years to show up. So payment outside of the current time silos.

And as I said, also, I think payment outside of a budget neutrality approach may be an important issue as well, because some up front investment may be required in order for us to see savings down the road.

This is a complex topic. I'm sure we could all go on and on, but those are a few thoughts.

MR. HACKBARTH: The issue of the role that better information systems could play, I think, is an important one, and certainly one that's gotten a lot of attention recently. Some of the recent IOM reports, for example, have made at least broad recommendations that the government ought to be doing more beyond the VA system in supporting the development and implementation of improved systems.

It's a very complicated subject, in terms of what, in fact, Medicare could do constructively in that area. But

because it's gotten so much attention, I'd like to see us at least not answer the question, but have some discussion of it. I asked Mark if he could help us, for the April meeting, just sort of lay out some of the issues there and we can make a judgment about what, if anything, to include in our June report.

Alice?

MS. ROSENBLATT: I, too, thought the chapter was excellent, and just a couple of points.

First of all, to the specific question Glenn raised. I would not rule out beneficiary cost-sharing. I think, particularly with the PPO plans now, we're seeing instances in the marketplace of beneficiaries dealing with different cost-sharing. So I would keep that on the list. Maybe provider should be the first priority, but I wouldn't rule it out. And I noticed there was a change in the way the recommendation was worded in this material versus what was up there. I would keep it in.

To answer David's question, I think, from what I know of the marketplace, in general you might think of it is a redistribution, I would think. It would like an across the board increase to all physicians versus less of an

across the board increase in some targeted money going for specific things.

To pick up on the systems thing, we always talk about data and we always bemoan the fact that we're using data that's two or three years old. I think any quality system, part of any quality system needs to include timely feedback to the providers. If you don't have that, it doesn't work. And two-year-old data, I would not consider timely feedback.

So I think, in our list of criteria, we really need to hit on that timely feedback issue more.

Two other points. One is, you mentioned disease management capitation. I have a lot of concern about that. We've done a lot of work on disease management at Wellpoint and the numbers that I've seen for the typical kinds of diseases like asthma, diabetes, congestive heart failure, the standard deviation is enormous. If we're going to talk about that, we might want to put out a warning about how there is wide variation in that kind of cost and capitated system is difficult.

The other warning that I would put out is if you're going to put savings numbers like on the General

Motors things, the other thing that I've seen in the industry is these savings are being calculated in bizarre ways. I mean, the most typical way of measuring savings is to say well, in the absence of doing anything, our trend would be 10 percent. But if we actually achieve a trend of 8 percent, we've saved 2 percent.

So be very careful before you quote a savings number and understand how it's being calculated.

MR. HACKBARTH: On disease management, your concern is about the payment method of capitation, as opposed to --

MS. ROSENBLATT: I'm concerned about what's in the capitation and is this sort of going to be the next thing that blows up, that companies are going to start doing, some of these disease management companies are going to start going on the risk, and the whole thing is going to blow up.

MR. DURENBERGER: Mr. Chairman, thank you. I'm just so happy to be here for this discussion I don't want to critique it, because it's kind of one of the things I came to MedPAC for. This and the variation discussion we had yesterday is sort of like getting at the heart of it.

So anything I say, I hope is a compliment to the

excellent work you've already done.

On PowerPoint number three, I think it would help if we reflect that Medicare has a tradition of trying to deal with quality, even though it's basically an administered pricing system, and so forth, and go back to PSRO and PRO and some of that sort of thing. And in our own way, as a program, the QIO is sort of like the latest evolution.

But I think there's been a tradition here, at least some kind of a commitment in the program, to respect quality.

On PowerPoint number five, particularly as it relates to the physicians, and you may well be aware of this, since about 1993 or 1994, Minnesota Health Plan has been putting a lot of money into something that nobody really knows much about called the Institute for Clinical Systems and Information. Practically every doc in the state of Minnesota now has had an opportunity over the last eight to nine years to go through basically a quality education and training program.

So in one of those inside out, bottom-up, nobody knows about it, nobody set criteria, there are in place --

at least in one piece of geography in this country -- not something that was opposed by the health plans or set up by the health plans, but paid for and run by the docs. And that's a good example, I think, of how to try to build a culture of quality rather than centers of excellence in a community.

To the recommendation, which was the chairman's question, I just think it's critical that the first recommendation that we make in this area not be as specific as the one that's been put before us. I like the Institute of Medicine's recommendation, which is that we ought to have, in our system and in our organization, we ought to have a culture of quality, not centers of excellence. That's stuck with me. That's on all my PowerPoints when I teach now. We don't have a culture of quality.

And if anything, it seems that the goal of the Medicare program ought to be to use its role and exercise some responsibility for helping to create a cultural of quality.

I don't personally believe that the provider-paid differential is the way to start. It's already been spoken to. It's sort of this top-down administered, you know the

latest whatever it is, and I'm uncomfortable with that, at least at this stage.

For reasons others have stated, I have some difficulty with the beneficiary differentials at this stage, as well. And I would suggest that we, having set our goal at a culture of quality, that we think about provider incentives. I think, listening to the comments of my colleagues before me, while this isn't the specific program, it is a way in which people with different ideas, I think, can come to some conclusions about what's the most appropriate incentives in a third-party payment system, whether it's private payers or public payers, that will incent the physician, the hospital, the whatever it is.

So that if we explore that issue just a little bit more, and I'm sure it gets complicated and the economists can deal with it a lot better than I, but the issue for me becomes what could we do in the area of provider incentives?

I agree with Pete about systemic failure, with Nick about the organizational challenge, and so forth. But I think if we look at this issue of provider incentives and we encourage the administration to be looking at it as well, they've got something to tie some of their things together

on.

We have one to recommend in a state-wide demonstration in Minnesota in which you simply allow the community of doctors and health plans to work together to design the measures and the various standards that they're willing to use in order to demonstrate to Medicare that they can do better care for less money. And I won't get into the details of it, but it's a bottom-up rather than a top-down theory of providing incentives to the providers to do some of these kind of things.

The last thing I would say with regard to HHS, in particular. Your report reflects the importance of measures, standards. It doesn't mention the privacy issue, the security issue, the confidentiality issues, and then the investment.

In this institute that I run, we now have 22 health organizations from the state of Minnesota plus Fargo, North Dakota; Sioux Falls, South Dakota; Eau Claire, Superior, LaCrosse, Wisconsin. A lot of those are in the tradition that Nick talked about. They've already built themselves up either to paperless systems -- they are on the verge of trying to do quality based or performance-based.

They're stopped not by money so much as they are by the lack of uniform measures, the lack of standards by which to use the data. And the problem that the states are posing with privacy regulations and things like that.

So before Tommy Thompson rushes off to invest a lot of money in technology, I think he ought to be focusing -- as an administration, we ought to be focusing on how do we get consensus on the measures, the data, and some of those sort of things. Because I believe that there are organizations now across this country that are poised to move in some appropriate direction if some of those issues could be taken care of.

MR. HACKBARTH: Dave, can I just try to get a better understanding of your first point?

I think back to the discussion we had with Don Berwick and Brent James. And the takeaway that I had from that was that first and foremost you need what you characterized as the culture of quality. That's a necessary condition for success.

But what I heard Don and Brent say was that even where you have that culture of quality, it isn't sufficient. It's necessary but not sufficient. And Brent gave a number

of examples where they were committed to quality but they were having problems because there are programmatic costs that you incur to set up systems. And the savings, which he thought were real, often don't accrue to the providers who make the investment.

So I heard from him a quite explicit call to marry some financial rewards with the culture if you're going to have success.

MR. DURENBERGER: And he also said a lot of other things about use the disease management program at the Health Partners, which has been in existence for 10 or 11 years now, as one of the business plan examples, in which it's so hard to prove that you're making money for a variety of reasons, including the fact that because your beneficiaries can move and out every year, they don't even know they're getting the benefit, they're reaping the benefit of your investment in long-term payoff.

So there's a whole series, I believe, of changes that need to take place in the current system, starting with not rewarding poor quality and issues like that, which is more complicated, that fall under rubric -- all I'm saying is don't start with one specific recommendation. Let's

start paying people for distinguishing this provider from that one.

If you looked at some of the Health Affairs, or wherever it was, article on that thing out in California that Jamie Robinson was part of, the hospital tiering. It's just another effort to say somebody knows how to select this hospital versus that one. I don't think we're ready -- my instinct is I don't think we're ready for that. But I think the hospital and the docs are ready to make some moves, if in fact we could help them identify the kind of base that they need.

And then, when you get to the health plans and so forth, that's where you start thinking about where are the changes that need to take place to provide incentives for the beneficiaries.

So I don't want my recommendations misinterpreted here. I'm so anxious to see us do this in the June report, but I don't want to get too specific about a solution because I'd like to see a wide variety of solutions cutting across various recommendations we've got.

DR. REISCHAUER: Karen and Sharon, I think you really did a tremendous job and presented it very well.

I guess I disagree with Alice, and to a certain extent, Dave, in the sense that I think we should be very explicit in our recommendation that the Secretary should focus on financial incentives for providers. I think your chapter actually laid out a very strong case why, in the fee-for-service part of Medicare anyway, incentives for beneficiaries are unlikely to be effective, are going to be difficult to implement, and are going to be politically nonviable. And rather that having HHS reinvent what you've already nicely summarized, I think we should say this really isn't the road to go down or to focus your effort on.

However, also to point out that in the non-fee-for-service component of Medicare, be that Medicare+Choice or enhanced Medicare PPO, there's a very effective way of providing the incentive, and that is to vary the Part B premium for high-quality versus low quality. So should the structure change, or the parts of the structure that are appropriate for this, there is a mechanism that's fairly simple and we could move forward on that front.

I also think you should be a little more explicit about advantages and disadvantages of absolute thresholds versus relative distributions when we come to measuring

quality. I think it was PacifiCare or somebody said we reward the top 10 percent with extra payments. That strikes me as not an approach to go down, simply because what you want to do is reward meaningful differentials in quality and the distribution could be very, very compact and the difference between the 10th percentile and the 90th percentile could be, for all practical purposes, meaningless. And we don't want to go down that road.

Finally, I think, although it is uncomfortable to do, that we should at least have some discussion of the political geography of this issue. The decisionmakers for this program are geographically based. We know there are huge differences in practice patterns across the geography of this country. There are probably huge differentials in average quality across the jurisdictions of America. That's strikes me as the major hurdle here to moving forward because. as you say, this does require legislation.

To the extent that you set out a threshold that is national, it is conceivable that very few providers in certain congressional districts, states, will meet that threshold. If that is the case, you're not going to see that legislation move one inch forward.

I think it's worth discussing the possibility of combining extra payments for high-quality providers with some temporary resources for those areas that are low in quality to improve quality. That it's going to have to be a mix of these two over the original -- over the transition period or else the way to do it is to start with very low thresholds for quality and legislatively explicit increase in those over a decade up to a level that you want.

But then what you're doing is really prolonging the period because you'd be distributing very little money to anybody with high quality or measured quality above this low threshold because so many people would be eligible.

But in theory, what we want to get to us a system in which everybody is rewarded for quality. I mean, that the quality improves throughout the country and in effect, the payment differentials provide, in effect, little incentive.

DR. NEWHOUSE: First, I think this is really exciting and a tremendous potential opportunity. In terms of the chapter and the draft recommendations, I thought it was good as far as it went, but it didn't go far enough. So I actually disagree with David, I think. I would like to

see somewhat more specificity along a couple of dimensions.

First, I tend to agree with Glenn and Bob on the provider-side incentives although demonstrations don't have to be mutually exclusive. But I think that's the place to start.

Where I'd like somewhat more specificity is, first of all, the process that would be engaged in for determining what exactly is going to be demonstrated. Would CMS appoint some kind of outside committee? The IOM? Do they ask, as the Department of Defense would if they were going to have an airplane, for various design groups to design prototypes and there would be a form of competition?

I don't know the answers to these questions, but it would be nice if we could think about something to say about how we get from here to there.

Then, on the process and outcome side, I think we have to recognize that we're dealing with a population that has a lot of comorbidities which complicates both process and outcomes, frequently brings multiple providers into play. Then there's the question of who gets rewarded or penalized? For what? There can be, as we know, coordination problems across the multiple providers. What's

the mechanism for getting at the coordination problems?

This would presumably all be addressed in the design phase of what are we going to exactly demonstrate? But then we are back to what is the process for determining this?

Ditto in the strengths of the incentives. Are we talking about 5 percent of the payments? 30 percent of the payments or what?

Then I think there's a question that we should, I think, say something about at some point that Nick touched on, which is the time it's going to take to actually do this. There needs to be some kind of design phase time. There probably should be some kind of pilot for how feasible this is, or working out the bugs in this.

Then there's the question of how long are you going to wait to get cost estimates? People have talked about downstream effects. There are some interim learning that could happen. But I think we need to get across that we're talking about a long-term project here and that we're not going to likely have useful information quickly.

So that brings me to a second point, which is that the CMS track record on actually learning things from

demonstrations is not great, for a lot of reasons that are not necessarily having to do with CMS. But I think here we ought to be fairly specific about saying to the extent practical we would like a randomized design, so that we actually learn something about what the effects are here.

Then I think this is a really hard question to figure out what exactly should be done here. I'd like to encourage us to put this on our retreat agenda for some discussion about where we go, and see where we get.

Then one final small point about Bob's comments about PPO and M+C. My question there is what did you have in mind? In effect, these entities or certainly the M+C plans are going to determine their networks which, to the degree they do that on the basis of any quality measure, it implicitly puts in a financial incentive on the consumer side. So I'm not sure what exactly we were advocating, if anything, or you were thinking of on the PPO and M+C side, but you may...

DR. REISCHAUER: I was thinking of steering beneficiaries towards those plans that had higher measured quality, by varying the Part B premium for those who join quality care golden versus resources average care brown.

DR. NEWHOUSE: In some kind of market-specific fashion? Plan A could be doing great in San Diego and lousy in Los Angeles.

DR. ROWE: Can I ask a question? I'm sorry I came in late, and I don't want to interrupt but I'm trying to understand this.

If you want to steer beneficiaries toward plans with higher quality, you would presumably do that by charging them a lower premium. That would steer them into it.

DR. REISCHAUER: That's what I said.

DR. ROWE: And then you're paying the providers more because they demonstrate higher quality, so that the premiums are lower and the payments are higher. So how do you --

DR. REISCHAUER: No, this was in a discussion of incentives for beneficiaries, as opposed to incentives for providers. So all I'm trying to do is lower the cost of participating in high-quality plans from the beneficiaries' perspective. I didn't say anything about the other side.

MR. HACKBARTH: The provider payment would be based on the plan's mechanisms. That would be a plan

decision on how to pay the providers. He's just thinking about the beneficiaries.

DR. REISCHAUER: You could do both. You could lower the Part B premium and raise the capitated payment for the plan.

DR. ROWE: Maybe in your world you could.

DR. REISCHAUER: I thought you'd like this.

MR. HACKBARTH: Joe, what I understand you're saying is that your mental image of what needs to be done in terms of demonstrations is much more like the Rand health insurance experiment as opposed to the demonstrations that we more typically see?

DR. NEWHOUSE: That was the burden of the randomized design comments, but I think while it's fine for us to say we'd like demonstrations on quality of care, if we're actually going to get something out of these to design is a tremendous task. Anything we can contribute alone those lines, at a minimum saying something about what the process ought to be, who designs this or what groups are involved, and how much time do we think is necessary and so forth, those are all very important decisions or this could amount to nothing at the end of the day.

DR. WAKEFIELD: Nice work. Just a couple of comments.

First of all, in the early part of the chapter you discuss disincentives in addition to incentives. I'm not sure that you can go down the road of disincentives much farther than you already have. Perhaps disincentives and incentives are two sides of the same coin. I don't know.

But it did strike me that if there were options, if we knew clearly what some disincentives were and there were options for removing those -- it might be regulatory burden for certain regulations, I don't know. But maybe there are two or three out there that can be identified that we could also say, and here's a place to start, not just to move and create new incentives which is critically important but also is there anything that could be rolled back or adjusted that right now is serving as a disincentive?

I didn't give it much more thought than that, other than to say you did a nice job of raising it early on, sort of the perversities in some of the financial disincentives.

I was wondering is there anything more that could be said about that? I'll give it some thought, too, but if

there is more, that might be worth expanding a little bit of a discussion there.

The other comment I wanted to make or another comment that I wanted to make is that the option of at least considering by way of example in the text incentives to improve and further push the development of infrastructure, information technology, information systems. I know other people have commented on different ways thus far, and clearly some institutions are moving rapidly on that front, others are not moving as rapidly for financial probably even cultural reasons, in terms of people feeling comfortable with using those systems and wanting to deploy them and so on.

But I'd say, by way of example, one of the core patient safety standards from Leapfrog was, of course, their computerized physician order entry system. What did it accomplish? Of course, it accomplishes improvements in medication, in decreasing medication errors.

But it also, in the process, contributes to improvement in the information structure, the IT of those hospitals where it's deployed. And that also, beyond medication error directly, enhances the ability of those

facilities to measure and to engage quality improvement more rapidly than they probably would be able to if they were still using paper and pencil, or whatever other parts of the system they had.

So I think we're seeing sort of fits and starts in terms of deploying clinical IT in really complex care systems, and anything we can do to help try and extend those activities is important.

I would say this is not all rural and it's not all urban. Just by way of example, and I know I used this once before but I'm going to again just to make the point. In a teaching hospital within a very short distance of us right here, I've said it before, when I was working on the To Err is Human Report with my colleagues at the IOM, at the very same time, my Medicare beneficiary mother underwent to laterality procedures at two different institutions within this geographic area. In one, a surgery on the wrong wrist. On another, a steroid injection in a hip under fluoro on the wrong hip.

So you think our tertiary care teaching facilities have got everything up to snuff. In querying that tertiary care teaching facility on the latter point, the excellent

physician surgeon who did that injection, about why did this happen? Well, the answer, from his perspective, was I didn't have the chart here. The chart was still in the clinic. And the clinic is just feet away from this outpatient unit.

So the point is to say that we've got some information systems built into some parts of really wonderful structures, but they're not necessarily threaded through. This wasn't an OR suite. It was an outpatient ambulatory care suite. So they had fine corrections and preventive measures that had been deployed in their OR, but they hadn't in their outpatient ambulatory care side.

So I'm saying I don't think we're as consistent with using IT as we could be, and I don't think it's just a rural/urban problem. I think anything we can do to improve quality and use this as a driver, as difficult as that is -- because I will tell you, in this case, Medicare paid twice for both procedures. And she paid twice, having to go through those procedures, yada, yada, yada.

So that's that point.

One might also think -- well, this is probably heresy. But as we even think about GME subsidies, perhaps

one thing we could think about over time is whether or not we'd want to help pay hospitals not just to train physicians in residency training, but also try and encourage those environments to move away -- that they're training, that those residents are operating in, from moving away from paper-based to broader IT-based on institutions that have really got very strong safety reporting and improvement systems embedded within them. So we might think about casting that a little bit more in that direction, for another day's discussion. But it just makes my point.

The last point I want to make is the House just passed legislation authorizing the establishment of patient safety organizations that can collect and report information confidentially on errors for the purposes of systems improvement. One might say that that is the sort of thing, I think, that if it's enacted, it would be great to link that with some financial incentives for hospitals and physicians and others to participate. So maybe they'd get a break from something else, from some other regulatory burden, if they step up to the plate and they participate in the creation of that new reporting system, if in fact it would make it all the way through.

But it's just the point, are there breaks that we can provide to those providers that engage in these early efforts, both financially, some financial incentives, and also some regulatory relief wherever we might be able to find that in the system to try and encourage these quality improvement efforts.

Last point, I actually really certainly support the first recommendation. I'd be happy if we could add to it, but I think it's a fine place to start.

I'm not so sure about the second recommendation. I think the criteria that you've listed are good. Whether or not they are embedded in a recommendation or they're discussed in text, either place. I don't feel strongly. I think they're find to have one place or the other.

The last point I was going to make is we also might say, somewhere in the text, unless they automatically do it -- you'll know the answer to this question -- but you might also try and have CMS engage with their colleagues at the Agency for Health Care Research and Quality for some of their research to get at your point earlier about how do you structure these demos in a meaningful way. Let's bring the folks who know a lot about different pieces of this

together. We might encourage that, at least in the text.

And I'd also say on the rural side, the Federal Office of Rural Health Policy has really been moving a lot on quality on the rural side. And that would be another player inside HHS to bring to the table to really get the very best we can out of this effort.

MS. DePARLE: I agree strongly with everything Bob Reischauer said, so I want to just echo him but highlight a couple of points.

One, I think that it is important for us to be as explicit and specific as possible with our recommendations. So I guess I slightly disagree with what Senator Durenberger said there.

I think CMS, I think the Administrator, and I think the entire agency is very committed to this. But they are very limited in their resources to do demonstrations. As much as we'd like to talk about how the whole thing is designed, that's an incredible burden. And also they have to work very closely with the Congress and we start talking about doing randomized in someone's congressional district, I can sure you that it's not -- the Rand Project might have an easier time of that than CMS would.

So I think we need to be as specific as possible.

And therefore, while I'm open to looking at beneficiary differentials, and I would suggest that the centers of excellence demonstrations that were done actually did do some of that, and I believe with some success, although as Glenn or someone said -- oh, I guess Joe, you said, the learning curve in learning from demonstrations is a difficult one, not all because CMS doesn't want to learn, but because sometimes what they learned is not what everyone wants them to have seen.

But anyway, I think that it's important to be as specific as possible and to focus probably on the provider side of this, because I think that's -- there's low-hanging fruit there. It's easiest to go there, first.

I'm glad to hear, Glenn, that you and Mark discussed doing a little more work on the clinical information systems front, because I think that's a really important area. I think even in this room we've heard different things about where are we really with that.

I was heartened by what Senator Durenberger said about the progress he's seeing in his area of the country. But I have no idea what we really stand. How many hospitals

are moving forward? How many aren't? What do they have? What do they not have?

I don't know, Mark, if it's possible, this might be something you have to contract out for, but to come up with some type of typology that would give us some information about this. And even, I think Bob is right. We probably need to look at it from a regional basis as well, just see if we can make any determinations about where we are there because we have to be realistic. That's what we're going to have to deal with if we want to move forward here and see what are the barriers?

We've heard that cost is a barrier. Medicare pays capital costs now. How much of this would Medicare already pay for? Are there other changes we could make?

So I'd like to see us do some more work there.

DR. NELSON: I certainly support going ahead and I support the recommendations. But I think more attention needs to be given to the implementation barriers, especially with respect to ambulatory care. On page 26 we say credible measures of physician quality are also available often through data collected by CMS claims data. But I submit that claims data are poorly suited to identifying individual

performance. You may know that a Pap smear was done. You don't know whether to give credit to the primary care physician who recommended it or the OB who did it, or a nurse clinician who did it.

Claims data are not suited for identifying individual compliance with best practice protocols, as Pete pointed out. Especially without drug data. You just can't do it.

I was part of IOM studies called Effectiveness Research in 1990 and we tested the thesis that this enormous amount of claims data for Medicare could be used to draw quality inferences. Very few. Usually we ended up recommending the PROs go look at the charts.

Finally, for fee-for-service ambulatory care, the data system capability isn't in place and we ought to worry about our recommendations sounding like an unfunded mandate. One of our recommendations might be for incentives to be provided for the development of information systems. One of our recommendations could help set that aside in the demonstrations.

DR. STOWERS: I agree with a lot of things here and I absolutely agree just because of the simplicity that

probably the provider payment differentials is the place to start. And with Joe, that we need to be specific on that.

This whole thing is very exciting. I just wonder if our biggest contribution as a commission might not be to couch this somewhere, in some kind of a strategic plan, and that we really look at our goals of where we're trying to go with this.

I heard several different goals coming around the table as to what we're trying to accomplish. Are we trying to get everybody up to a benchmark? Or that kind of thing.

I'm okay with the recommendation but I really think it needs to be couched in something that we let Congress know that this is not going to work if we don't work on our information infrastructure, and we don't get our criteria set, and we don't get our case-mix problem solved, that that all has to happen together.

At several conferences we've been at lately, what Mary and Pete are talking about is we've got to accept in Medicine that there's got to be better management systems and that it's not going to be the traditional doctor/patient relationship or typical hospital things that are happening. So I think that needs to be part of the

strategic plan of doing that.

I just would like to see it couched more in that and not on isolated demonstration project that looks at provider differentials but a demonstration project that also looks at some of these other problems and the management systems that might be in that program because there's some really good ones out there.

So I think if we just go after payment differentials in the demonstration project we're going to lose a lot of valuable time and effort. That's kind of where I am.

MS. BURKE: You guys did a terrific job. It is, I think, an enormously important piece that is heading us in the right direction. I have little to add to what has been said, but I wanted to underscore a couple of things.

Let me begin with Ray's points. Pete made, I think, a critical point in his conversation. Congress has a tendency to look at the end result of whatever has occurred, which is often the easiest thing to do. And the failure to look at the inputs and the systems issues here, I think, will lead to a continuation of problems.

And so Ray's point, which was that you need to

create a context in which all of this has to be done, that will include looking at the infrastructure and the inputs and the process and procedures, as well as the end result which is the outcome that we measure, will be critical. To fail to do that will have us focus solely on the outcome and that is whether someone does X, Y, or Z, and little attention to the infrastructure that needs to be put in place to achieve that over the long term.

So I think Pete's point, which is that we have to look at both sides of this for equation; Ray's point that you have to create the context so that Congress understands that; I think are going to be critical to whatever is that we do, and I think has to be referenced.

Like Nancy-Ann, I want to underscore and support the points made by Bob and by Joe. And that is the complexity of the politics of this will make or break what it is we try to do. And I can tell you already, that the exercise that will take place to try and anticipate the end result of a demo, that will result in movement of money around the country will be the first thing they ask. Tell me right now what does my district look like? And what will the impact be? And how much money am I going to lose?

I mean, we went through this when we created DRGs. We went through this when we did M+C and we set rates. It is inevitable, so we may as well anticipate that at the outset.

So to understand that, I think, has to necessarily suggest the kind of detail that Joe raises and what a structured demonstration needs to look at. We, in fact, do not have a good success at either structuring demos nor utilizing the outcomes, nor getting a result that we've put in place any time in our lifetimes.

We've all known demos that have done on -- S-HMOs is a good example -- that have gone on forever with little attention to what we started to ask, where we got with an answer, and whether we did anything with it.

So the detail that Joe suggests is exactly what you need to look at to ensure that the outcome of the process is one that is, in fact, utilized in developing a system.

So I think that looking to Pete's point, create the end and the beginning; Ray's point, we have to create the context of what success will be here and some reasonable expectation; and the kind of details that Joe suggests will

be needed to avoid the kind of problem that Bob anticipates we all know will happen.

And I think this is something well worth spending time on at the retreat. I think this has moved us in a terrific direction. I think the whole context of what is best practices? What do we know? Real differences between what the public sector and the private sector are paying for. Our patient mix is very different, attention to that.

But I think we cannot avoid these questions, but we have to create a structure that will get us an end result that is sustainable. The only way you do that is by the kind of investment Pete suggests, which is look at what the inputs look like as well as what the outcomes are going to be. And build consensus around what we all think is success, because that will be what drives this political agenda at the end of the day.

DR. MILLER: Just to say a couple of things. One thing I think is really positive about this is I think we've just hit something that is really important. I think virtually every person commented on this and had a lot to say about it.

I've been taking extensive notes and rather --

because we're over time, I was going to try and track through this and summarize what happened here. But I think we don't really have the time to do that. So what I'll do, when we get out of this, is we'll write an e-mail back to you guys and tell you the major blocks that we'll take up in this chapter.

I just do want to say this. I think we anticipated a lot of what happened here, the idea of trying to be more specific and some of the broader context things. We're coming into this to first say is this even the direction you want to go in or what we want to focus on? And we've heard a lot of help, in terms of trying to frame this and moving forward. And we'll try and lay that out for you and get it back to you.

MR. SMITH: Very briefly, I'm struck, beginning with Pete and Sheila's summing up.

One of the things we ought to talk about at the retreat is whether or not the protocol/process/IT issues, that so many people have talked about so well, necessarily have to be linked to solving all the problems of moving forward on quality.

It seems to me the burden of the case that has

been made around this table is we know the importance of this stuff, we know we are lagging. We don't understand enough about why we are lagging, the questions that Nancy-Ann raised.

But it doesn't seem to me we need to hold that conversation and a discussion about how we might move ahead on the protocol/IT front hostage to solving the critical political and design questions that Bob and Joe and others have raised about taking demonstration steps on the incentive and quality question. They aren't necessarily the same question.

DR. NELSON: You want to move on?

I think what I heard was general agreement that this is the direction we want to go. We want to make a good clear statement that Medicare ought to pay for quality. With all of the caveats, don't remove that basic conclusion from what I heard.

MR. HACKBARTH: I agree, Alan. There's a clear consensus on that. I also hear a consensus that we need to begin to experiment with ways to operationalize it. I also heard an acute awareness that there are a number of things that need to come together to achieve the level of quality

that we all want for the program for the beneficiaries.

So there's lots of consensus, I think, at the high level and obviously our task, both for the June report and the ensuing months, is to try to get as concrete and detailed on next steps for the program.

Thank you, Karen and Sharon. We do need to move ahead now.

Next up is experience with market competition in fee-for-service Medicare.

MS. MUTTI: This presentation is intended to give you a sense of our workplan in the area of exploring experience using market competition in fee-for-service Medicare. We hope to give you a sense of a draft paper that we will give you in advance of the April meeting. I think this presentation also follows nicely on some of the things that you've just discussed in relation to Karen's presentation because we touch a lot on demonstrations, and the lessons learned, in their role and the future of them, as well as get into the centers of excellence concept which builds nicely on some of the quality discussions that you've just had.

But we do approach this particular presentation

from a market competition point of view so the question that we first posed in starting out is, can market competition be used to price fee-for-service Medicare products and service? And if so, how should it be designed?

Not only has Congress required demonstrations testing competitive bidding, but legislation has also been introduced that would require competitive bidding to determine prices for such things as durable medical equipment and laboratory services nationally. There's also been conceptual discussions about how you might use it to price Part B drugs.

So to begin to consider this question we thought it would be helpful to review Medicare's experience with at least two key demonstrations, the competitive bidding for DME demonstration and the participating heart bypass center demonstration. That one was the most comprehensive demonstration of the two that looked at the centers of excellence concept back in the 1990s.

Last September Sharon presented the results of the initial evaluation of the DME competitive bidding demonstration to you. As you may recall, the demonstration was in operation between 1999 and 2002 in two sites, Polk

County, Florida and San Antonio, Texas. Each site tested bidding for a different subset of DME products and the bidding rules varied somewhat based on the specific product. In all cases, beneficiaries had choice among winning bidders.

A total of three rounds of bidding were conducting, and while the evaluations are not complete, results from the first two years of the demonstration indicate that on average prices were lower than the fee schedule and quality and access in general were not compromised. In fact the three rounds of bidding resulted in prices that averaged between 17 and 21 percent below the fee schedule.

While on the whole access and quality appear unchanged under the demonstration, two situations, at least two caught the attention of evaluators. There was one concern in Polk County that there was a decline in the proportion of beneficiaries receiving portable oxygen, which is an issue in terms of their quality of life. And there one issue that they noted in San Antonio where some complaints were that equipment wasn't being adequately serviced. In response, beneficiaries used other bidders

that were available to them.

The Medicare participating heart bypass center demonstration was conducted between 1991 and 1996. This demo invited physician and hospital organizations nationwide to offer a price for the total hospital and physician services surrounding two cardiac DRGs. 209 hospitals responded to the solicitation, 42 of which submitted very thorough applications and ultimately seven sites were selected.

In return for the lower payment the participating sites received two key rewards. First, they were paid a bundled fee for all hospital and physician services, and this includes consulting physicians, surrounding those DRGs. This bundled fee allowed participating organizations to create a payment approach that rewarded physicians for reducing the total cost of care. It aligned their incentives so that they shared in the savings that were accruing to the hospital before. They had the incentive to use perhaps lower cost supplies in the OR, to improve the discharge time from the ICU.

Second, facilities could market themselves as having this national distinction that recognized that they

provided high quality service in these areas and they could potentially use this as a way to market themselves and gain greater market share in their local market. This demonstration did prove to reduce spending on the bypass patients that it served by about 10 percent, and many of the participating sites did respond to the incentives and considerably reduced their own costs. In addition, mortality rates declined.

In the paper that we're preparing for April we plan to identify some of the key issues that appear relevant to any competitive bidding proposal and examine how each of the two demonstrations approach them. Specifically, we plan to look at each of the demonstrations with respect to the following key elements.

First, how the market is defined. This includes questions about how you would define the product, how comparable the product is across providers and suppliers, the degree of bundling of services and products that were in each demonstration, and then we'll also talk about the geographic boundaries of the market and how that was defined as well as who were the eligible participants to play in this market.

A second design issue is how the bidding process is created and what incentives are in place for competitive bids. We'll talk about the specifics of the bid solicitation under each demo as well as the carrots and sticks, or the rewards and penalties, that each pursued to induce competitive bids, and their relative success.

We'll also highlight in this discussion some of the transition policies, in particular in the DME demo that were pursued

. One interesting one was the concept of allowing some losing bids, in this case for oxygen suppliers, to continue to serve their current patients, but not take on new Medicare beneficiaries for the term of the contract.

Finally, we'll examine how each of the demonstrations provided for the education of beneficiaries and providers, and what protections were in place for beneficiaries who had concerns and needed problems addressed.

In the course of looking at this issue we wanted to also point out to you today that despite the savings achieved for beneficiaries in the program in these two demonstrations neither program is in operation, and I guess

that's not a surprise considering some of the comments that you've made already. As of January 1st the reduced rates paid to DME suppliers in the two sites were increased to the statewide fee schedule. In a way, I think the demonstration proved that the fee schedule is broken.

CMS no longer has the legislative authority to selectively contract with winning bidders, and this is a key element to the demonstration.

The fate of the centers of excellence concept has been more complicated. As we noted, the bypass demonstration ended in '96. Recognizing its success and the utility of expansion, CMS issued an RFP in 1998 to expand the concept to more sites and more procedures, including orthopedic procedures. It was under a new name at this point, centers of excellence. 100 facilities responded but the timing was poor for CMS. They were facing the Y2K preparations and then they also had BBA coming down the pike and had staffing constraints.

So it was relaunched in 2000 and targeted to three states. Apparently there was a fair amount of interest although CMS would not share with me how many respondents they got on this round. They also report that the discounts

were not as deep as they had been in the past. They said that prospective applicants had concern about the physician payment reductions that they thought might be coming down the pike, and also concern about whether the drug-eluding stents were going to be reclassified in a higher paying DRG. Both of those issues have been subsequently resolved but in the interim, before they were resolved, all interest in participating in that round of the demonstration dissipated, so to date there are no immediate plans anyway to continue with that demonstration concept.

Although there is a related demonstration that has been announced by the Secretary but has not been approved by OMB, and this was in response to an unsolicited proposal by some hospitals in Virginia, the Virginia cardiac surgery initiative. In this demonstration that they are contemplating it would be paying the bundled payment but there would not be the same kind of quality requirements, in particular, the volume of services that were evident in the bypass demonstration and planned for in the provider partnerships demonstration.

So given the significant investment in infrastructure of both demonstrations and the initial

success each has had in preserving quality while reducing costs for beneficiaries in the program, commissioners may want to consider recommending that these demonstrations be continued. The DME, you may want to recommend that at a minimum the sites be continued in their current locations, or you could suggest that they be expanded to other sites. And there's certainly the notion that there could be a national option also.

Staff plan to give further thought and analysis as to how expansion may best be pursued for the April meeting. In particular, Sharon is looking at measures of local markets competitiveness for DME and we'll present those results at the next meeting.

Reasons for not recommending continuation is a belief that the isolated incidents of compromised quality and access are severe enough from this demonstration to warrant termination of the demo and resumption of the higher payment rates.

You may also be concerned, and I know this was mentioned back in September about the magnitude of administrative costs. The cost of administering the DME demo as reported in the second evaluation that has come out

subsequent to our last meeting was estimated to be about $4.8 million, while the savings of the demo amounted to $8.5 million. So more than half of the savings in this demo were offset by the administrative expense. But the evaluators are quick to note that the fixed costs would be defrayed over more sites and could increase the return substantially.

Another point to keep in mind is that we are still waiting for the last part of the evaluation on this demo that is due later this year.

As a parallel point, you may want to consider recommending that the Secretary continue to test the concept of paying a discounted bundled payment as a means of promoting cost effective delivery of high-quality care.

So we are interested in hearing your thoughts on the direction of this draft paper/chapter and the potential recommendations. Then we would become your thoughts on potential future research issues. One thing that's certainly on our mind is getting a better handle on the experience of other purchasers in using these type of approaches; whether they're using them now, have used them in the past, what's been the evolution. That could help inform our thoughts on this also.

MS. DePARLE: Anne, thank you for an excellent report. This is an area where I think that MedPAC could really play an important role. I think that if you walk around Washington, everyone says that to the extent that people are still supportive of fee-for-service Medicare, we have to get away from administered pricing. These are the demonstrations that have been done to try to figure out how to do that. I think that the research I've seen and what Anne presented today convinces me that they are moving in the right provide direction. But it has been extremely difficult.

I think if we talk to Senator Durenberger's former colleagues, there were only a handful who really have kept the faith on this and kept pushing it even though everyone says, this is the direction we want to go. It's one of those, not in my backyard, it's a classic not in my backyard issue. So I would urge us to be supportive of this and try to help both the Congress and the agency to move in this direction and to do more here, because we will never see how Medicare can move beyond administered pricing unless can do a better job of trying these things out. As I said, I think they've shown that they can be successful.

MR. HACKBARTH: Anne, did you say that there's one more evaluation report due on the DME demo? When is that due?

MS. MUTTI: It's required to be six months after the completion of the demo, but I think it's not unlikely that it might slip a little bit. So that would be in six months, or actually less, in four or so.

DR. REISCHAUER: Is that covering only San Antonio or is it covering both of them, Polk and San Antonio

MS. CHENG: The third evaluation would revisit Polk. Especially they'd like to do some more investigation of how Polk compares to the county -- they have Brevard County and they've done similar surveys of beneficiaries to see what the impact of access and quality has been. So they have a comparison county. So they will explore some more differences and similarities between Polk and Brevard. The third report will focus on San Antonio, and do the first round of those surveys and find out how San Antonio compared to its comparison counties.

MR. HACKBARTH: I guess my off-the-cuff reaction is that it's appropriate to wait for the final evaluation to come in. But if it's consistent with the findings to date,

then just to recommend extension of the same demos seems inappropriate. We'd be falling back into the S-HMO model, let's have perpetual demonstrations.

If the results are as we've heard so far, then we ought to be moving towards implementation and not towards continued demonstrations.

MS. DePARLE: That's what I meant to say. But at this point there isn't even support for moving forward with the demonstrations it seems, or at least there's certainly not enthusiastic support for it.

DR. REISCHAUER: I'm very sympathetic with that conclusion, but at the same time I wonder whether Polk County, Florida and San Antonio are representative of all of the environments one might find. I defer to whatever it is, Big Bear Lake --

DR. WAKEFIELD: Devil's Lake.

DR. REISCHAUER: Devil's Lake, excuse me -- might be a little different as might New York City. When we do our analysis I think that's one of the questions we should ask which is, do we know enough to pull the trigger and say, let's go nationwide on this? I'm sympathetic to doing that if the results come out as they do.

The other thing I'd like to know is whether we really have enough information from these demonstrations for the Congressional Budget Office to do a good cost estimate of this? Your description of implementation, administrative costs, which I really was an issue I threw onto the table in the past, is a very important one. Getting some kind of idea about what the scale of that would be if you went nationwide, I would think you could do it a lot more efficiently on a per whatever it is basis than just doing it in two counties. To the extent that something like this can overcome the natural political obstacles, it's going to be because somebody makes the proposal and the Congressional Budget Office estimates that you can save $11.6 billion over the next 10 years and Congress is desperately looking for ways to save money within the Medicare program without disadvantaging beneficiaries.

MR. HACKBARTH: Other comments?

The evaluations, I assume will address what the necessary market characteristics are to make this concept work. I vaguely recall that was part of the earlier evaluation.

MS. CHENG: They certainly did try to get a sense

of how competitive the market already was in the demonstration areas, to get a sense of how competitive it was for various lines of DME. One thing to remember about this benefit is that providers who may compete in one line, oxygen supplies, may in fact not compete in hospital beds or wheelchairs. So there are several different things to consider if you're going to competitively bid DME, about how to measure the relative competitiveness of a market, and they have looked at that.

One of the things that we hope to be able to bring you too is also a first cut at a description of DME markets across the country. We're going to try to look at some other MSAs and some statewide rural areas. It's going to real initial, but also to see how many counties look like Polk and how many MSAs look like San Antonio.

MS. MUTTI: At least initially they had hoped to do a rural site for the demonstration. That hasn't happened, so I think they're limited in some ways in evaluating the experience that they've had in the two sites that they have. I don't know how far they can take that and comment about how it would work in different markets.

MR. HACKBARTH: I'm trying to think of precedence.

I'm not talking about demonstrations but within the actual operation of the program where we've selectively implemented a change in methodology like this one and say, in particular circumstances, particular market conditions, we can handle something differently than we might in, say, a rural area where there's less competition. I guess I can't think of any examples of that off the top of head.

MS. DePARLE: I guess it's usually characterized as a demo when they do that. I know the PPOs demos they're now doing it's pretty big. They've chosen certain areas of the country. I don't know whether they have the authority to do it that way or not.

This will need congressional ascent, buy-in -- Joe, that should be my word, not yours. But it's going to need that. In any event, they're going to have to work with the Congress and they might as well get some sort of legislative authority. But I think we can help support the effort.

MR. HACKBARTH: This is perhaps another example of people have talked about how Medicare needs to operate more like private payers and needs the legislative authority, CMS needs the authority to distinguish among different

situations and say, this will work in place A. It may not work in place B. But there's no reason why we should overpay everywhere because this idea won't work in every single market.

MS. DePARLE: Right. There might be some markets -- I know I've seen some research on this. I wonder if it was a GAO report. Do you all remember having seen a GAO report on this that evaluated maybe Polk County? Anyway, I think they did some work on looking at the markets. I know CMS, in fact Lu Zawistowich when she was there, in respect to the competitive pricing demos for managed care, they did exhaustive market analysis, perhaps more focused on managed care plans. But in any event, there's a lot of that available. I don't think anyone thinks that you can do the very same thing in every area, so there will have to be some more flexibility here. But the problem is what you said, Glenn, there's been a lot of talk, but that's all it gets is lip service.

DR. NEWHOUSE: I'd like to raise a new front. Should we be talking about the possibility of competition in lab, and conceivably, some degree in radiology as films can be digitized and sent around?

MR. HACKBARTH: As potential demonstration areas?

DR. NEWHOUSE: Yes.

DR. REISCHAUER: Anybody have a handle on what Medicare reimbursement for a lab test is relative to what private payers do? If you look at the lab, the growth of lab services it's very, very low. The methodology that we've used to update --

MS. DePARLE: I think it is lower than private payers, and they're doing a negotiated rulemaking I think right now on this.

DR. REISCHAUER: That's what I suspected. I thought, go to competition and raise the price?

MS. DePARLE: Maybe we're not paying enough. There are those situation too. I wouldn't say that about labs necessarily.

DR. ROWE: I need to make sure I'm here at the beginning of these meetings. With respect to radiology and the digitization comment, the capacity to do that is related to IT systems called PACs basically, which are expensive, very, very effective, very impressive capacities. You basically have a filmless radiology lab and you can move the images around. A physician in his or her office who sends a

patient for an x-ray will get the x-ray on their computer in their office in addition to a note from the radiologist, et cetera.

But it's a little bit like computerized physician order entry. That is, for any given film or any given examination the cost may be very limited but there's a big capital expense for the hospital to go and put this in. So I would think that for us to pay more for systems like that on a per-exam basis would probably not be that helpful to hospitals because they would have a big upfront capital investment and they wouldn't trust that Medicare wouldn't reduce the rate later and they couldn't recover their capital investment.

So from that point of view I think that's probably a different -- that may be one of the things Mary mentioned earlier, we're prodding people to do the right things and with the GME money or something maybe that's something we could do there. I don't know if it reduces errors but it certainly is more efficient.

MR. MULLER: It's also contained inside the DRG for an awful lot of the Medicare activity.

DR. NEWHOUSE: But the DRG is an administered

price.

MR. MULLER: But then you'd have to move that whole price around that component.

MS. MUTTI: We'd be happy at the next meeting to come back to you with a little more information, especially on the lab idea.

DR. NEWHOUSE: It may be a cockamamie idea. I just wanted to raise it. If it gets shot down, that's fine.

MS. MUTTI: Certainly some thought has been put into it already.

MR. HACKBARTH: In terms of our recommendations that we'll take up in April, one approach would be to have a conceptual recommendation that endorses the concept of competitive bidding and in the text we could say, examples that may be explored for future demos are A, B, and C. Then a second recommendation that is specific to DME and what we think ought to be done there. There we may even wish to wait for the final evaluation before we make a formal recommendation.

MR. MULLER: I'd just make a similar point. I think, as Anne's presentation indicated, this has been -- and Nancy-Ann's comments -- this has been a long time coming

and it's moved very slowly. Doing this on products like DME or on drugs and so forth that can be seen as discrete products it's probably a little easier than something that's integrated into the pattern of care like radiology where you -- and especially in light of HIPAA, you don't even want to start thinking about all the consequences of trying to figure out how to take digitized images out of one care setting to another and getting consent and so on. So I think I would continue to focus on more discrete products that are not as integral to the care process as things like radiology exams, and certainly DME fits into that.

You talk about politics. You probably get into the politics of drugs even -- take Bob's comments and put an exponential function on them. But those are things that are probably easier to think about competitive bidding on than things that are so cohesive to the process.

MR. HACKBARTH: The potential political problems are very real and daunting, although it seems to me that part of our function is that bad we are to be guided not by the potential political problems but rather say, this is a wise, prudent direction for the program to move. It reduces costs, enhances quality, whatever. There are other people

paid to worry about the political problems. I don't want to sound hopelessly naive in saying that, but I don't think we ought to be saying, we can't do this because it's just politically too difficult. That's a judgment for the people to make.

MR. MULLER: I agree with that. I'm just saying if you use a kind of criteria, where is that a lot of money, what's discrete products? I mean, pharmaceuticals are a good place to look, and that's all I'm saying.

MR. HACKBARTH: My comment wasn't specifically about radiology. I agree with the points you made there, in fact. But I don't want us to get hung up too much on the politics.

DR. MILLER: Can I just say one thing? Anne, what I am taking away from this is, in our agenda as we think about alternatives to administered pricing I'm hearing some interest in exploring labs, radiology, you've brought up drugs. I just want to make sure that for the next meeting, I'm not going to promise that we're going to have labs wired out to present here.

MS. MUTTI: Right, especially not in a paper.

DR. MILLER: But I hear an agenda and as we hit

the summer you may see some of this work that you're asking for here. I just think to hit the next meeting and the June report it would be a little tough.

MR. HACKBARTH: To be real specific on DME, my inclination, as I said is that we ought to be moving towards implementation. I do think that any recommendation we made in that direction will have more force if we wait for the final evaluation of the demonstration. So if that means we don't have a recommendation in the June report, so be it.

Thank you. We need to move on.

Our last item is the payment method for Medicare covered outpatient drugs.

DR. SOKOLOVSKY: Good morning. In your briefing materials I gave you a draft chapter on this subject for the June report. There are a lot of holes in it as I'm sure you all saw. I'm going to try to focus in my presentation on some of the issues that I haven't talked about in presentations before, but I'm looking for and hoping for your suggestions and comments on the whole draft.

The way the chapter is structured right now, the beginning will talk about what drugs are covered, what the expenditures are, coverage policy, and trends. Then the

focus will move to payment policy and problems with the current payment system. We'll talk about payment methods used by other payers and then we'll evaluate some of the alternatives to the current system that are being discussed both on the Hill and outside the Hill.

Much of this I've discussed before. Program spending in 2001 totalled close to $6.4 billion. In Medicare terms, compared to hospital spending and physician spending this may seem still like a small amount of money. But if you benchmark it against, for example, the amount of federal dollars that went into the SCHIP program in 2001 it's more than twice that amount. This $6.4 billion does not include drugs paid for in the outpatient departments of hospitals or in dialysis facilities. Dialysis facilities alone were another $2 billion in 2001 and there were about $1.2 billion in pass-through drugs and separately billable drugs that went through the outpatient department. That would include blood products but would not include drugs that were bundled as part of other APCs.

These rapid growth trends that we see, for the last three years over 20 percent a year, are not only about AWP and the price of drugs, they're also about volume

increases and they're about new and more expensive drugs replacing older therapies. For example, of the top 20 drugs covered by Medicare in 2001, seven received FDA approval in 1996 or later.

Here you see the top 10 drugs by expenditures covered in 2001. Just a few things to note here, these 10 drugs alone accounted for about 60 percent of all Part B drug expenditures. Seven of them are related to cancer, either chemotherapy agents or treating the side effects of chemotherapy. One thing you might want to notice, erythropoietin has moved to the top here. It accounts for more than 12 percent of all Part B drug spending. It's now one of the highest growing drugs in the United States, including all drugs, not just Part B drugs. If you turn on the television, if you've had any chance recently, you'll see more and more commercials of the grandfather playing with his children and saying, even though I have cancer, chemotherapy doesn't get me down because I have EPO.

The chapter talks about, and we have talked about here, a number of problems with the current payment system, but there are three problems that really are the basis of the chapter and the three problems that I think about most

important. One is that payment based on AWP overstate provider acquisition costs for drugs.

Secondly, the payment system actually provides incentives for higher prices for the Medicare program.

And thirdly, these high drug prices are used to subsidize payments for drug administration that may well be too low.

I'd like to briefly look at each one of these issues. In its 2001 report the GAO found that catalogue prices for drugs covered by Part B were widely available to providers at prices that ranged from 13 percent to 86 percent below AWP. Most importantly, there's no clear relationship between what Medicare pays for drugs and the market price of a drug. The most typical discounts are between 13 percent and 34 percent of AWP. These discounts, again, do not include the rebates and other discounts that are widely available to providers but are not public and therefore the GAO could not count.

Here we come to the second problem, that the differences between AWP and acquisition costs are higher for products that are available from more than one source. In fact the way this payment system is set up, competition

leads to higher prices. Average prices for albuteral and ipratropium bromide, these are two widely used drugs that are used with DME for respiratory conditions, in fact they represent 88 percent of pharmacy supplier claims for drugs. They're available at 85 percent and 78 percent less than AWP. If you go back to that top 10 list of drugs you'll see that those are the fifth most and third most billed drugs for Medicare.

Then when you have drugs that are single source drugs but that there has been a lot of consensus in the clinical area that they are about equally effective, you get even higher spreads because these are more expensive drugs. So you have the case of leupron and Zolodex where companies went beyond raising the spread, the market price, and the AWP to actually providing worksheet teaching providers how to bill Medicare for free samples of drugs. This was something that everybody agrees is illegal and in fact the makers of leupron have paid $875 billion to resolve criminal and civil cases with the government. There are ongoing cases in a great many states for both of these products. Here, these two drugs are the second and fourth highest grossing drugs of any drugs covered by Part B.

I wanted to show this a little bit graphically. I think there were some requests for this at the next meeting. These do not represent actual drugs. These are just hypothetical cases. You take a drug with an AWP of $150 -- not an unusual price. Medicare would reimburse for that drug at 95 percent of AWP which would be $142.50. If you take the typical discount found by GAO which would be about 23 percent, the provider would pay $115.50 for that drug and the resulting profit for the provider would be the Medicare payment of 142.50 minus the provider cost of 115.50 or $27.

Then you move to a case where in fact the spread is much higher, where there is more competition for the drugs so AWPs have gone up, provider costs have remained pretty much the same, Medicare continues to reimburse providers at the price of 95 percent of AWP. In the case of a drug for $150, that would be $142.50. The provider cost based on this discount of AWP minus 86 percent would be $21. Again subtracting the provider cost from the Medicare cost you get a total of $121.50. The beneficiary copay in this instance would have been $28.50, more than the cost to the provider for that particular drug.

It's real important to note here that although the

spreads for generic drugs tend to be higher, they tend to have these 86 percent, 78 percent spreads, single source drugs are more expensive in general and so a much smaller spread may represent more extra money in dollars. Again, in terms of my presentation last month, this is not a Medicare issue alone. MedPAC's survey of health plans found that most of the large plans we surveyed were paying on the basis of AWP, and paying as much or more than Medicare for these particular drugs.

I'd like to move on to the third issue and this is an issue that makes it very difficult to resolve the other two issues because they have to be handled together I think, which is that there is a lot of evidence developing that high cost of drugs are being used to subsidize costs for drug administration that may be too low. To understand this we need to look at the components of practice expenses. Just to briefly remind everybody, practice expenses include the cost for paying non-physician staff, rent and utilities, equipment, and supplies.

Although there are a number of issues related to Medicare underpaying for drug administration, the most widely discussed, most difficult issue is the issue of

underpayments for the administration of chemotherapy. This issue is based on problems of data and the way in which the practice expense component of the physician fee schedule works in relationship to chemotherapy.

If we look at what parts of practice expenses are too low for chemotherapy, the first thing you want to look at is supply expenses. When the original survey was done by CMS to figure out the pool of practice expenses for oncologists, the supply expenses included the cost of drugs. There was general agreement that since physicians were billing separately for the ,drugs you had to take the drugs out of the supply number, but that didn't leave them with enough information to tell them what the supply pool should look like. So they used the average pool of supplies for all physicians. There are reasons to believe that oncologists who are providing chemotherapy in their offices have higher supply expenses than the average pool. This is not included. So that's one problem.

The larger problem, or certainly equal problem is that there are problems with the way in which CMS allocates indirect expenses for work that's done by non-physician staff. This is a problem that's not unique to oncologists

but is particularly important in the question of chemotherapy. Although more than 80 percent of chemotherapy is performed in what Medicare classifies as physician offices, physicians don't generally administer chemotherapy. Chemotherapy is one of a group of services that are performed by nurses and other clinicians. While most specialties have only a small share of services billed by physicians but performed by others, the mix of services billed by oncologists can be provided by non-physician as much as half the time. So this pool is a really big issue.

When CMS tried to figure out this component they did a survey in 1998, only 34 oncologists responded to the CMS survey and these 34 oncologists did not accurately reflect the mix of oncology practices. They were disproportionately in practices that didn't give chemotherapy in offices so they didn't have the direct expenses of nursing, of supplies, and of equipment.

The GAO was asked to do a report trying to figure out were there problems with the practice expense component for chemotherapy and what would it take to fix it. In 2001 their report was issued and they estimated that it would cost approximately $50 million to fix it. The CMS

administrator in testimony before the House Ways and Means Committee in October also said that CMS estimated it would cost a little bit more than $50 million to fix the underestimation of practice costs.

Even if we agreed on the $50 million number -- and I have to say that this 50 million number is very, very controversial -- it would still be very difficult to fix because practice expenses would be fixed in terms -- administratively it would be fixed in a way that was budget neutral, and that would affect the payments for other specialties. Radiation oncologists, for example, would lose money if a drug administration pool for practice expenses was fixed administratively.

In addition, other specialties would say and in fact some of them already have said, that their practice expense pool is also underestimated. Rheumatologist, for example, have said that they have the same sorts of issues with the way practice expenses are calculated and simply to fix this issue for oncologists would not be fair.

Thirdly, the oncologists dispute the $50 million number. They say they have more nonbillable activities; things that include patient monitoring. They say that

Medicare patients are more expensive to treat than other cancer patients, and that their current expenses are considerably higher than the 1998 survey would suggest because of changes in the way chemotherapy is delivered.

As the CMS agreed and as other specialties can also do, ASCO did another survey to get a different pool for practice expenses for oncologists. They submitted this survey to CMS. CMS gave it to the Lewin Group for an independent analysis. The Lewin Group had serious concerns with the data. The data showed, according to their analysis, extraordinarily high clerical and clinical staff expenses and a more than 300 percent increase in other expenses compared to the 1998 survey.

For example, analysis of the survey showed that compensation would average $71,000 for clinical staff and more than $87,000 for clerical staff in oncologists' offices. As Lewin reported, that's about 400 percent above the BLS figures for that category of worker.

So in the December physician fee schedule, CMS did not accept this survey but discussions between CMS and ASCO continue and it's not clear how this will eventually be resolved.

In terms of our chapter, some of the ongoing research that we hope to have available for the June chapter, one of them is we're looking at the components of expenditure growth in this area. We want to know to what extent price, the new mix of drugs, more beneficiaries taking drugs, and for beneficiaries who are taking drugs, taking more drugs than they used to take, to what extent these components add to the volume growth, add to the expenditure growth that we see.

We're also studying drugs in the pipeline, those likely to receive FDA approval in the next five years. Our goal here is to understand the extent to which those drugs would be covered under Part B under current coverage rules. What conditions do they treat? An increasing number of drugs and biologicals are being developed that would be administered incident to physician services. To the extent that these drugs may include conditions more prevalent than cancer, for example, congestive heart failure, the spending trends that we've already reported may actually increase rapidly.

The third kind of research that we're working on now is a series of structured interviews to understand the

different ways in which physician-administered drugs are purchased, distributed, and paid for in the private market. Do insurers or physicians determine from which sources physicians Will purchase drugs? Who does the purchasing? Do physicians purchase any services along with the drugs? Under the selective contracting arrangements that some plans have begun, what happens to inventories? If a physician is in more than one plan do they need to maintain separate inventories with different contractors? These are the kind of issues that nobody knows right now and we're hoping to be able to shed some light on those issues.

We also want to know if any of the specialty pharmacies and PBMs that have moved into this market in the past few years use formularies and how that works.

Finally, our chapter will look at issues to consider in reforming the system. We want to know whether the proposed new method would affect beneficiary access, affect site care? Would we create financial incentives that would shift the site of services for one site to another site based on financial considerations? Does this new system, whatever the alternative might be, create new administrative burdens? Does it affect the prescription

drug market?

For example, would changing the payment methods affect what other purchasers including other public purchasers like the VA and Medicaid, affect the prices that they pay? Would the new system be equally effective for all drugs? We can imagine one sort of system that would work well for generic drugs but might not work for innovative, single source drugs. And finally, does it require new legislation?

That's the structure of the chapter and I'd very much like to hear your comments and suggestions.

MR. HACKBARTH: Joan, as recently as 1992, as I understand it from reading the chapter, Medicare paid based on acquisition costs. So AWP came after that, payment on AWP. Why was the switch made?

DR. SOKOLOVSKY: If you think about 1992, that was the same time in which the physician fee schedule was also being implemented and the idea was to get Medicare payments off a charge-based system and onto some objective standards for payments. Now when we say before 1992 that they paid actual acquisition costs, I do not believe, and I should look into this more carefully, but I'm pretty certain that

they were not paying invoice prices. It was more of a usual and customary sense of what acquisition prices were.

MS. ROSENBLATT: Joan, this is a good chapter. You hit on one of the administrative issues here and I don't know too much about this but I think it's a bigger issue than you made it to be. If I understand it correctly, and I'm not saying that I do, the way this is billed is through J codes, and it's not at the NDC level. HIPAA now has standardized the J codes.

So it would seem to me that in order to get this right you somehow need to move the NDC codes into the J codes, and I see Ray nodding his head over there. So I just think that whole coding thing, particularly with HIPAA, is a bigger issue and it doesn't get the prominence it needs in the chapter.

DR. SOKOLOVSKY: I do agree that it's a really big issue. As I understand it, there's a certain kind of exception here for the physician-administered drugs and the J codes are not going away so quickly on that. But I'll check more into that.

MS. ROSENBLATT: I guess what I'm saying is, it sounds to me like the J codes need to be expanded somehow

into NDC type codes and HIPAA right now is preventing that from happening. So HIPAA has made it a bigger issue than it might have been in the past.

DR. ROWE: Thank you for this, Joan. I'm delighted to see that we're continuing to focus on this, and since our last discussion there's been more media attention brought to this too. I remember a long article in the New England Journal on this, and in the New York Times not long ago.

I have a couple thoughts. One is, I'd like to see more emphasis in the chapter not on what it costs Medicare but what it costs Medicare beneficiaries. One of the most egregious aspects of some of this is the fact that there are copayments, that poor cancer-stricken Medicare beneficiaries are paying very large amounts out-of-pocket in association with the administration of these medications. It's just not right. So I think we should at least -- because this sounds like, what is Medicare paying and the patient is not involved in the financial transaction, and that's not the case, I believe, although I may be wrong. So we need more emphasis on that to personalize this issue a little bit, which has been the part of this that's always bothered me

the most.

The second is this thing you have on page 18 about the Lewin Group's analysis suggests the data from ASCO reflected 400 percent above the Bureau of Labor Statistics estimates. I don't know what -- I mean, shouldn't they go to jail or something? I mean, why are we bothering to do it with them this way if this is the -- now the Lewin Group analysis is not valid. I haven't read it. Maybe they're wrong, et cetera. But there has to be some point at which somebody is going to get upset about this. I don't know what that threshold is but if these data are correct I think we need another approach.

Maybe we need to get physicians out of this business. If this is the kind of data we're going to get from them -- I'm all for paying physicians the right amount for the administrative costs of the medicine whether it's $50 million or whatever it is. Whatever it is, I'd pay the right amount. Maybe we need a system whereby Medicare pays for these drugs to a PBM or something, or specialty PBM and we don't pay the physician for the drugs, and the physician doesn't purchase the drugs and we just get the doctors out of the pharmacy business and into the medical oncology

business. I would love to see a more detailed analysis of that approach going forward.

DR. SOKOLOVSKY: I'm hoping that some of this additional work will enable us to at least flesh that out.

DR. ROWE: Some of the health plans have specialty PBMS. One I know very well has one, so I'm not -- so there are models there where Medicare could do it, and then we just get them out of this business.

DR. NEWHOUSE: I'm delighted we're doing work here for all the reasons people have said. I think the general thrust of continuing to pay 95 percent of AWP isn't sustainable is a good thrust to take.

I wanted to make a couple of comments. One, the right amount on practice cost is, at bottom, probably an unanswerable question because of the allocation of cost to specific things is ultimately arbitrary, although it's clearly -- I'm prepared to believe that the current amount is to low, having said that.

Secondly, on Alice's comment about coding. I'm actually trying to work with claims data for these procedures and the coding problem is even more complicated. It's not always the J codes. The J codes, in fact I would

have said, are probably specific enough. That's not so much the issue. The issue is that a lot of the claims, the drugs are bundled with other services, so it's in fact not always easy to tell what exactly was paid for the drug from the claims. But I'm not sure that needs to get into the chapter. But I do agree with Alice, and that's actually in the chapter that there's a set of coding issues and that's certainly true.

DR. REISCHAUER: Unfortunately, the two people that might know the answer to my question have left. One of the most interesting things in this chapter, Joan, was you saying that many large health plans pay equal or more than Medicare does. I'm wondering why, and is it because they pay the oncologist also based on the Medicare payment schedule, so the total bundled together is maybe more or less right, or what's going on? Because they aren't constrained the same way we are.

Joe's going to answer the question but let me continue one more aspect of this, which is if the payments to the oncologist is too low but the payment for the drug is too high, by focusing on the coinsurance associated with the drugs we're overstating really what the whole picture is

because the beneficiary also pays coinsurance on the physician services. So it might be less of an egregious burden, the total package of services, if we raised the physician and lowered the drug component.

DR. NEWHOUSE: They're different orders of magnitude here.

MR. HACKBARTH: You're talking about a $50 million increase on the physician side versus hundreds of millions of dollars on the drug.

DR. REISCHAUER: If those are the numbers, right.

DR. NEWHOUSE: We're spending $6 billion on all of the drugs in total. I was going to say on the private side, ultimately I don't have a really good answer for you but my sense is that it historically on the smallish side, and these percent increases have been going on there too, so now it's gotten people's attention and things are starting to change fairly quickly.

The other thing to say is that the private side negotiates prices and in several places the oncologists have a fair amount of market power. So the oncologists in a local town may say, I won't contract with you unless you pay me X percent of AWP where X could be considerably higher

than 95, which is I think one reason why Dykman is finding what he's finding.

The other thing to say is -- maybe this was in the chapter. I think it was -- that the private side frequently paid for this under major medical and didn't put it through the PBM. The major medical, it was a more passive reimburser I think than the PBM was.

DR. WOLTER: Just a couple things. Survey tactics are somewhat interesting. It seems to me in this universe there must be a focus group of reputable, cooperative oncologists who could be convened to put us in a ballpark of administrative costs. We'd certainly be happy to participate, and I think that still leaves some ambiguity. But it's surprising to me how much time we can spend on these things and not have any idea what we're doing.

The second thing, I was really struck by the fact, if I"m remembering what was in the chapter, that 72 percent Medicare payments to oncologists are related to drugs. I'm very, very concerned about the unbalanced incentive that that creates. Whether that's our role to comment on or not, I don't know. But I don't think that's a good thing in the practice of medicine. We see this in other areas, whether

its investment in ambulatory surgery centers or carve-out hospitals or whatever, but I think to focus on appropriate payment for administrative time and clinical time and to take that unbalanced payment away in terms of the cost of the drug would, in my mind, be philosophically the right direction to go. In that regard I would support Jack's suggestion that maybe physicians ought not to be in this business in the way that they are now.

Then lastly, this is another example also of where payment is different in different sites. It's quite a bit different now if you're an oncologist employed in a university or a hospital-based system. Everything is different than what we're talking about in this chapter. We might want to comment on that because I think that could be addressed as well.

MS. DePARLE: Joan, the paper was really good and I think pulled together in one place a lot of important information about this issue. One point you make in talking about things that are available to be done about it is about inherent reasonableness. I wondered if you know what the status of that is at CMS and whether there's any chance that that tool might be used here to address some of the most

egregious cases.

Secondly, you also talked about that -- it's on this slide here -- looking at the various methods for might be employed to develop a better way of paying for these drugs. I saw one reference to use of competitive price as in the Texas DME competitive bidding demo, and albuteral was the specific example. But I did not see a reference to the proposal that I think Chairman Thomas made, or at least I don't recognize it here. So is that the same thing as his proposal about using PBMs or private plans and letting them acquire these drugs competitively or it is different? So two questions.

DR. SOKOLOVSKY: Let me answer the easy one first, the inherent reasonableness issue. The comment period closed last month for the inherent reasonableness rule. I'm hoping that by the next meeting I'll be able to have a sense of where they're going now that the comment period has closed. It specifically says that this can be used for drugs. However, the administrator has said that that is not a route that would be a very good route to use for that and that he's hoping that it won't have to be used for that.

In terms of the competitive bidding issue, it's

easy for me to flesh out what it would look like in terms of albuteral in the demonstration project. In order for me to really flesh out the other piece, that's what started me on the route of looking at, how is this working in the private market? I think that Ways and Means is also trying to get more detail before they actually have a proposal in hand.

MS. DePARLE: Because I've talked to some people in the pharmaceutical community who argue that it would be very difficult to do this because of the way that these drugs are actually acquired. I'm not sure I understand it. It certainly seems like this example from Texas worked well. But I think you're right, that we have to understand the various pieces of it to know how it could be deployed here.

MR. HACKBARTH: Other comments?

Just a quick thought, Joan, about the physician piece of this. It sounds like there's general agreement that if we do -- we have to fix the pieces concurrently, the physician and the drug method; that there are legitimate issues there, although the amount of money involved on the physician side is dwarfed by the potential savings from the drug change.

In your presentation you mentioned that one of the

issues that's been raised is that without legislation, if you increase the administrative component for one then you've got to do it budget neutral and reduce it for others. Given, again, the potential savings it seems to me that the obvious solution there is to do it legislatively and not require the budget neutral adjustments with the other administrative factors.

Then the next roadblock as I understand your presentation was, there are rheumatologists and other specialties that say, our administrative piece is too low and you can't fix theirs without fixing ours. This is the sort of stuff that really frustrates me. For whatever it's worth, I wouldn't be deterred by that argument. They're no better off by leaving this in place, but we know the beneficiaries and the taxpayers are much worse off.

So I don't know whether it makes sense for us in our chapter to address some of these arguments that are being made against the proper fix. They seem nonsensical to me on the face of it.

DR. SOKOLOVSKY: The way I've been thinking about right now is that we don't have the resources to really have an answer here and that the best I can do in this chapter is

to describe the state of play.

MR. HACKBARTH: Although I don't want to leave the impression, you go through all these barriers that people have raised as to why this is so complicated to fix. They're paper barriers to me, if you really want to fix this, and I think there are very compelling reasons to do so. I don't want to add to the impression that -- there are problems everywhere you look. All that's missing is the will, I think.

Okay, I think we are done. We will have a brief -- thank you, Joan. As always, a very good piece of work. We'll have a brief public comment period.

MS. MENSCH: My name is Stephanie Mensch and I'll from Advamed, the advanced medical technology association. I would like to address the competitive bidding discussion. We have some policy positions on this as the manufacturers of medical devices and medical equipment that would be covered under the demonstration or the competitive bidding suggestion.

First, we have some materials, a policy position -- we're opposed to competitive bidding and I'll leave that for the staff to distribute to the commissioners. We oppose

it for a number of reasons, but one, you believe that it is one form of getting away from administered pricing, but we believe that it is still government-administered pricing, especially the way the demonstrations are set up. We believe that it will require the establishment of a large infrastructure to manage it, and we think that it could conceivably, based on a study that we had done on the House provisions last year, it could add almost one-third more of bureaucratic structure to CMS now. I'll leave that report with you.

This is troublesome especially since CMS cannot implement the appeals procedures, provisions that were put into place by BIPA. They don't have the staff to do it, and the Administration is talking about cutting back. So not only will you be eliminating some appeals provisions that some of these beneficiaries may need to have in place in order to make sure that any movement forward into competitive bidding is fair, but that we don't know how this could be administered on a national level.

Another problem is that CMS, we believe that CMS's evaluation of the demo overstates savings and understates some of the problems with it. To give you an example, they

only looked at eight products in two states, and of those eight products four products had problems that they would admit to in their report. That was internal nutrition, neurologic supplies, orthotic supplies, and oxygen, portable liquid oxygen.

The other issue is that they talk about how there might be a savings of 17 to 20 percent but they didn't mention that the bids for urologic supplies went so low that in the second round for Polk County they paid more than the DME fee schedule in that area for the urologic supplies in order to reinstate it so they could get the supplies to the beneficiaries.

One other issue is that right now under the DME fee schedule products compete on service and there is a service component even with some of the most common or discrete products that you can look at. Right now they compete on service. Under competitive bidding where low price is the goal they will only be competing on the price. We're very concerned that service, which includes maintenance, instructions to the beneficiary on how to use it effectively will disappear, and there's some proof of that in the two demonstration projects.

Finally, we think that based on the MSA size that was under the House language there's some concerns that you may find yourself doing two things. One, putting some small businesses that are suppliers out of business, and also affecting minorities in a larger way than others under the program. For some products this could be a considerable affect on minorities.

So thank you. We'll leave some materials with the Commission staff.

MS. McILRATH: I'm Sharon McIlrath with the AMA. I'll be brief, and we can perhaps provide you with some additional information. I don't in anyway want to condone the system that's out there now. I just want to point out, Glenn, that if you do this legislatively as opposed to administratively it will be scored in the law and regulation section of the SGR so you'll still end up having a reduction across all physician fee, because so long as the drugs are included in the SGR, and they're growing five times as fast or they were '96 through 2001, as the physician services, they're already pulling the payments down. Once you put this into the SGR and it gets scored you'll essentially have the same effect as if you did it administratively and the

budget neutrality was applied because of the change in the practice cost for administering the drug.

MS. FOSTER: My name is Sheila Foster and I'm with ASCO. Because of the extensive conversation about the Gallup data I felt compelled just to make a couple of brief comments.

One is that this data is collected according to very, very strict guidelines that are set out in regulation. Those have all been followed, and in fact you can see that in the Lewin report. Those regulations also determine how aberrant data is treated. We have met with CMS about a couple of the high values and have explained to them what we think accounts for those high values. We've be happy to talk with you further or share some of that information with you.

MR. HACKBARTH: Okay, thank you, all. We'll see you in April.

[Whereupon, at 11:53 a.m., the meeting was adjourned.]

1